



澳門科技大學

MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY

學術年報

Annual Academic Report of MUST

2010 年

澳門科技大學學術年報 (2010)

**Macau University of Science and Technology
Annual Academic Report (2010)**

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主編的話

首先，對澳門科技大學學術年報（2010 年）的出版，表示熱烈祝賀！

在本期學術年報中，完成的科研項目數有所增加，發表的學術論文水平也有顯著提高，多篇論文被 SCI, EI 等收錄。反映出自 2005 年全面開展學術研究工作以來，不少研究項目已經完成，並且取得顯著的研究成果。

本期學術年報的一個特點是收錄了澳門科技大學在 2010 年內開展的各項科普活動。近年來，澳門特區政府大力提倡面向中小學生，面向社會開展科普活動，以提高廣大青少年的學習興趣和全社會的科學品位。為此，澳門科技大學在 2010 年陸續開展了生物大分子探索、月球知識科普夏令營及數學建模比賽等科普活動。均取得了良好的社會效果。

在各種會議上的公開演講及發表於報刊的文章也大幅增加。這說明澳門科技大學的師生在進行學術研究的同時，也十分關注與澳門社會密切相關的熱點問題，並參與其中，發表意見，產生了良好的影響。

澳門科技大學已經成立十周年了，各項工作基本上已經步入正軌。在 2011 年上海交通大學發表的大學排名表中，澳科大已經躋身兩岸四地 100 強大學行列。在去年，大學還成立了“中藥質量研究國家重點實驗室（澳門科技大學）”和“太空科學研究所”，我們相信，在今後的日子裏，無論在學術研究方面，或者是服務社會方面，必將取得更為豐碩的成果，在未來的十年中，更上一個臺階。

在此學術年報出版之時，我們向澳門基金會、科學技術發展基金對我校學術研究

工作的大力支持，表示衷心的感謝。也對全校教師在教學工作全力以赴的同時，積極參加學術研究並協助籌辦各項會議表示感謝。我們還要感謝科研管理處的同事為本期學術年報的出版所付出的心血和努力。

學術年報主編，澳門科技大學
唐澤聖 教授

學術年報主編，澳門科技大學
陳乃九 教授

Handwritten signature of Tang Zheseng in black ink.Handwritten signature of Chen Naijiu in black ink.

Preface

A warm welcome and congratulations towards the publication of the 2010 Annual Academic Report of MUST!

In the forthcoming volume of Annual Academic Report, we witnessed the increase in the number of completed research projects as well as the improvement in the quality of academic papers and there are many academic papers were accepted by SCI, EI. These results have demonstrated a significant achievement and many research projects have been completed since the initiation of research projects in 2005.

One of the highlight in this report is that we recorded the activities of promotion of science in 2010. The Macao government suggested carrying out a series of activities regarding promotion of science among high school students and elementary school students, as well as Macao society, in order to increase the interest of young people in learning and enhancing the sense of scientific knowledge throughout the society. Therefore, Macau University of Science and Technology has developed a series of programs regarding the exploration of biological molecules, summer camp in popularized the knowledge in Lunar science, and competition in mathematical modeling etc. The efficacy of these events has brought out a good social impact.

We have also achieved a significant increase in terms of public lectures in various academic conferences, articles published in newspapers. It shows that not only have our teaching staff and students been devoted to the research work, but we also care about the hot topics of Macao society and addressed their point of view, the result and impact of which are satisfactory.

Macau University of Science and Technology has been established for 10 years, and all work has been on the right track. In 2011, the popularity ranking from the Shanghai Jiao Tong University indicated that Macau University of Science and Technology ranks among Top100 in Cross-Straits. We also established the “State Key Laboratory for Quality Research in Chinese Medicines (MUST)” and “Space Science Institute” in 2010. We are confidence that we shall have a greater success in academic research and community service. Moreover, we shall reach the next milestone in another decade.

We sincerely express our gratitude to the Macao Foundation, the Science and Technology Development Fund and other enterprises for their kind support towards our university’s research work, and also to our faculty members for their devotion to teaching,

active participation in research, assistance in organizing various conferences.

Thanks are also given to the colleagues in Research and Technology Administration Office for their contribution made during the publication process.

Co-Editor in Chief of Annual
Academic Report

Professor Tang Ze Sheng

Handwritten signature of Tang Ze Sheng in purple ink.

Co-Editor in Chief of
Annual Academic Report

Professor Chan Lai Kow

Handwritten signature of Chan Lai Kow in purple ink.

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學術會議和活動

Academic Conferences and Activities

1.兩岸四地圖書館館長高峰論壇

主辦機構：

澳門科技大學

資／贊助機構：

EBSCO 公司、北京超星公司、廈門外圖公司、中國教育圖書進出口公司、Elsevier 公司

時間：

2010 年 1 月 19 日至 2010 年 1 月 20 日

地點：

澳門科技大學圖書館大樓 N 座禮堂

會議總結：

2010 年 1 月 19 日至 20 日，由澳門科技大學主辦的『兩岸四地圖書館館長高峰論壇』於澳門科技大學成功舉行，來自國內、香港、臺灣和澳門的二十多家著名圖書館的館長以及超過七十位圖書館和文化教育業界人士參加了此次論壇，針對新時期挑戰下的大學圖書館應當發揮怎樣的功能，以及如何開展圖書館資源共享等重大議題分享經驗和進行探討。

兩岸四地的六位館長報告了新時期挑戰下的大學圖書館的功能。總結來看，首先，大學圖書館必須要去支援大學的運作，配合大學的策略發展。其次，在文化保存功能上，圖書館責無旁貸。其中，圖書館應當對保存紙質文字要負起責任；而數位資源也是責無旁貸的保存對象，尤其數位延伸和 born digital 資料。同時，圖書館還需要推動校園的文化藝術活動等等。面對新的時代，幾位專家都共同提到，一定要有新的觀念、新的方法、新的技術來支援這些功能。特別是圖書館一定要負起知識管理的責任。面對整個大學、整個社區社會，對於顯性知識的知識管理，圖書館已經有非常充分的經驗來從事；但對隱性知識的知識管理，圖書館在新時代下必須進行更深入的探索和研究。要實現這些功能，圖書館的人才培養至關重要。會議提到了館員必須要扮演 13 個角色，同時還要再加上與 End Users 之間如何進行溝通協調的角色。

四位館長分享了其代表的各地區資源共建共享的經驗，並就如何在澳門開展共建共享展開討論。總結來看，大陸、台灣、香港高校圖書館都有大量成功的案例，但與周邊地區比較，澳門的圖書館事業特別是資源共建共享方面發展相對緩慢，未能很好地滿足澳門讀者的學習、研究和文化需要。此次會議通過學習兩岸四地圖書館的先進理念和豐富經驗，希望能建立一個新技術框架下的、吸引多方資源的、方便讀者使用的共享環境，以澳門大學圖書館、中央圖書館為龍頭，以澳門地區圖書館暨資訊管理協會和澳門文獻信息學會為雙翼，以澳門各類圖書館為對象，帶動澳門地區圖書館事業的全面發展。



1. University Librarians' Forum in Greater China 2010

Organizer:

Macau University of Science and Technology

Sponsor:

EBSCO, Beijing Superstar Info. Tech. Co., Xiamen International Book Center, CEPIEC, Elsevier

Date:

From 19/1/2010 to 20/1/2010

Venue:

Hall, Block N, MUST

Summary:

University Librarians' Forum in Greater China 2010 was held by Macau University of Science and Technology from Jan. 19th to 20th, 2010. More than 20 University librarians from the most famous universities in Greater China took part in the forum, and there are about 70 participants of this conference came from library and other cultural or educational institutions. The main topic of this forum is on the functions of academic library when facing new challenges in new era, and how to practice resource sharing in library circumstances.

Six university librarians' reports are on the functions of academic libraries in new era. As conclusions, firstly a university library must support the university, to matching the university's development strategy. Secondly, preserving cultural materials of any formats is the indispensable duty of libraries, not only paper resources but also digital resources, especially digital born and digital extended materials. Thirdly, academic libraries should also enhance the campus circumstance of arts and humanities. The experts all agreed that the libraries need new conception, new methods and new techniques to support these functions, and the libraries must take the responsibility of knowledge management. While serving the whole community of campus or society, libraries have competent experience of explicit knowledge management, but limited progress in tacit knowledge management. Librarian training is a key point to implement these functions. It's been discussed that the librarian acts as 13 roles with an extra communication skills between the end users.

Four university librarians shared their experience on resource sharing from different regions and discussed the possibility of resource sharing in Macao. As concluded, there are many successful cases in Mainland China, Taiwan and Hong Kong. However, resource sharing in Macao is much slower than the other parts in Greater China. It's hope to learn the advanced ideas and experience from the other libraries, and to set up a resource sharing environment in Macao with new technical infrastructure, various source co-operations and use-friendly platforms, leading by UMAC library and the Macao Central Library, with the help of MLIMA and MDIS and extensively support by all the libraries in Macao.

2. 首屆亞太地區現代服務業發展高峰論壇

主辦機構：

澳門科技大學、澳門成人教育學會

承辦機構：

澳門科技大學持續教育學院

資／贊助機構：

澳門基金會

時間：

2010 年 11 月 9 日至 2010 年 11 月 11 日

地點：

澳門科技大學總校及澳門科技大學持續教育學院

會議總結：

由澳門科技大學與澳門成人教育學會聯合主辦，澳門基金會資助部分經費，澳門科技大學持續教育學院承辦之「首屆亞太地區現代服務業發展高峰論壇」於二零一零年十一月九日至十一日在澳門科技大學校本部以及持續教育學院舉行。其中，開幕禮於十一月九日下午五時至七時假澳門科技大學 D 座會議廳隆重舉行。

研討會以簡單而隆重的剪綵儀式揭開序幕，大會很榮幸邀請到的主禮嘉賓有：澳門特區政府社會文化司張裕司長的代表張素梅辦公室主任、中央人民政府駐澳門特區聯絡辦公室教育文化部劉曉航部長、澳門科技大學校董會周禮杲副主席、澳門科技大學許敖敖校長、澳門基金會管理委員會吳志良主席、澳門科技大學持續教育學院梁文慧總監以及澳門成人教育學會梁官漢理事會主席。開幕典禮還得到澳門各高等院校代表、教授、研究生等近四百人出席。

學術論文演說於十一月十日及十一日在澳門科技大學持續教育學院舉行。論壇以“現代服務業發展趨勢與管理創新”為主題，集亞太地區政界、學界、產業界專家深入研究“後金融危機時代”現代服務業的發展趨勢，探討亞太地區現代服務業未來發展方向。本次會議涉及到現代服務業的多個行業，主要有金融業、教育服務業、物流業、房地產業、旅遊業、會展業、諮詢業、文化產業、租賃業、商貿業、IT 服務業等的發展現狀以及發展模式進行全面而深入的探討。

本屆研討會有幸邀請到中國湖北大學旅遊發展研究院院長、中國湖北大學中國會展研究中心主任和中國教育部工商管理(旅遊)教學指導委員會委員馬勇教授；國家商務部研究院服務產業研究部副主任俞華教授；台灣高雄師範大學成人教育研究所教授、教育學院院長王政彥教授等一百二十多位來由中國各地和亞太成人教育領域內的專家學者參加。經由學術委員會審評後選出五十多篇論文在為期三天的研討會上以小組型式進行演說與宣讀。十一月十一日下午，在科研管理處處長韓子天博士的主持下，舉行了結題報告會及中期報告會，由國際旅遊學院院長梁文慧教授、李璽副教授、葉桂平助理教授及張濤助理教授報告研究成果，並得到各專家學者的踴躍評點與發問。

大會還得到國家教育部工商管理指導委員會的指導以及商務部研究院服務貿易研究室、湖北大學中國現代服務業發展研究中心、澳門檢察院、澳門旅遊局、澳門教育暨青年局、澳門行政

暨公職局以及澳門民政總署的支持，讓與會者在澳門能透過不同的角度，體驗澳門熱誠好客之道。

澳門新聞界對這次會議反應熱烈，衆多新聞單位如澳門電視台、澳門日報、華僑報、濠江日報等都做出了一系列報道。

與會分別來自內地及台灣的代表也對這次大會的圓滿舉辦表示了充分肯定。在閉幕典禮上，各參會嘉賓對本屆高峰論壇的作用及工作，作出了高度評價，首屆亞太地區現代服務業發展高峰論壇於一片熱烈的掌聲中完滿結束。



2.The First Summit Forum on Modern Service Industry Development in the Asia-Pacific Region

Organizer:

Macau University of Science and Technology (MUST) , Macau Association for Adult Education

Co-Organizer:

School of Continuing Studies (SCS), MUST

Sponsor:

Macau Foundation

Date:

From 9/11/2010 to 11/11/2010

Venue:

Macau University of Science and Technology School of Continuing Studies, MUST

Summary:

The First Summit Forum on Modern Service Industry Development in the Asia-Pacific Region organized by the Macau University of Science and Technology (MUST), Macau Association for Adult Education (MAAE) and sponsored by the Macau Foundation was held at the MUST Main Campus and at the School of Continuing Studies (SCS) from November 09 to 11, 2010. The opening ceremony was held at D Hall, MUST Main Campus on November 9 from 5 to 7 PM.

The following honored guests cut the ribbon on the opening day ceremony: Representative of Mr. U Cheong, Secretary for Social Affairs and Culture, Ms. So-Mui Cheung, Chief of Office, Mr. Xiao-Hang Liu, Director of Department of Culture and Education, The Liaison Officer of the Central People's Government in the Macau SAR, Prof. Li-Gao Zhou, Vice-Chairperson of University Council, Macau University of Science and Technology, Prof. Aao Xu, Rector of Macau University of Science and Technology, Dr. Ziliang Wu, President of Macau Foundation, Prof. Aliana Leong, Director of School of Continuing Studies, Macau University of Science and Technology, and Mr. João Leão, Director of Association For Adult Education of Macau. There were nearly 400 guests at the opening ceremony, including professors, postgraduate students and representatives from high schools and colleges in Macau.

The forum's theme was 'The Developing Trend and Management Innovation of Modern Service Industry.' Presentation of research papers was conducted at the SCS-MUST on November 10-11. There were discussions on the trends of Modern Service Industry in the 'post-financial crisis era' and on the direction of its future development in the Asia-Pacific Region. Ideas were collated from politicians, scholars, and other influential leaders of related industries. The forum also discussed the current developing statute and comprehensive model of a number of modern service industries, focusing on the financial sector, education services, logistics, real estate, travel and tourism, M.I.C.E., consulting, culture, leasing, commerce and trade, and the IT service industries.

The forum was honored by the presence of Prof. Yong Ma, President of the Tourism Development Academy, Hubei University, Director of MICE Research Center, Hubei University, Member of

Pedagogic Committee of Business Administration (Tourism), and the State Education Commission of China. Prof. Hua Yu, associate director of Chinese Academy of International Trade and Economic Cooperation, Ministry of Commerce of the People's Republic of China. Prof. C. Y Wang, professor of Taiwan Kaohsiung Normal University, Dean of Adult Education Institute, together with about 120 experts and scholars from the Greater China and Asian-Pacific Region. After a review by the academic committee, more than 50 papers were presented during this three-day forum. In the afternoon of November 11, Chi-Tin Hon, Head of the Research and Technology Administration Office, presided at the Symposium of Faculty of International Tourism presented by Prof. Aliana Leong, Associate Prof. Xi Li, Assistant Prof. Kuai-Peng Ip and Assistant Prof. Tao Zhang.

This great event was endorsed by the Business Administration Committee for Ministry of National Education; Chinese Academy of International Trade and Economic Cooperation, Ministry of Commerce; MICE Research Center, Hubei University, Public Prosecutions Office, Macau Government Tourist Office; Macau Education and Youth Affairs Bureau, Macau Public Administration and Civil Service Bureau and the Macau Official Provisional Municipal Council which ensured that participants will experience the warm hospitality of Macau through different perspectives.

The news of the Forum was closely reported to the public by the Macau Television, Macau Daily News, Journal Va Kio and Hou Kong Daily News.

Representatives from China and Taiwan expressed their high appreciation of the forum and congratulated the hosts for a successful endeavor.

3. 杏苑生春學術報告會（一）

主辦機構：

澳門科技大學中醫藥學院、兩岸四地中醫藥科技合作中心

資／贊助機構：

澳門基金會

時間：

2010 年 3 月 27 日

地點：

澳門科技大學 H 座 401 室

會議總結：

報告會於 3 月 27 日下午在澳門科技大學 H401 室舉行，澳門中醫藥社團負責人，兩岸四地中醫藥科技合作中心理事長周禮杲、臺灣中國醫藥大學副校長張永賢、《中國中西醫結合雜誌》常務副總編輯陳維養等嘉賓應邀出席。澳門醫務界代表、澳門科技大學中醫藥學院師生、校友及科大醫院醫務人員 100 餘人參加是次學術報告會。

陳院士就中西醫結合的歷史與現況、發展與展望作了全面深入的講解，他在報告中首先就中西醫學兩個學科體系進行了系統比較，指出兩種醫學體系的差異與優劣。他說目前國家在發展中醫藥的政策上面提出中西醫並重、實現中醫藥現代化和促進中西醫結合的方針。陳院士還指出了中西醫結合的兩層含義，即衛生工作層面中西醫團結合作，互相學習，共同提高，醫學科學層面中西醫優勢互補，交叉融匯，有機結合；以及中西醫結合的三個水平，即衛生工作方面中西醫合作、醫療保健方面中西醫互補、學術融合做到理論與實際有機結合。最後中西醫結合達到相互取長補短，優勢互補，和諧並融入主流醫學的目的。學術報告會最後陳院士用顏真卿的《勸學》詩句“黑髮不知勤學早，白首方悔讀書遲”勉勵在座的澳門各界朋友精研醫術，以不斷學習提高自身素養為己任。與會者還與陳院士就中西醫結合的熱點問題展開了熱烈討論，本次報告會使與會者對中西醫結合事業有了更深次的瞭解。



3.Chinese Medicine Academic Symposium– “Hang Yuan Seng Chun”

Host organization:

Macau University of Science and Technology – Faculty of Chinese Medicine, Cross-Strait Scientific Collaboration Center for Chinese Medicine

Sponsor Organization:

Macao Foundation

Date:

27 Mar 2010

Avenue:

Macau University of Science and Technology – H401

Summary:

The symposium was held in Macau University of Science and Technology – H401 at noon in 27th March, 2010. Zhao Li Gao, the director of Cross-Strait Scientific Collaboration Center for Chinese Medicine, Chang Yung Hsien, vice president of China Taiwan Medical University and Chen Wei Yang, vice executive editor of <Chinese Journal of Integrated Traditional and Western Medicine> were invited to the symposium. There were over hundred people including representative in medical service, teachers, students and alumnus of MUST and medical service representative of University Hospital who attended this symposium.

Mr. Chen provided a profound interpretation about the history, development and future of integrated traditional and western medicine in his report. In the first place, a comparison between traditional and western medicine about the strengths and weaknesses was made. According to Mr. Chen, the country equally emphasizes traditional and western medicine. Chinese medicine modernization and integrated traditional and western medicine should be achieved. About integrated traditional and western medicine, there are two layers of meaning: the cooperation and learning between each others in hygienic work and take the strengths and weaknesses between Chinese and western medicine as complement and integration. Moreover, the three standards, hygienic works, health care and academic theories, should also be integrated. Finally, we can reach our aim that integrated traditional and western medicines could become the main stream of medical science. In the end, Mr. Chen made an encouragement to us by quoting “early hair do not know diligence, regret to be too late in white hair” in <Learning Encouragement>by Yan Zhen Qing. Afterwards, the attendants started a hot discussion with Mr. Chen and this symposium gave a deeper understanding of traditional and western medicine to the attendants.

4. 杏苑生春學術報告會（二）

主辦機構：

澳門科技大學中醫藥學院、兩岸四地中醫藥科技合作中心

資／贊助機構：

澳門基金會

時間：

2010 年 4 月 7 日

地點：

澳門科技大學 H 座 401 室

會議總結：

報告會於 4 月 7 日上午 9 時半在澳門科技大學 H401 室舉行，澳門中醫藥社團負責人，兩岸四地中醫藥科技合作中心理事長周禮杲等嘉賓應邀出席。澳門醫務界人士、澳門科技大學中醫藥學院師生、校友及科大醫院醫務人員 100 餘人參加是次學術報告會。

國醫大師張學文教授就中醫四大難證之首的中風病進行了系統講述，他首先提出對中風先兆的調護可減低中風病發病率的科學論斷，體現了中醫“治未病”的思想，同時張教授強調對中風先兆研究的重要性，認為在中風先兆階段，積極地進行干預性防治與調養，對醫者來說，事半功倍，對患者而言，受益匪淺。在對中風病的辨證分期方面，他積五十餘年的臨床經驗，指出中風病分四期六證，並將個人臨證體會毫無保留地講述給與會者，相信對參加本次學術報告會的與會者大有裨益。對中風病的後遺症問題，張教授也指出綜合治療是患者康復的主要途徑。與會者還與張教授進行了關於中風病防治方面的互動交流，報告會結束之際，兩岸四地中醫藥科技合作中心周禮杲理事長向國醫大師張學文教授致送紀念品，感謝他百忙之中來澳為廣大澳門市民作的一場精彩學術報告。



4.Chinese Medicine Academic Symposium – “Hang Yuan Seng Chun”

Organizer:

Macau University of Science and Technology – Faculty of Chinese Medicine, Cross-Strait Scientific Collaboration Center for Chinese Medicine

Sponsor:

Macao Foundation

Date:

7 Apr 2010

Venue:

Macau University of Science and Technology – H401

Summary:

The symposium was held in Macau University of Science and Technology – H401 at 09:30 in 7th April, 2010. Zhao Li Gao, the director of Cross-Strait Scientific Collaboration Center for Chinese Medicine, etc, were invited to the symposium. There were over hundred people including representative in medical service, teachers, students and alumnus of MUST and medical service representative of University Hospital who attended this symposium.

Zhang Xue Wen, the master of the state doctor, made a systematic interpretation for apoplexy, the head among the four most intractable deceases. In the first place, he mentioned that the prevention about the sign of apoplexy can decrease the incidence rates which achieved the idea of “cure before falling ill” in Chinese medicine. At the same time, Professor Zhang emphasized the importance of sign study that he considered positive prevention and cure could yield twice the result with half the effort by the doctor and was also good for the patients. He reviewed his fifty years experience of defining apoplexy which can be divided into four periods and six symptoms. Without reservation, his personal clinical experience was revealed to the attendants which must enrich the knowledge for all the attendants. About the sequela of apoplexy, Professor Zhang pointed out that integrated treatment is the main way for recovering. The attendants and Professor Zhang also made an interaction about prevention and cure for apoplexy. In the end of the symposium, Zhao Li Gao, the director of Cross-Strait Scientific Collaboration Center for Chinese Medicine, gave souvenir to Professor Zhang and thanks him for coming with the wonderful academic report for the Macao citizens.

5.2010 粵澳中醫藥科技產業園論壇

主辦機構：

澳門特別行政區政府中醫藥科技產業園籌備辦公室、兩岸四地中醫藥科技合作中心

承辦機構：

澳門科技大學中醫藥學院、澳門藥物及健康應用研究所

資／贊助機構：

澳門基金會、科學技術發展基金

時間：

2010 年 12 月 13 日 至 2010 年 12 月 14 日

地點：

中土大廈 19 樓澳門商務促進中心會議廳

會議總結：

12 月 14 日“論壇”邀請到來自內地、港澳臺四地的政府代表、知名學者、企業家，包括：澳門特別行政區政府中醫藥科技產業園籌備辦公室陳敬紅副主任；著名企業家中國工程院院土、以嶺藥業集團董事長、中華中醫藥學會副會長吳以嶺院土；廣州醫藥集團有限公司李楚源總經理；中國藥品生物製品檢定所中藥室林瑞超主任；香港浸會大學中醫藥學院劉良院長；台灣台北醫學大學謝瀛華教授；澳門大學中華醫藥研究院王 濤院長；澳門科技大學項平教授和謝培山教授 9 人作為主講嘉賓，分別從“產業園的建設營運與法規”、“產業園中藥質量標準的控制”、“產業園的招商引資”、“產業園的公共核心技術平臺”、“中醫藥產業人才培養”五個專題方面來進行研討。來自兩岸四地的中醫藥專家學者，通過充分討論和交流，就未來粵澳中醫藥科技產業園的規劃和發展，發表意見與建議，在推動中醫藥科技產業園的建設上凝聚共識，為兩地政府建設好產業園區提供決策依據。



5. Forum sobre o Parque Cientifico e Industrial de Medicina Tradicional Chinesa de Guangdong e Macau -2010

Organizer:

Gabinete Preparatorio do Parque Cientifico e Industrial de Medicina Tradicional Chinesa, Cross-Strait Scientific Collaboration Center for Chinese Medicine

Co-Organizer:

Faculty of Chinese Medicine, Macau University of Science and Technology, Macau Institute for Applied Research in Medicine and Health (MIAR)

Sponsor:

Macao Foundation, Science and Technology Development Fund, MSAR

Date:

From 13/12/2010 to 14/12/2010

Venue:

China Civil Plaza 19- andar, Macau – MBSC Conference Room

Summary:

Government representatives from China, Hong Kong, Macau and Taiwan, celebrated scholars, entrepreneur were invited to the Forum. They are including: Mr. Chan King Hong, deputy officer in preparatory office of “Parque Cientifico e Industrial de Medicina Tradicional Chinesa de Guangdong e Macau”; Mr. Wu Yi Ling, academician of China Engineering College, Yiling Pharmaceutical Group President, China Association of Traditional Chinese Medicine Vice President; Mr. li chuyuan, manager of Guangzhou Pharmaceutical Group; Mr. Lin Rui chao, officer of National Institute for the Control of Pharmaceutical and Biological Products; Mr. Lao Leung, Dean of Faculty of Chinese Medicine in Hong Kong Baptist University; Mr. Xie Ying Hua, Professor of Taiwan Taipei Medical University; Mr. Wong Yat Tao, Dean of University of Macau, Institute of Chinese Medical Sciences. Professor Xiang Ping, Xie Pei Shan, etc from Macau University of Science and Technology were the speakers and they made discussion with five topics: the building of operation and rules for the Industrial Field, the control of medicine quality for the Industrial Field, business attraction for the Industrial Field, public core technology platform for the Industrial Field, personnel training for the Industrial Field. The master and scholars express their opinions and suggestions which made a common consensus to set the Industrial Field into action and also provide a basis for decision making to the government of China and Taiwan.

6. 「澳門社會」系列講座

主辦機構：

澳門科技大學社會和文化研究所

資助機構：

澳門基金會

時間：

2010 年 12 月 16 日

地點：

澳門科技大學圖書館大樓 N101

會議總結：

為進一步加強與社會的關係，加深學生對澳門社會的了解，澳門科技大學舉辦「澳門社會」系列講座，邀請本澳各界知名人士，主講一系列有關澳門社會現況與未來的講座，深入闡析澳門各方面的情況及提出其見解。

該系列講座的首場主講嘉賓為前澳門特別行政區立法會主席曹其真女士，講題為「細說澳門的管治與立法」。講座議題圍繞澳門的管治與立法及相關社會事務為主，以互動交流的形式進行，並邀請了五位校內師生參與台上的討論。曹其真與科大師生一起分享其豐富的政壇經驗，令大家獲益良多。

是次講座反應熱烈，共吸引了二百多位師生出席。透過曹其真女士的精彩演講，令大家對澳門有更深入的认识。



6. “Macau Society” Seminar Series

Organizer:

Institute for Social and Cultural Research, Macau University of Science and Technology

Sponsor:

Macao Foundation

Date:

16/12/2010

Venue:

N101, Macau University of Science and Technology

Summary

In order to enhance the connection with the society and increase students’ understanding on Macau society, Macau University of Science and Technology organizes “Macau Society” Seminar Series and invites influential individuals to talk about Macau’s current and future situation. The speakers will share their insightful experiences with teachers and students.

The first guest speaker of “Macau Society” Seminar Series was Ms. Susana Chou, the former President of Legislative Assembly of Macau SAR. The topic of the seminar emphasizes on Macau’s governance, legislation and social affairs. In this seminar, there were also five MUST’s teachers and students participating in the discussion. Ms Susana Chou shared her great political experiences with teachers and students and all of us learnt a lot.

This event attracted more than 200 teachers and students to participate. Through Ms. Susana Chou’s seminar, we could know more about Macau.

7. 澳門法律改革與法制建設學術研討會

主辦機構：

澳門科技大學

承辦機構：

澳門科技大學法學院

資／贊助機構：

澳門基金會

時間：

2010 年 3 月 19 日至 2010 年 3 月 20 日

地點：

澳門科技大學圖書館大樓 N101 禮堂

會議總結：

本場研討會既是大學建校十周年校慶系列活動之一，亦是法學院建院十周年的慶祝活動，來自兩岸四地的專家學者、政府部門以及法律實務界人士彙聚一堂，圍繞“一國兩制”下的法學教育、澳門法律改革中的本地化問題、“一國兩制”與區際法律協調、澳門實體法律改革以及澳門程式法律改革等問題展開學術研討。



澳門科技大學十周年校慶系列活動：澳門法律改革與法制建設學術研討會
2010年3月19日-20日

7. Conference on Macao Law Reform & Legal Development

Organizer:

Macau University of Science and Technology

Co-Organizer:

Faculty of Law, Macau University of Science and Technology

Sponsor:

Macao Foundation

Date:

From 19/3/2010 to 20/3/2010

Venue:

N101 Auditorium, the Library Building, Macau University of Science and Technology

Summary:

The Conference on Macao Law Reform & Legal Development was one of the series of activities for 10th Anniversary Celebration of the University and celebrated the 10th anniversary of the Faculty of Law. Experts & scholars, government officials and lawyers coming from the Chinese Mainland, Taiwan, Hong Kong and the local gathered together to discuss the topics which included the legal education and the regional harmonization of laws under the principle of “One country, Two systems”, the localization problems in the reform of Macao law and the substantive and procedural law reforms in Macao.

8. 十字門名家論壇（第三場）

主辦機構：

澳門科技大學法學院

承辦機構：

澳門科技大學法學院學生會

資／贊助機構：

澳門基金會

時間：

2010 年 5 月 13 日至 2010 年 5 月 13 日

地點：

澳門科技大學圖書館大樓 N320 演講廳

會議總結：

本論壇主題為“臺灣違憲審查制度改革——比較憲法觀點”，由臺灣著名憲法、行政法、環境保護法與政策專家湯德宗教授主講，闡述了世界主要國家的違憲審查制度的同異之處，並對臺灣違憲審查制度改革提出自己的意見。



8.The 3rd Macau Expert Forum2010-2011 Academic Year

Organizer:

Faculty of Law, Macau University of Science and Technology

Co-Organizer:

The Faculty of Law Students' Association

Sponsor:

Macao Foundation

Date:

From 19/3/2010 to 20/3/2010

Venue:

N320 Lecture Room, the Library Building, Macau University of Science and Technology

Summary:

Professor Dennis Te-Chung Tang, the Taiwan's famous scholar on constitution law, administrative law, environmental law and policy and also the founding director & distinguished research professor of Institutum Iurisprudentiae (Preparatory Office), Academia Sinica, Taiwan, delivered a lecture on the theme of "Reform the Constitutional Review System in Taiwan: from the Perspective of Comparative Constitutions", in which he compared the differences and similarities of major constitutional review systems in the world and provided his ideas about the reform in Taiwan.

9. 十字門名家論壇（第四場）

主辦機構：

澳門科技大學法學院

承辦機構：

澳門科技大學法學院學生會

資／贊助機構：

澳門基金會

時間：

2010 年 12 月 15 日至 2010 年 12 月 15 日

地點：

澳門科技大學圖書館大樓 N317 演講廳

會議總結：

本場論壇主題為“中國刑法改革的新思考”。中國法學會刑法學研究會會長、國際刑法學協會中國分會常務副主席、北京師範大學法學院暨刑事法律科學研究院院長趙秉志教授闡述了目前中國刑法改革中非暴力犯罪中死刑的取締、死刑適用範圍的限制、自由刑的改革、特殊群體從寬制度以及關於保護社會民生利益的問題。



9. The 4th Macau Law Forum of 2010-2011 Academic Year

Organizer:

Faculty of Law, Macau University of Science and Technology

Co-Organizer:

The Faculty of Law Students' Association

Sponsor:

Macao Foundation

Date:

From 15/12/2010 to 15/12/2010

Venue:

N317 Lecture Room, the Library Building, Macau University of Science and Technology

Summary:

Professor Zhao Bingzhi, the chairman of Criminal Law Research Association of China Law Society, the standing vice-chairman of the International Association of Penal Law China Branch, the dean of Law School and College for Criminal Law Science of Beijing Normal University, delivered a lecture entitled "The New Thinking on Criminal Law Reform in China", in which he discussed the problems on abolishing capital punishment in non-violent crimes and its restrictive application, the reform of liberal punishment(imprisonment), the less severe punishment for specific social groups and the protection of social welfare in the criminal law reform process.

10.2010-2011 學年十字門法學論壇(第一場)

主辦機構：

澳門科技大學法學院

承辦機構：

澳門科技大學法學院學生會

資／贊助機構：

澳門基金會

時間：

2010 年 10 月 5 日 至 2010 年 10 月 5 日

地點：

澳門科技大學圖書館大樓 N317 演講廳

會議總結：

本場論壇主題為“刑事和解相關法律問題”。澳門特區檢察院黎裕豪檢察官、澳門大學法學院李哲助理教授、法學院 2009 級博士研究生彭勃分別從澳門、內地及境外的刑事和解或恢復性司法的實踐出發，對刑事和解制度的功能和實施難點、刑事和解與刑事處罰的關係等問題作了報告；法學院趙琳琳助理教授及謝國欣講師對報告進行點評。



10. The 1st Macau Law Forum of 2010-2011 Academic Year

Organizer:

Faculty of Law, Macau University of Science and Technology

Co-Organizer:

The Faculty of Law Students' Association

Sponsor:

Macao Foundation

Date:

From 5/10/2010 to 5/10/2010

Venue:

N317 Lecture Room, the Library Building, Macau University of Science and Technology

Summary :

Focusing on the theme of "Criminal Reconciliation", Lai U Hou (Prosecutor of the MSAR), Li Zhe (Assistant Professor of the Faculty of Law of University of Macau) and Peng Bo (PhD Candidate of the Faculty of Law) gave related reports respectively on the functions and the implementation difficulties of the criminal reconciliation system and its relationship with the criminal punishment on the local and overseas practice of criminal reconciliation or restorative justice. Zhao Linlin (Assistant Professors of the Faculty of Law) and Hsieh Kuo-hsing (Lecture of the Faculty of Law) made comments on the reports.

11.2010-2011 學年十字門法學論壇(第二場)

主辦機構：

澳門科技大學法學院

承辦機構：

澳門科技大學法學院學生會

資／贊助機構：

澳門基金會

時間：

2010 年 10 月 29 日至 2010 年 10 月 29 日

地點：

澳門科技大學圖書館大樓 N317 演講廳

會議總結：

本場主題為“房價調控相關法律問題”。澳門法制研究會林浩威副理事長、法學院 2009 級博士生李堅分別就澳門的公共房屋制度、內地房商品房市場價格發展變化以及房地產調控法律政策進行報告；澳門特區立法會吳在權議員及行政與管理學院劉成昆副教授對報告進行點評。



11.The 2nd Macau Law Forum of 2010-2011 Academic Year

Organizer:

Faculty of Law, Macau University of Science and Technology

Co-Organizer:

The Faculty of Law Students' Association

Sponsor:

Macao Foundation

Date:

From 29/10/2010 to 29/10/2010

Venue:

N317 Lecture Room, the Library Building, Macau University of Science and Technology

Summary :

Focusing on the theme of “Price Regulation in Real Estate Market”, Lin Haowei (Vice Director of Macau Legal System Research Association), Li Jian(PhD Candidate of the Faculty of Law) gave reports on the Macao's public housing system, the price changes and price regulation in the real estate market in Chinese Mainland. Ung Choi Kun(the Legislator of the Legislative Assembly of the Macao Special Administrative Region) and Liu Chengkun (Associate Professor of the Faculty of Management and Administration) made comments on the reports.

12.2010-2011 學年十字門法學論壇(第三場)

主辦機構：

澳門科技大學法學院

承辦機構：

澳門科技大學法學院學生會

資／贊助機構：

澳門基金會

時間：

2010 年 11 月 18 日至 2010 年 11 月 18 日

地點：

澳門科技大學圖書館大樓 N317 演講廳

會議總結：

本場主題為“恢復原狀救濟方式相關法律問題”。法學院畢經緯講師闡釋“恢復原狀”在羅馬法和教會法中的淵源和演變，法學院 2010 級博士研究生王楓從現代民法的角度進行分析；澳門法學協進會會長李煥江大律師和澳門大學法學院訪問學者王瑩瑩博士對報告進行評議。



12. The 3rd Macau Law Forum of 2010-2011 Academic Year

Organizer:

Faculty of Law, Macau University of Science and Technology

Co-Organizer:

The Faculty of Law Students' Association

Sponsor:

Macao Foundation

Date:

From 18/11/2010 to 18/11/2010

Venue:

N317 Lecture Room, the Library Building, Macau University of Science and Technology

Summary :

Focusing on the theme of “restoration remedy”, Bi Jingwei(Lecturer of the Faculty of Law) and Wang Feng(PhD Student of the Faculty of Law) gave reports respectively on meaning and its changes of the restoration remedy in the history of Roman law and Canon law and the modern civil law systems. Lei Wun Kong (Barrister, the President of Macao Law Promotion Association) and Wang Yingying (PhD, visiting scholar of the Faculty of Law of University of Macau) made comments on the reports.

13. 境外刑事裁判的承認與代執行

主辦機構：

澳門科技大學法學院

資／贊助機構：

澳門科技大學基金會

時間：

2010 年 11 月 10 日 至 2010 年 11 月 10 日

地點：

澳門科技大學 N317 演講廳

會議總結：

主講嘉賓王效文先生，畢業於國立臺灣大學法學院，先後獲得法學學士和法學碩士（師從顏厥安教授），後赴德國留學，於法蘭克福大學獲法學博士學位（師從德國 NOMOS 刑法注釋書主編、前德國法哲學協會主席 Ulfrid Neumann 教授）。

著有 *Der universale Strafanspruch des nationalen Staates: eine Untersuchung über das Weltrechtsprinzip im Internationalen Strafrecht*（民族國家普遍的刑罰權——國際刑法中的世界法原則研究），Frankfurt/M 2005，並在刑法學、刑事訴訟法學和法理學領域發表多篇論文。教授課程為刑法總則、刑法分則、刑事政策、刑法實例研究、刑法專題研究、法理學、刑事法基本問題研究、德國法學名著選讀。

本次講座的内容是，隨著兩岸四地經貿的發展，許多臺灣人和大陸人各自到大陸與臺灣從事經濟、教育等方面的活動時，可能會觸犯當地刑法，但是為了更好地執行刑罰，大陸與臺灣簽署了互相承認對方刑事判決的協議，從而能夠直接移送犯人到其來源地執行。這個過程可能涉及到臺灣地區現行憲法對自由的保障，以及刑法禁止私放犯人罪的適用問題。對此，王效文副教授提出了自己的解決建議。講座之後，科大法學院的老師和同學們，還有澳門大學法學院的李哲助理教授，和王效文副教授就德國刑法、臺灣刑法、法哲學等問題進項了討論和互動，在熱烈地氣氛中，本次活動落下了帷幕。

13. Recognition of foreign criminal jurisdiction and execution

Organizer:

Faculty of Law, MUST

Sponsor:

Foundation of MUST

Date:

From 10/11/2010 to 10/11/2010

Venue:

N317 Hall, MUST

Summary:

Speaker Mr. Xiaowen Wang, graduated from National Taiwan University School of Law, has earned a law degree and Master of Law (under the tutelage of Professor Juan Yan), and went to study in Germany, received his PH.D. at the University of Frankfurt (Germany) under the tutelage of editor of the Criminal Code Annotated, the former German law professor of Philosophy and Chairman of the Association, Mr. Prof. Ulfrid Neumann. His dissertation is published with the Title “Der universale Strafanspruch des nationalen Staates: eine Untersuchung über das Weltrechtsprinzip im Internationalen Strafrecht“, Frankfurt / M 2005. He has also published many papers in the field of criminal law, criminal procedure and legal philosophy. He teaches such courses like general principles of criminal law, criminal law, criminal policy, criminal case studies, thematic studies of criminal law, the basic issues of criminal law, Readings in German law.

The content of the lecture: With the cross-strait economic and trade development between Taiwan and the mainland people from the mainland or Taiwan in their economic, educational and other activities may violate local criminal law, but in order to better implement the penalty, the mainland and Taiwan signed a mutual recognition agreement on other criminal sentences, allowing direct transfer of prisoners to their hometown. This process may involve the current constitution the protection of freedom in Taiwan, and the Criminal Code there prohibits the illegal release of prisoners. In this regard, Professor Xiao-Wen Wang put forward his own solution proposals. After the lecture teachers and students from the MUST, as well as Prof. Zhe Li from Law School of Macao University and Wang Xiao-Wen, have discussed together some issues on German criminal law, the Taiwanese criminal law, legal philosophy. In the warm atmosphere the event came to a close.

14.澳門文化創意的法律保護暨澳門創意共用（CC Macau）

項目座談會

主辦機構：

澳門科技大學法學院、澳門科技大學社會和文化研究所

資助機構：

澳門科技大學社會和文化研究所

時間：

2010 年 11 月 25 日

地點：

澳門科技大學圖書館大樓 N317 報告廳

會議總結：

澳門科技大學法學院於 2010 年上半年組成了以法學院人員為主、兼有人文藝術、語言及網路技術專業人士參與的 CC Macau 項目組（中譯名為“澳門創意共用項目”），希冀為本澳文化創意產業的順利發展提供一個新的合理有效之法律保護選擇，為本澳文化、教育、會展等行業的創意共用提供公益管道。是次會議，獲得了澳門文化創意產業界專業人士和香港 CC 的大力支持。與會代表包括澳門特區經濟局知識產權廳鄭曉敏顧問、澳門文化局文化創意產業促進廳彭羨欣顧問、澳門創意產業協會司徒作存理事長、澳門維基協會周志堅會長，以及來自澳門貿易投資促進局、港澳臺文化藝術協會、澳門動漫文化產業協會、澳門攝影學會、澳門青年交響樂團協會、香港 CC 等機構、團體的嘉賓。與會者就 CC Macau 成立的意義、CC 協議的方法與中立之道、澳門文化創意產業發展的現狀和前景、本澳文化創意的法律保護需求和現狀等主題進行了深入討論和交流，冀望 CC Macau 發揮公益平臺功能，助力本澳文化創意產業的發展和著作權法律制度的修訂完善，亦為兩岸四地以及澳葡文化創意產業的互動共進發揮作用。



14. Seminar on Legal Protection of Cultural and Creative Works in Macau and CC Macau Project

Organizer:

Faculty of Law & Institute for Social and Cultural Research of MUST.

Sponsor:

Institute for Social and Cultural Research of MUST.

Date:

2010 Nov 25

Venue:

Hall N317, Macau University of Science and Technology

Summary :

Faculty of Law of MUST organized CC Macau project team (translated as “澳門創意共用項目” in Chinese) in early 2010 mainly with its staff members, assisted by professionals of art, network technology and language. The project team hopes to provide a new, reasonable and effective form of legal protection for the smooth development of the Cultural and Creative Industries (CCI) in Macao. It’s also the team’s aim to provide channels for copyright holders among culture, education and exhibition industries in Macao to share their creative works.

The Project team held a Seminar on Legal Protection of Cultural and Creative Works in Macau and CC Macau Project in Hall N317, MUST on Thursday afternoon, November 25th, 2010, together with Socio-Cultural Research Institute of MUST. The seminar received great support from all circles in Macao and Hong Kong. Participants include Consultant Zheng Xiaomin, The Intellectual Property Department of the Macao Economic Services, Consultant Peng Xian xin, Department for the Promotion of Cultural and Creative Industries, Cultural Affairs Bureau, Chairman Situ Zu cun, Macao Creative Industry Association, Chairman Zhou Zhijian, Wikimedia Macau Association, and guests from organizations like Macao Trade and Investment Promotion Institute, Culture & Art Association of Hong Kong, Macau and Taiwan, Macao Animation & Comic Culture Industrial Association, Macao Photography Association, Macao Youth Symphony Orchestra Association, CC Hong Kong, etc.. All participants joined the heated discussion about the significance of the establishment of CC Macau, the methods and neutrality of CC Macau, the status quo and future of the development of CCI in Macao, the status quo of the legal protection of cultural and creative works in Macau, and so on. They also hoped CC Macau would work as a public platform to contribute to the development of CCI, revising of copyright law in Macao and promoting the cooperation in developing CCI in the four regions across the straits.

完成的研究項目

Research Projects

1.澳門房地產市場景氣預警系統研究

負責人：宋宇

澳門科技大學 行政管理學院

資助機構：

澳門基金會

完成時間(年／月)：

2010 年 12 月

主要參加者：

劉成昆等

課題簡介：

房地產預警是指通過定性及定量的手段對房地產市場當前的運行態勢進行分析測度和判斷，並對未來的發展狀況進行預測和預報。預警系統的運用，便於政府組織及時採取有效的措施以促進房地產市場健康可持續發展。本項目旨在通過運用數據挖掘技術中的神經網路技術構建一個適合澳門房地產業發展的房地產預警系統。本項目從房地產活動的全過程出發，並且結合前人總結的有關房地產方面的預警指標，運用定量和定性的方法篩選了 15 個指標來建立澳門預警指標體系。通過定性分析與定量分析相結合的系統化研究方法，並借助 Spss、Spss clementine 等電腦軟體與資訊技術著重針對房地產預警系統進行定量化分析，從而完成房地產經濟運行情況的預測。研究結論證明：數據挖掘中的神經網路模型應用於房地產預警具有較高的精度和良好的泛化能力。

1.Study on Forewarning System of Macau Real Estate Market

Principal Investigator: Song, Yu

**Faculty of Management and Administration, Macau University of Science and
Technology**

Sponsor:

Macao Foundation

Completion period (Y/M) :

2010/12

Main Participants:

Liu,Chenkun et al.

Introduction:

Real Estate Warning means through qualitative and quantitative methods to analyze and determine the currently operational state of real estate market, and predict and forecast its development in time to take effective measures to reduce the volatility. This project aims to use a neural network, one of data mining technologies, to analyze recent years' data of Macau real estate so as to build a forewarning system for its development. Considering the whole process of real estate activities, the forewarning system of Macau is established after screening the 15 indicators using the Spss, Clementine. Empirical results show that the Clementine data mining technology is effective in establishing the Macau real estate forewarning system.

2. 澳門青年理財和消費觀念與博彩習慣之關係研究

負責人：石貴成

澳門科技大學 行政與管理學院

資助機構：

澳門教育暨青年局

完成時間(年/月):

2010 年 12 月

主要參加者:

石貴成、龐川、劉成昆

課題簡介:

本研究在定性研究的基礎上，採用判斷抽樣以街頭攔截的方式面對面調查了 1116 位 18-29 歲的澳門居民，對澳門青年的理財與消費觀念、澳門青年參與博彩活動的習慣、澳門青年個人特性與其理財消費觀念與參與博彩活動習慣之關係、澳門青年理財和消費觀念與其參與博彩活動習慣之關係作了深入探討，並對澳門防治青年博彩活動作了相對應的建議。

2.The relationship among youth's concepts of finance and Consumption and gambling habits in Macau

Principal Investigator: Shi Guicheng
Faculty of Management and Administration, Macau University of Science and Technology

Sponsor:

Education and Youth Bureau, Macau S.A.R.

Completion period (Y/M) :

December 2010

Main Participants:

Shi Guicheng, Pang Chun, Liu Chengkun

Introduction:

Based on a series of qualitative researches, this project has done 1116 mall intercept interviews among 18 to 29 youth in Macau through judgmental sampling, then explored their concepts of finance and consumption, and their gambling habits, and the relationship among their personal attributes and concepts of finance and consumption and gambling habits, and the relationship among their finance and consumption concepts and gambling habits, and finally provided corresponding suggestions to the prevention of gambling of the youth in Macau.

3. 污點證人制度及其在澳門具體個案中的運用

負責人：趙琳琳
澳門科技大學 法學院

資助機構：

澳門基金會

完成時間(年／月)：

2010 年 08 月 31 日

主要參加者：

趙琳琳

課題簡介：

在刑事司法中，“取證難”一直是制約賄賂犯罪、有組織犯罪等案件偵查工作的一個很重要因素。為此，很多國家和地區的司法機關通常採取對相關人的刑事責任豁免來獲取打擊這類犯罪的證據手段，完成追訴犯罪的任務。目前，澳門多部單行法規，如廉署組織法、有組織犯罪法等均設有污點證人制度，但從未在具體個案中運用。因此，本項目主要通過國內外污點證人方面的理論、立法和實踐的比較研究，對澳門相關制度的完善提出建議，並將項目成果向澳門司法警察局、廉政公署等實務部門推介。

3.The system of tainted witness and its application in Macau

Principal Investigator: Zhao Linlin

Faculty of Law, Macau University of Science and Technology

Sponsor:

Macau Foundation

Completion period (Y/M) :

2010/08/31

Main Participants:

Zhao Linlin

Introduction:

In the criminal justice, “collecting evidence difficultly” has been an important factor to restrict the investigation on such cases as bribe, organized crimes and so on. Therefore, the judicial organs in many countries and regions usually adopt the method of exempting the legal responsibility of the related persons and acquiring the evidence in order to crack down on this kind of crimes. At present, there are a lot of separate regulations in Macau, like the CCAC constitutive law, the organized criminal law and so on, which are equipped with the tainted witness system, but it has never been utilized in the concrete case. So this project is mainly through comparative research on domestic and foreign theory, legislation and practice about tainted witness, to put forward the proposal of the related system's consummation to Macao, and introduce the project achievement to the judicature, police station and so on for their recommendations.

4. 澳門會展服務顧客滿意度指數構建研究

負責人：張濤

澳門科技大學 國際旅遊學院

資助機構：

澳門基金會

完成時間(年/月)：

2010 年 8 月

主要參加者：

金輝、李璽、周勇

課題簡介：

本課題以澳門會展服務為例，剖析會展服務滿意度的影響因素，構建會展服務滿意度測評指標體系。本研究通過文獻研究和專家訪談等方法，構建了會展服務滿意度指數模型；對參展商和觀眾進行問卷調查，發放 600 份問卷，回收 452 份有效問卷，對數據採用因子分析、方差分析和結構方程模式等分析技術加以分析。研究表明：會展服務滿意度主要有四類影響因素，分別是現場接待服務、會展專業服務、會展配套服務和會展後臺服務；會展服務滿意度測評需要考察十五項指標。本研究對提高會展服務品質、提升會展企業競爭力具有指導意義。

4. Research on the Construction of Macao Customer Satisfaction Index (MCSI) for Meeting and Exhibition Services

Principal Investigator: ZHANG Tao

Faculty of International Tourism, Macau University of Science and Technology

Sponsor:

Macao Foundation

Completion period (Y/M) :

2010/08

Main Participants:

Jin Hui, Li Xi, Zhou Yong

Introduction:

This study is to discuss the influence factors of customer satisfaction on the meeting and exhibition services and establish a measurement scale system of customer satisfaction on meeting and exhibition services using Macau exhibition service as an example. For the purpose of study, literature review, personal interview, case study, and data analysis were used. 600 questionnaires were distributed and 452 effective questionnaires were gained, then descriptive analysis, factor analysis, ANOVA analysis and structured equation modeling analysis were used. The conclusions of this study are presented as follows: (1) Four service dimensions should be investigated to measure customer satisfaction of meeting and exhibition services, which are hospitality services, exhibition professional services, exhibition complementary services, and back-stage services of meeting and exhibitions. (2) Fifteen items are included in a questionnaire of MICE service satisfaction measurement scale. The study is valuable for improving exhibition service quality and raising competitiveness of exhibition companies.

5.生態旅遊視野下的澳門文化遺產旅遊可持續開發對策研究

負責人：葉桂平

澳門科技大學 國際旅遊學院

資助機構：

澳門基金會

完成時間(年/月)：

2010 年 9 月

主要參加者：

張萌、張曼胤、吳錚爭、羅好、邱宸雨

課題簡介：

本研究立足於澳門文化遺產旅遊發展的現狀和未來趨勢，廣泛吸收前人相關的研究成果，通過一個全新的研究視角——生態旅遊學，探究澳門文化遺產旅遊的生命週期特點及所處階段，測算文化遺產旅遊地生態足跡並分析其生態可持續性，識別並深入解讀澳門文化遺產旅遊發展中其他眾多方面的問題，如利益相關者利益協調、旅遊環境容量控制、旅遊服務設施規劃、遺產管理手段等，並借鑒生態旅遊學的理论觀點及實踐經驗，系統性地提出了澳門文化遺產旅遊進一步發展的對策建議，包括保護體系、開發體系、經營體系、管理體系等四大運作體系及法制保障、組織保障、資金保障、人力保障等四大保障措施，以期促進其可持續發展及綜合效益的實現。

5. Study on Strategies for Sustainable Development of Cultural Heritage Tourism in Macau based on the Perspective of Ecotourism

Principal Investigator: IP Kuai Peng

Faculty of International Tourism, Macau University of Science and Technology

Sponsor:

Macao Foundation

Completion period (Y/M) :

2010/09

Main Participants:

Zhang Meng, Zhang Man Yin, Wu Zheng Zheng, Luo Yu, Qiu Chen Yu

Introduction:

Based on the current status and future trend of cultural heritage tourism in Macau, and in combination with reference to previous research findings, this study proceeded with a new angle, the theoretic viewpoint and practice experience of ecotourism, probed into the characteristics of the life cycle of cultural heritage tourism of Macau and its current stage, calculated the touristic ecological footprints of the cultural heritage site and examined the sustainability of this venture, and performed an in-depth analysis on the problems with cultural heritage tourism of Macau, such as the coordination of stakeholders, control of environmental carrying capacity, planning of tourism facility, measures of tourism management, and finally brought forward a series of countermeasures accordingly, comprised of “four developing measures”, namely, measures for protection, exploitation, operation and management and “four enabling recommendations”, namely, recommendations on law and regulation, institution, financing and human resources.

6.文化遺產旅遊與城市互動發展策略綜合性研究-以澳門為例

負責人：梁文慧

澳門科技大學 國際旅遊學院

資助機構：

澳門基金會

完成時間(年/月)：

2010 年 5 月

主要參加者：

梁文慧教授、馬勇教授和研究助理

課題簡介：

長期以來，文化遺產一直都受到海內外政府和旅遊者的青睞。對於各國城市發展而言，文化遺產是海內外眾多城市不可多得的“文化名片”。澳門自回歸祖國以來，在特區政府的卓越領導下，十分重視文化遺產在擴大澳門城市張力，提升澳門城市功能，增強澳門城市影響等方面的特有功能。澳門作為一個擁有世界級文化遺產的城市，在社會、經濟、文化等諸多方面都取得了長足進步的同時，十分有必要大力研究和發展澳門的文化遺產旅遊產業，使之成為澳門未來發展的重要社會力量和新的經濟增長點。因此，我們選取澳門作為例子來探尋文化遺產旅遊與城市互動發展的模式。

澳門的城市形象和旅遊主題正面臨著由單一化向多元化的轉型，目前迫切需要我們在認真研究和總結借鑒海內外文化遺產旅遊與城市互動發展成功模式和成功經驗的基礎上，對澳門今後如何盤活自身得天獨厚的世界級文化遺產旅遊資源，展示除“賭城”以外的更加多元化的旅遊形象，從而提升城市功能，實現城市的可持續發展做出深入思考。而本研究正是本著盤活澳門文化遺產資源存量，提升澳門城市旅遊形象，促進澳門文化遺產旅遊與城市互動發展，增強文化遺產管理人員素質，以便更好地服務於城市文化遺產保護與發展而編制的。本研究不僅介紹並總結了海內外文化遺產的發展背景與發展趨勢、海內外文化遺產旅遊與城市互動發展的成功模式與成功經驗，而且具有創見性地提出澳門文化遺產旅遊與城市互動發展的新思路與新方法，並提出了具體的實施策略。

本研究從選題到完成一直都追求這樣一個基本立意，即致力於探尋文化遺產旅遊與城市的互動發展的模式，並培養素質相對較高的文化遺產旅遊管理人才，真正實現城市文化遺產的合理保護與有效開發。本研究充分強調了可持續發展的基本指導思想，把握澳門文化遺產旅遊資源和城市旅遊形象重塑這兩大關鍵要素，對澳門文化遺產與城市互動發展研究的各個環節提供了系統性的指導。研究共分為三個大的部分：第一部分為國際視野篇，重點分析海內外文化遺產旅遊的發展現狀及趨勢、以及海內外文化遺產旅遊與城市互動發展的成功模式；第二部分為現狀分析篇，重點分析了澳門文化遺產旅遊資源的賦存狀況以及發展現狀；第三部分為整合提升篇，提出了澳門文化遺產旅遊與城市互動發展的模式以及具體實施策略。

6. A Study on the Interactive Strategies for Culture Heritage Tourism and City Development –A Case Study on Macau

Principal Investigator: Prof. Aliana Leong

Faculty of International Tourism, Macau University of Science and Technology

Sponsor:

Macao Foundation

Completion period (Y/M) :

2010/5

Main Participants:

Prof. Aliana Leong, Prof. Yong Ma and Research Assistants

Introduction:

For some time now, cultural heritage has been gaining the attention of governments and tourists of all ages worldwide. Yet, in the context of city development, cultural heritage is a rare “Culture Name Card” among many cities everywhere. Since Macao’s handover to China, the SAR government attaches greater importance to cultural heritage. This is an obvious effort for Macao to release the tension, enhance urban functions, and boost the impact of its unique urban features. Macao has a world-class cultural heritage apparent in its social, economic, and cultural growth. Because of this, it is necessary to vigorously research and develop the city’s cultural heritage tourism industry in order to make it an important social force and a novel focal point for economic growth. This makes Macao an outstanding example to explore the interaction between cultural heritage tourism and city development patterns.

Macao’s city image and tourism themes are confronted with changes from a single transfer to that with a wide array of focus. Based on successful experiences of other cities and community models, an inventory of these world-class tourism resources for Macao's unique cultural heritage has to be established in order to show a more diverse tourism image than just being a gaming metropolis. The ultimate goal is to achieve the sustainable development of the city. This study aims to take stock of Macao’s cultural heritage resources to be revitalized, enhance the tourism image of Macao, promote cultural heritage tourism and city development, and strengthen the quality of cultural heritage management practitioners in order to better serve the city in the protection of its cultural heritage and prepare for its development. This study not only introduces the cultural heritage locally and overseas, but also summarizes the background and trends of development. It identifies successful models and appealing experiences of cultural heritage tourism and the interaction of city development. It also puts forward the nature of Macao’s Cultural Heritage Tourism, introduces new ideas and innovative methods of city development, as well as proposes specific implementation strategies.

This study has been completed from the selection of subjects to pursue such a basic concept that is committed to exploring the interaction of cultural heritage tourism and urban development patterns. It seeks to develop the cultural heritage of relatively high quality of tourism management talents to realize the reasonable conservation of urban heritage and its effective development. The study fully stresses the

fundamental guiding principle of sustainable development, grasps the two key elements of tourism resources and cultural heritage of Macao tourism image reshaping and provides a systematic guidance to Macao Cultural Heritage and Urban Development in all aspects. The study is divided into three major parts: the first part for international perspectives, status analysis, trends and successful models of cultural heritage tourism and city development; the second part analyzes the occurrence of Macao's cultural heritage tourism resources and the current stage of its development; the third part is for integration and enhancement which proposes an Urban Development Model and outlines specific implementation strategies.

7. 高峰期關閘口岸人流控制策略研究

負責人：梁文慧

澳門科技大學 國際旅遊學院

所屬學院/研究所：

國際旅遊學院

資助機構：

澳門治安警察局、澳門教育暨青年局等八個政府部門

完成時間(年/月)：

2010 年 5 月

主要參加者：

梁文慧教授、李璽博士、梁文昌博士和研究助理

課題簡介：

關閘是旅遊者及本澳居民進出澳門的重要口岸之一，同時也是澳門旅遊形象的視窗區域，對澳門旅遊形象的形成與優化有著十分重要的作用。同時，出入境的順暢程度也是旅遊者對目的地形象心理感知與評價的重要內容之一。縮短高峰期旅客進出澳門的時間，進一步優化過關等候的環境等都成為目前訪澳遊客及本澳居民的迫切訴求。為此，本項目主要側重於高峰期關閘口岸的人流控制，使用了深度訪談法、問卷調查法、實地觀察法、量化分析法以及統計學分析等多種方法進行綜合分析、探討和尋求進一步提升關閘口岸資源利用率及運作效率的途徑，從而為澳門旅遊業的發展以及旅遊形象的提升做出更大貢獻。

通過對服務行業排隊服務中的 56 篇期刊論文的分析研究，項目組認為有效的解決顧客等待服務的方法是綜合運用排隊論知識，採用先進技術，合理分配資源。同時，注重對顧客需求及行為特徵的分析，針對不同類型的顧客提供相應的服務。此外，在排隊管理過程中，還應注重提升服務效率，並不斷提高排隊過程中的服務體驗質量，使顧客在排隊中享受到優質服務。具體到關閘邊檢站高峰期人流的控制可以從旅客過關的需求管理、排隊模式管理、排隊服務及心理管理、排隊模擬分析等角度進行實證研究，最終達到控制高峰期旅客流量以及盡可能提升通關效率的目的。

從關閘邊檢站的服務流程出發，項目組在分析了進出關閘的服務流程後，認為在旅客出境過程中，有兩次選擇回到關閘廣場附近等待的機會。如有必要，邊檢站的工作人員能夠利用上述契機對旅客的過關需求進行控制和管理。可見，在澳門關閘的出入境服務中，出境服務流程中有更多的可控因素，入境服務則針對環境的應變性不強。如果能夠利用上述服務流程中的選擇和決策環節，能夠對旅客的通關行為產生一定的影響。

另外，項目組還根據服務要素的觀點，從關閘口岸服務的背景、關閘口岸服務的能力、關閘口岸的服務對象以及關閘口岸的服務關鍵時刻等四個方面進行服務要素分析。同時認為上述四個方面的服務要素對於解決澳門關閘口岸高峰期旅客流量控制問題具有一定的啟發，應該在後續研究和策略分析中作為參考。項目組還根據關閘邊檢站提供的歷史資料對旅客的出行特徵進行了統計分析。經過研究，項目組認為可以將關閘進出關閘的旅客流量規律歸納為：每個月有四至五

個高峯期，每週的週六和周日分別出現出境高峯以及入境高峯。以一天為單位，則平日的出境高峯為 19:00，入境高峯為 9:00；節假日出境高峯為 19:00，入境高峯期為 11:00。澳門居民則通常選擇星期六出境而星期天返回澳門。從中國內地居民出入境的資料來看，周高峯期主要出現在週六和周日，均表現為週六大多為峰值，周日大多屬於回落狀態。

通過對比中國內地居民與澳門居民的出行資料，項目組發現在入境方面，澳門居民與中國內地居民的高峯期具有錯位的特點。但是，在出境方面，澳門居民的出境最高峯會與中國內地居民的出境次高峯具有一定的同步性。

通過旅客的比例結構分析，項目組認為目前關閘口岸服務的主要對象為澳門居民以及中國內地居民，如何將有限的關閘資源合理的在上述群體之間分配以最終達到高效利用資源的目的是解決關閘高峯期旅客流量控制問題的關鍵。

通過對持逗留簽注的旅客進行分析，項目組發現持逗留簽注的入境旅客在中國內地居民及總入境旅客中所占的比例一般星期六降到最低，周日則開始快速攀升。表明逗留簽注的旅客進出境行為受工作日和休息日的影響較大。而周日時通常為逗留簽注旅客出境比例最低的時候。可見，持逗留簽注的旅客是出行頻率最高，同時也是佔旅客比例較大的人群，如何對其流量進行控制並提升服務效率是關閘口岸服務過程中亟待解決的問題。

項目組還對回收的問卷進行了整理與分析。通過統計分析，項目組認為，在受訪旅客的出行特徵方面，三分之二的旅客及半數自助通關旅客出入境頻率較高，旅遊與通勤是旅客的主要出行目的，約三分之一旅客為獨自出行，其次為與朋友和家人同行。

在出行的需求剛性方面，出境旅客的高峯期過關需求更具彈性。為此，項目組認為可以採取適當的方式向旅客傳達過關的即時資訊，以幫助旅客更為理性和合理的安排行程。在資訊發佈的管道方面，手機短信是公認為最便捷的方式，其次為互聯網和廣播。因此，借助手機及互聯網技術的不斷發展，向旅客提供出入境高峯期有關的資訊將有助於旅客在出行需求方面進行適當調整。

在研究中，項目組還認為，如果實施設施和服務優化能提升其他口岸的分流功能。此外，如果能夠對關閘口岸區域整體形象加以優化，並配合一定的推廣措施，應該能夠使關閘廣場附近區域發揮蓄水池的作用，對彈性出行需求的旅客產生一定的吸引力。

而在旅客對關閘通關效率的評價和感知方面，大部分出境旅客認為關閘及拱北口岸高峯期通行均較慢，較大部分入境旅客認為關閘口岸通關速度慢過拱北口岸。而高峯期旅客的實際等待時間目前與期望值相一致。從受訪旅客的通關效率感知來看，只有少量旅客對於出入境服務的效率感到不滿意，半數以上的旅客對於關閘口岸的通關效率較為認同。

為了評價目前關閘口岸通行效率，項目組還對關閘口岸的排隊系統進行了模型類比。根據關閘服務工作的特點和統計結果，項目組認為關閘旅客排隊適用於 $M/D/C/\infty/\infty/FCFS$ 模型，即多服務台泊松到達、定長服務時間的排隊系統模型，並借助實地測量的資料構建了關閘高峯期旅客排隊類比模型。

借助排隊系統的類比及分析，項目組認為目前關閘高峯期的排隊屬於不穩定狀態的排隊行為，其旅客的到達速率高於服務台所能提供服務的速率，為此，隊伍不斷增長是必然的結果。而從現有的服務台來看，根據系統類比的結果，在項目組實地勘測的資料下，關閘的服務台已經達到了 99% 的使用率，就單個服務台而言，其工作效率提升的空間不大。而在出入境間以及工作日

和節假日間的比較分析過程中，項目組認為加開服務台數仍然是較為有效的減少等待時間的因素，其次，服務效率也會在一定程度上改變排隊的狀態。

同時，在研究中項目組發現出境時的服務台服務效率會比入境時稍高，這也導致入境時的等待時間稍長於出境。可見，如果能夠採取方法增加入境大廳的服務台效率，有助於縮短入境大廳中旅客隊伍的長度和等待的時間。

關閘作為澳門重要的進出口岸之一，一直以來都在不斷的提升服務效率和質量。如在基礎設施方面，關閘口岸邊境站擴建工程已經竣工並投入運營。此外，為了進一步提升關閘的通行效率，當局已經從技術引進、檢查流程以及內部管理方面採取措施進行優化。在內部管理優化方面，也採取有系列有效措施。儘管關閘口岸邊境站已經採取了系列措施以改善高峰期旅客的排隊過關問題，然而，澳門社會經濟的快速發展也對關閘口岸產生了更高要求。關閘口岸在發展過程中也面臨較多的困境和挑戰，具體表現為出入境需求激增的挑戰、人力資源緊缺的挑戰以及應變機制缺乏的挑戰等三個方面。

項目組在分析了澳門關閘高峰期旅客流量特徵以及口岸發展面臨的挑戰基礎上，結合服務品質管制的相關原理提出了需求控制、互動溝通、柔性供給、整體管理、技術領先、服務提升、協調統一、區域合作以及制度創新等澳門關閘高峰期旅客流量控制的九大原則。並進一步提出澳門關閘口岸可以從旅客通關供需平衡管理、關閘通關服務能力管理、關閘通關旅客排隊管理以及關閘通關服務質量提升等方面採取措施調整高峰期的旅客流量。項目組還就上述內容，提出了系列具體舉措。

最後，項目組建議政府可以從明確關閘口岸之文職人員定位、明確關閘口岸的警員互助機制、研究一關兩檢的制度創新安排、加強珠海系列口岸的聯動發展以及持續強化對水客行為進行打擊等方面對關閘口岸的高峰期旅客流量問題提供援助。

由於本項目在研究的時間方面具有較緊迫的要求，為此，在實際考察過程中，參考和分析了治安警察局提供的 2009 年 4 月至 2010 年 1 月的相關歷史資料，並於 2010 年 1 月 23 日至 2 月 9 日期間對高峰期關閘現場過關的旅客進行了問卷調查。由於調查的時間相對集中，因此，在調查分析的樣本方面難免存在一定的限制性。本研究的對象為澳門關閘口岸本身，對口岸人流的分析及對策研究於其他口岸應有借鑒之用，但並未必能直接反映澳門其他口岸的具體個別情況。

另外，本研究中所涉及到之量化分析及框架為現有時空背景下關閘口岸的獨立數據和結果，可能隨著口岸的未來實際發展及人流規律等因素的改變而不同。對於新形勢下的情勢，則需要不斷持續研究。

7. A Strategic Study on the Control of Rush-hour Traffic at the Border Crossing

Principal Investigator: Prof. Aliana Leong

Faculty of International Tourism, Macau University of Science and Technology

Sponsor:

Macao Public Security Police Force and the Education and Youth Affairs Bureau of the Macao Special Administrative Region and other six government departments

Completion period (Y/M) :

2010/5

Main Participants:

Prof. Aliana Leong, Dr. Jacky Li, Dr. M. C Leong and Research Assistants

Introduction:

The Macau-Mainland China border crossing is not only one of the key ports for tourists and Macau residents, but also a window of Macau tourism. Because of this, management of traffic at the border plays an important role in the formation of policies that affect the image of tourism in Macau. The extent of smoothness in the process of border crossing is one of the vital components of the psychological perception and evaluation of such image. Less time spent crossing the border during rush hours and further optimization of the entrance environment have become an urgent appeal among local residents who are constantly crossing the border. For this reason, this project focuses primarily on the management and control of border crossing traffic during rush hours. By using in-depth interviews, questionnaires, field observation, quantitative analysis, and statistical analysis a comprehensive analysis of approaches will be explored and sought in order to maximize the utilization of resources and improve operational efficiency with the intent of further developing Macau tourism.

After analyzing and studying 56 journal articles, the project team considers that the most effective method to shorten the travelers' waiting time while crossing the border is the integrated use of the queuing theory, using advanced technology and the reasonable allocation of resources. Meanwhile, the team suggests for the provision of services that focus on traveler needs based on the analysis of behavioral characteristics of the different types of travelers. In addition, it is suggested that the queue management process should also focus on enhancing efficiency to continuously improve such service. By improving the quality of their experience, travelers could enjoy even while at the queue. Specific to the Border Gate checkpoint control of the peak flow from the tourists clearance demand management, queuing model management, queuing services, and psychological management, queuing simulation analysis, and ultimately achieving control of the peak tourists traffic as much as possible to improve the efficiency of passing through customs .

The project team analyzed the service processes at the entry and exit points and considers two options to return to the closing square wait-around opportunity from the Border Gate service. The frontier inspection staff can take advantage of the opportunity for tourist demand to control and manage

according to the flow conditions. Macau border crossing process has more controllable factors. The entry service point can be made more environmentally-friendly. If these services can be used in the selection process and decision-making, tourists can have a certain influence.

In addition, the project team analyzed four service factors: services background, service ability at the border crossings; target clients at border crossings and rush hours of each border crossing. Moreover, the above four service factors should follow-up with research and strategic analysis as a reference in favor of solving the traffic congestion problem at the Macau border crossings during rush hours.

The characteristics of travelers have been analyzed based on historical information provided by the frontier inspection station. According to data gathered for this research, the entry and exit of travelers are summarized as: 4-5 rush hours per month; exit and entry peak hours on Saturday and Sunday. Taking one day as a unit, the daily exit peak is 19:00, entry peak is 9:00; holiday departure peak is 19:00, entry peak is 11:00. Macau residents often choose to leave on Saturday and return on Sunday; whereas for Mainland Chinese travelers, the rush hour is on Saturdays and Sundays. Saturday is at peak during the day and less activity on Sunday.

A comparison of the information of travelers from Mainland China and Macau showed that they have different characteristics at the entrance point and similar characteristics at the exit point.

An analysis of the proportion of travelers showed that the existing border crossings and ports services are primarily used by Macau and Mainland China residents. How to use the limited available resources efficiently among the above-mentioned aspects to eventually solve the flow control matter of the closing peak hours of tourists is a key problem.

Travelers with permission to stay comprised the least number among Mainland China residents and the entire inbound travelers. The number of these stay-permitted travelers is lower on Saturday and higher on Sunday, which indicates that entering and exiting conditions of stay-permitted visitors depend on their work and holiday schedule. Normally, stay-permitted travelers have the lowest departure percentage on Sunday. How to control the flow and enhance efficiently in the delivery of service is an urgent situation that needs to be resolved.

Based on travel characteristics, one third of the tourists and half of the self-service travelers were high frequency visitors and commuting was their main purpose; one third of the tourists travelled alone; followed by those who traveled with family and friends.

In the context of travel needs, departing tourists after peak hours demanded more flexibility. Thus, taking appropriate measures to speed up the clearance of tourists' real-time information is an urgent need. Based on the information released, cell phone text messaging is recognized as the most convenient way, followed by the Internet and broadcasting. Therefore, the usage of mobile phones and the Internet continue to evolve as main sources of information for visitors inquiring about the border situation during peak hours and this will help them adjust their travel needs appropriately.

Optimization of facilities and services can improve the streaming function of other ports. In addition, if the overall image of the region on the border crossings and ports are improved in line with certain measures, the border square area could play a significant role in meeting the demands of travelers.

In the evaluation and perception of visitors regarding the border crossing, majority of departing tourists answered that the Macau side is slower than the Gongbei side. The peak of the actual waiting time of tourists (Average time customers/tourists spent in the system) is currently in line with expectations. From the tourists' feedback, only a small number were satisfied with the service, and more than half gave negative feedbacks.

In order to evaluate the efficiency of the current procedure at the border crossings, the project team also analyzed the simulation model of queuing systems in accordance to the characteristics and statistical results, the closing of queuing for $M / D / C / \infty / \infty / FCFS$ model, namely, multi-server Poisson arrival of fixed-length service time of queue system model, and with the field measurement data to build a closing peak of queuing simulation models.

With the simulation and analysis of the queuing systems, the existing border crossings and the peak of the queue line reflect unstable behavior; the travelers' arrival rate was higher than the rate of activity at the help desks. The teams of service desks were continuously increasing. According to the system simulation analysis, the closing of the help desk had reached 99% of the utilization of a single desk; its work efficiency leaves very little room for improvement. During working days and holidays, the comparative analysis of the process, the number of additional help desk (Number of servers), it is still more effective to reduce the waiting time factor, and secondly, the service efficiency can also influence the queue condition to a certain extent.

In addition, the efficiency of help desk services at exit points on the Macau side was slightly higher than the entry point, which also led to longer waiting time at entry than at the exit point. Thus, it would be extremely helpful if measures were taken to increase the efficiency of the entry hall desk to help reduce the congestion at the Entry Hall and shorten the waiting time.

The Border Gate, as one of Macau's major export port, has been continuously upgrading its efficiency and quality of service. Infrastructure, border crossings and border points port expansion project had been completed and put into operation. In addition, in order to maximize the efficiency of the closing passage, the border gate administration has moved for technology transfer, inspection processes, and internal management measures to be improved. The internal management optimization has also taken a series of effective measures. While closing ports checkpoint measures have improved, the peak period traffic congestion problems at the border crossings and ports had higher demands. Border crossings and ports in the development process is also faced with more difficulties and challenges, specifically the performance of the surge in demand for the challenges at entrance, human resources, shortage of challenges and the challenge of a lack of response mechanisms in three areas.

The project team analyzed the Macau border crossings considering the peak of travelers traffic characteristics as well as the challenges facing the development of ports based on the combination of service quality management principles related to the demand put forward control, interactive communication, flexible supply, the overall management, technical leadership, service enhancement and coordination of a unified, regional cooperation and institutional innovation in Macau. The project team also made a series of specific initiatives on the speeding up of the travelers' clearance at control points to

create a balance between supply and demand management, border crossings and customs clearance services, capacity management, border crossings and customs clearance of queuing, as well as border crossings and customs clearance management to enhance the quality of service and effectively manage the traffic of travelers crossing the borders at peak hours.

Finally, the project team recommends that the Macau government provides assistance at the closing ports with consideration from the civilian point of view, a clear border crossing and port police mutual aid mechanism, a closed system of co-location of innovative arrangements to develop the Zhuhai border, as well as to strengthen the linkages of water-off behavior in terms of border crossings and ports to combat traffic congestion of travelers during peak hours.

As the project is on urgent needs, the actual process of inspection, reference and analysis of security is provided by police stations' relevant historical data from April 2009 to January 2010. The survey was conducted during peak hours from January 23 to February 9, 2010. As the investigation of the relative concentration of the time it was conducted, the sample of the survey analysis had certain inevitable constraints. This study focused on border crossings and the Macau port. The right port flow analysis and countermeasures study aimed to learn from other ports should be used, but not necessarily directly reflecting other individual specific ports.

Additionally, this study involved a quantitative analysis and framework for the existing border crossings against the background of an independent data and results may influence the port' future actual developments and pedestrian factors within the context of modification of existing laws. To meet the needs of new developing situations, a continuing research and further study is considered necessary.

8. 博彩從業青年生存狀態與成長路徑優化研究

負責人：梁文慧

澳門科技大學 國際旅遊學院

資助機構：

澳門特別行政區政府教育暨青年局

完成時間(年/月)：

2010 年 8 月

主要參加者：

梁文慧教授、李璽博士、梁文昌博士和研究助理

課題簡介：

博彩業是澳門的重要龍頭產業，一直廣為人們所關注。博彩業作為服務行業，其人力資源的質素也會對整個行業的運作和競爭力產生深遠影響。同時，青年問題也是澳門社會持續發展的重要內容。為此，澳門特別行政區政府教育暨青年局在 2009 年專門針對博彩業青年展開了研究項目的資助。

由於目前澳門對博彩從業青年尚未有較為全面的統計資料來幫助社會瞭解這個群體，因此，項目組在研究時主要依託澳門青年指標，希望通過綜合使用文獻研究、深度訪談以及問卷調查等方法能夠對博彩從業青年的生存狀態以及成長現狀能有較為初步的瞭解，並針對性的提出相關策略。

這裏所謂的生存狀態總體上包括以下三個方面的內容，即生活、學習及職業發展。生活主要針對澳門博彩從業青年的日常生活行為和狀態進行分析；學習則是針對澳門博彩從業青年對學習的態度和觀念；職業發展則是針對澳門博彩從業青年在職業生涯發展中對於工作中的各種關係及工作環境的判斷。

項目組成功訪問了七名來自不同博彩公司的青年從業人員代表以及六名來自不同博彩公司的高層管理者，並成功回收了 517 份針對澳門博彩從業青年發放的問卷。通過對訪談資訊以及資料的分析，項目組得到以下基本結論：

博彩行業工作確實會對從業青年的生活和行為有一定影響，如博彩從業青年的休息時間相對偏短，健康程度感知中等偏下，吸煙的比例較高，閱讀時間較少，休閒活動方式受工作及個人特徵影響明顯；社會公益活動參與率較低，個人消費過於注重娛樂，博彩活動參與率略高於同齡人等。

而在職業發展及工作滿意度方面，博彩從業人員對於其自身工作的滿意度並不理想，對博彩行業發展的前景也較不樂觀，特別是在工作的成就感和社會認同感方面，博彩行業還應該做出更多的努力，以提升從業人員在社會中的地位 and 形象。此外，博彩從業青年所從事的工作會對其學習狀態產生一定的客觀阻礙。同時，博彩從業青年對於學習的態度也還有待進一步優化。

最終，項目組建議透過七種方式緩解目前在博彩從業青年發展方面存在問題，如定期開展博彩從業青年的普查，瞭解博彩從業青年發展訴求；企業社會共同參與，優化博彩從業青年生活模式；適當引入競爭機制，提升博彩從業青年的學習動力；創新員工管理模式，增強博彩從業青年多元化的技能；以民間社團為基礎，推進博彩從業青年參與社會活動；透過各類教育機構，為博彩從業青年提供專項精品課程；以特區政府為主導，完善博彩從業青年的職業路徑。

8. Achieving a Successful Career in the Gaming Industry: A Situation Analysis of Young Gaming Practitioners in Macau

Principal Investigator: Prof. Aliana Leong

Faculty of International Tourism, Macau University of Science and Technology

Sponsor:

Education and Youth Affairs Bureau, MSAR

Completion period (Y/M) :

2010/8

Main Participants:

Prof. Aliana Leong, Dr. Jacky Li, Dr. M. C Leong and Research Assistants

Introduction:

The gaming business as Macau's leading industry has obtained widespread concern. As a service industry, the quality of gaming's human resources has far-reaching impacts on the entire operation which directly affects Macau's competitiveness in the business. As age is an important factor in the sustainable development of the Macau community, the Education and Youth Affairs Bureau of the Macao Special Administrative Region in 2009 funded this project to carry out research works for youth practitioners in the gambling industry.

Comprehensive data to help the local community understand the plight of young gaming practitioners in Macau is at its best, incomplete. For that reason, this study focuses mainly on Macau Youth indicators. It is expected that through combined literature review, in-depth interviews and questionnaire survey, an initial understanding of Youth Gaming Practitioners' living and growth status can be achieved so that proposals on strategies for improvement can be made.

The 'living status' includes three dimensions: living, studying and career development. 'Living' is mainly focused on 'youth practitioners' daily living activities and behavior; 'career development' is mainly focused on youth practitioners' judgment amidst various relationships in their working environment.

The research team successfully interviewed 7 'youth practitioners' representatives and 6 senior executives representing six different gaming corporations. A total of 517 feedback questionnaires were collected and through interviews and survey, the outline below was completed:

It is proved that working in the Gaming Industry has a certain influence on 'youth practitioners' life style and behavior , such as shorter rest time; lower health cognition; a high percentage are smoking; less time spent on reading; leisure activities are significantly influenced by work and personal characteristics; low participation rates on social welfare activities; excessive attention on entertainment and personal consumption; and a slightly higher participation rate in gaming activities than their peers.

On the degree of satisfaction on career development and work, 'youth practitioners' in the gaming industry are dissatisfied: less optimistic on career development, especially on the aspects of 'working achievements' and 'social cognition'. There is a big gap to be developed to enhance gaming industry

practitioners' social status and image. Meanwhile, there are some objective obstacles on studying for the conditions confronting 'youth practitioners in the gaming in the gaming industry'. Most of the 'youth practitioners in the gaming industry' are not fully aware of the significance of their involvement in the development of the industry as shown by their limited participation in discussions surrounding the issues.

The project team proposed seven ways to ease the current existing problems in 'youth practitioners' development in the gaming industry, such as regularly carry out surveys of youth gambling practitioners to understand their aspirations; corporate social participation, optimize lifestyle; appropriate competition mechanism to further enhance their motivation in learning; innovative staff management , and increasing a wide range of skills of young practitioners; to the basis of civil society, promoting 'youth practitioners' participation in social activities; provide Gaming Specialized Courses through various educational institutions; through government-led efforts, accomplish a successful career path for 'youth practitioners'.

9. 澳門會展業與博彩業互動發展創新策略初步研究

負責人：梁文慧

澳門科技大學 國際旅遊學院

資助機構：

澳門理工學院博彩教學暨研究中心

完成時間(年/月)：

2010 年 12 月

主要參加者：

梁文慧教授、李璽博士、梁文昌博士、馬勇教授和研究助理

課題簡介：

會展業在全球範圍內的發展已經逐步進入成熟期，然而，澳門的會展業起步相對較晚，尚處於初步發展階段（梁文慧，2006）。澳門會議與展覽業協會（簡稱會展協會）發布的《澳門會展業發展研究報告》指出，到 2010 年澳門會展業才脫離嬰兒期，正式踏入初級發展/市場培植期。為此，國際上會展業發展的成功路徑極待總結，與此同時，從產業集群的視角來探討澳門產業結構升級的問題具有較高的戰略價值與意義。

出於促進澳門社會經濟多元化發展以及提升澳門龍頭產業間互動效率的考慮，項目組對澳門博彩業以及會展業之間的互動機制進行了探討。具體而言，主要包括對會展業、博彩業之間的關係進行界定和分析，從理論上探討會展與博彩之間的互動機制。分別從澳門會展業、博彩旅遊業的角度分析其各自在發展過程中所面臨的機遇與挑戰以及探討會展業與旅遊博彩業之間互動發展的可能途徑。

在研究過程中項目組綜合運用了多種方法進行研究。如在研究初級階段採用文獻分析法，搜集國內外有關博彩業以及會展業發展的研究文獻，通過對有關會展業與博彩業的社會經濟效益的文獻進行整體的分析與回顧整理，來重新審視博彩業及會展業的性質。

再如針對澳門會展與博彩經營與管理人員、政府行政人員學術界等學者專家邀請其參與深度訪談，以探討澳門博彩業及會展業的發展現狀及相互之間的影響和制約關係，並就兩者之間的互動發展可行性進行探討。

項目組還在研究中針對來澳門參加各類會展活動人士進行問卷調查和統計分析。以透過問卷調查的形式，從展會參與者視角，研究和分析澳門會展業與博彩業的互動發展現狀及作用機制。

項目組從 2010 年 9 月 13 日開始邀請澳門的博彩與會展相關行業的代表進行了深度訪談，從而為博彩與會展業的互動發展機制研究提供初步的資訊。截止到 2010 年 9 月 30 日，項目組已經完成對所有上述 12 位專家的深度訪談。

問卷調查的研究物件則選擇了來澳參加會議、展覽以及節事活動的人士。本次調查採用抽樣方法進行區域控制性問卷調查。調查工作於 2010 年 10 月 8 日至 2010 年 11 月 20 日間完成，問卷調查的主要投放地點包括澳門威尼斯人會展中心、澳門觀光塔會展中心、漁人碼頭會展中心、澳門文化中心、澳門綜藝館以及澳門其他酒店及會展場地。項目組在調研期間總共發放問卷

1200 份，回收 1180 份，有效問卷 1178 份，有效回收率為 98.2%，所得的資料具有較強的代表性。

項目組首先從會展業以及博彩業的基本概念界定出發，結合前人已經有的研究成果分別對會展以及博彩業的發展條件以及構成要素，對社會以及經濟發展的影響進行了歸納總結。與此同時，項目組還就產業集群及其發展影響因素、產業集群的競爭力評價和影響產業集群競爭優勢的因素等進行了歸納和匯總。

項目組認為，在研究澳門博彩業與會展業的互動發展策略時，首先應該肯定澳門的博彩業以及會展業正朝集群的方向發展。其次，在探討其互動發展的策略時，需要分析兩個產業間是否存在產業關聯。第三，對於產業間的協同度，則需要借助兩者的產業鏈構成以及業務流程上來進行分析。只有明確了上述的三個問題，才能初步判定澳門博彩及會展業之間的互動關係，從而更加清晰的研究促進兩者更進一步融合，提升其各層面影響力的策略。

從與會展及博彩業受訪者的交流情況來看，博彩業與會展業之間具有較為明顯的產業關聯性以及產業協同性。從澳門會展業的發展來看，澳門博彩業先發優勢所提供的完善商旅接待、休閒娛樂服務、以及政府的政策支持是澳門會展業發展的優勢。根據專業人士的意見，同作為第三產業中的重要部門，澳門博彩業發展過程中的國際化管理經驗及來自不同文化背景的工作人員可能會對會展行業服務及管理品質的提升產生正面影響。而澳門目前具有較高認同度的賭城形象對於會展業發展的影響則受不同國家和地區文化背景影響較多，相關影響正面及負面影響兼有。

在資料分析方面，項目組藉助結構方程模型的分析，對博彩業與會展業之間的互動關係及機制有了較為深入的瞭解。

在文獻綜述以及專家深度訪談的基礎上，項目組將博彩業與會展業間互動的仲介因素分為八類，分別是：基本要素、基礎設施與環境、娛樂活動、相關支援性服務、人力資源因素、費用因素、正面旅遊地形象評價和再次到訪目的地。其中博彩業可能會通過前六類因數與會展業展開互動，而會展業則通過後兩類因數與博彩業進行互動。

透過分析發現，從會展業的總體情況來看，博彩業在人力資源因素上對於會展的支持較小。基本要素、基礎設施與環境、娛樂活動、相關支援服務以及成本因素是博彩業影響會展業的主要途徑，其中博彩業通過基本要素的仲介作用推動會展業發展的顯著性要遠大於其他互動因數。而會展業產生的正面旅遊地形象評價以及商務人士的再次到訪均對博彩業有顯著影響。

而對於會議市場而言，博彩業透過影響人力資源推動會議市場發展的關係假設不成立。博彩業透過基礎設施與環境和娛樂活動等影響會議部門的發展較為明顯。而與會者的目的地形象正面評價對博彩業發展的影響不如重遊率帶來的影響大。

從展覽市場來看，博彩業透過人力資源影響展覽部門發展的關係假設仍然不成立。博彩業透過基礎設施與環境的仲介作用影響展覽部門發展更為明顯。展覽參與者對目的地形象評價及再次到訪都會顯著影響博彩業發展，且對旅遊目的地正面的形象評價對博彩業發展的影響更為明顯。

從節事活動的發展來看，博彩業通過人力資源推動節慶發展的假設同樣不成立。博彩業更多的透過娛樂活動的仲介作用來促進節事活動的發展。節事參與者對目的地形象評價及重遊會促進博彩業的發展，其中目的地正面形象評價的影響更為明顯。

綜上所述，博彩業與會展業的互動發展主要是透過基本要素、基礎設施與環境、娛樂活

動、相關支援性服務、成本因素、正面旅遊地形象評價和再次到訪目的地來發生相互影響。其中在不同的會展細分市場中，相互影響和作用的機制略有差異。為此，澳門在今後的發展中可以結合相關結論，大力推動會展業與博彩業的結合，以促進兩個產業共同進步與發展。

在對來澳會展參與者消費行為及其對澳門作為會展旅遊目的地的滿意度進行問卷調查分析的基礎上，項目組認為目前澳門博彩業與會展業之間的互動效應已經初步呈現。在會展業推動博彩業發展時，主要體現在兩個方面，其一為非博彩娛樂項目的需求使得博彩業不斷創新發展模式；另一方面，會展參與者的口碑宣傳對於提升澳門區域旅遊形象有較大的幫助。而博彩業對於會展的推動作用，在基礎設施以及環境方面有一定的體現，同時，也得到了來澳參與會展活動人士的認可。

結合產業集群競爭力提升的相關理論，項目組認為在促進會展業與博彩業融合發展方面，應該注意以下發展方向：延伸博彩及會展產業鏈，加強人力資源開發；促成博彩與會展戰略聯盟，增強產業間的正協同效應；以市場需求創新非博彩項目，提升澳門商務會展形象；加強互動機制的構建，促進會展業各細分市場與博彩業的互動；推進區域會展業合作，創新拓展博彩業發展領域。並在下一階段的研究應該側重於以下領域：即探索和研究的其他典型區域博彩業與會展業互動發展的機制特點；透過案例分析，總結其他區域在博彩業以及會展業或產業互動發展方面的經驗與模式；在上述戰略發展方向的前提下，深入系統探討推進澳門博彩與會展業互動發展的具體措施。

9. A Primary Study on the Interactive Strategic Development Between MICE and Gaming Industries in Macau

Principal Investigator: Prof. Aliana Leong

Faculty of International Tourism, Macau University of Science and Technology

Sponsor:

Macao Polytechnic Institute Gaming Teaching and Research Centre

Completion period (Y/M) :

2010/12

Main Participants:

Prof. Aliana Leong, Dr. Jacky Li, Dr. M. C Leong, Prof. Yong Ma and Research Assistants

Introduction:

The growth of the M.I.C.E. industry has entered maturity in the international scene. In comparison, M.I.C.E. industry in Macau started to develop relatively late, and it is still in its early development stage (Leong, 2006) . The Macau M.I.C.E. Industry Research Report issued by the “Macau Convention and Exhibition Association” states that “up until 2010, the Macau M.I.C.E. Industry is out of its infancy stage, and enters the initial developing/marketing establishing period”. It is therefore, necessary to summarize the successful experiences on the development of the international M.I.C.E. industry inasmuch as it has a high strategic value and significance on the perspective of industry cluster to upgrade Macau’s industrial structure.

With reference to the interactive validity on the promotion of Macau social economic diversification and enhancing the efficiency of its leading industry, the project team discusses the interaction mechanism between the gaming and M.I.C.E. industries in Macau. The discussion centers mainly on the definition and analysis of their interactive relationship, the perspectives of opportunities and challenges, and an exploration of possible interactive development paths between both the Macau M.I.C.E. industry and Macau gaming industry.

A variety of research methods have been used. On the initial stage of the research, literature review analysis is used to collate domestic and international information on the gaming industry and the M.I.C.E. industry, which aims to re-examine the nature of the gambling industry and the M.I.C.E. industry seen through the social economic benefits both bring about to the community.

Further, in addition to management personnel in Macau M.I.C.E. industry and the gaming industry, government administrators, academics experts and scholars are invited to participate through in-depth interviews which are designed to explore the impact and constraints between the M.I.C.E. industry and the gaming industry, and to further discuss the feasibility of their simultaneous interactive development.

The questionnaire survey and statistical analysis of participants in various M.I.C.E. activities are designed to evaluate the current interactive statutes and mechanism of the M.I.C.E. and the gaming industries. The project team invited representatives from the Macau gaming industry and the M.I.C.E. industry to conduct in-depth interviews to provide preliminary information on the interactive

development mechanism between these two industries from 13 September 2010 to 30 September 2010. The project team has completed all the above in-depth interviews with 12 experts.

The questionnaire survey targets are participants to M.I.C.E. and festival activities in Macau. Samplings were collected from controlled areas from October 8, 2010 to November 20, 2010, including the following venues: the Convention and Exhibition Center at the Macau Venetian Resort, the Convention and Exhibition Center at the Macau Tower, the Convention and Exhibition Center, Fisherman's Wharf Macau, Macau Culture Centre, Macau Forum as well as other hotels and convention venues in Macau. A total of 1,200 questionnaires were delivered with 1,180 feedbacks. There were 1,178 valid responses, with valid rate of 98.2%, indicating that the feedback has a strong validity.

Firstly, the panel started from defining the basic concepts of the gaming and the M.I.C.E. industries, and combined with previous research results, reached a conclusion and summary of the developing conditions and composing elements the M.I.C.E. industry and the gaming industry, along with the developing social and economic influences. The panel concluded and aggregated the industry cluster and its influencing factors, evaluated the competitiveness of industry clusters and competitive advantage of industrial clusters. On the interactive developing strategy between the M.I.C.E. industry and gaming industry, first and foremost, it must be affirmed these two trades are moving ahead to the direction of the cluster.

Secondly, on discussing the interactive developing strategies, it is necessary to analyse whether there is an industrial connection between the two trades. Thirdly, concerning the collaboration degree between the two industries, it is essential to analyse both the chain up compositions and business processes. Only when the above three issues are identified the initial interactive relationship between the M.I.C.E. industry and the gaming industry, could advance further integrations for the enhancement of its strategic influence at all levels.

On the communication perspective of the interviewee at the M.I.C.E. industry and the gaming industry, there is an obvious industrial relevance and industrial synergy between these two trades. On the aspect of Macau M.I.C.E. industry development, it is noted that it provides first-mover advantage of the perfect business travel hospitality, leisure and entertainment services of the Macau gaming industry, and the support of government policy is an advantage of Macau M.I.C.E. industry development. According to the professionals' advices, the same important industry as the service sector may have a positive impact on the quality of service in the M.I.C.E. industry from the growth of Macau gaming industrial international management experience, as well as staff from different cultural backgrounds. Currently, Macau has a high degree of recognition on the impact of the M.I.C.E. industry development, which is subject to different cultural backgrounds, with both positive and negative effects.

Concerning the data analysis, the project team analyzes structural equation modeling on the gaming industry and the M.I.C.E. industry in the interaction and has a more comprehensive understanding of the mechanism.

Based on the literature review and expert interviews, the project team divides the interactive intermediary factors of the gaming industry and the M.I.C.E. industry into eight categories: basic

elements, infrastructure and environment, recreational activities, related support services, human resources factors, cost factors, positive tourist image evaluation and re-visit destination. The gambling industry may be interacted with the adoption of the above-mentioned six types to connect with the M.I.C.E. industry, while the M.I.C.E. industry may interact with the gaming industry through the first two types of factors.

From an overall M.I.C.E. industry perspective, the human resources factors of the gaming industry insignificantly support the M.I.C.E. industry. Basic elements, infrastructure and environment, recreational activities, support services and cost factors are the basic elements that influence the M.I.C.E. industry. Amongst these factors, the gaming industry utilizes basic elements of intermediary role by promoting the development of the M.I.C.E. industry other than the rest factors.

The M.I.C.E. industry generated a positive image of tourism and visiting business people are a significant influence factor on the gaming industry.

Concerning the M.I.C.E. market, the hypothesis does not hold gambling industry to promote the relationship between conference markets through the development of human resources, infrastructure, environment, entertainment and activities that are obvious to the meeting sector development for the gaming industry. The positive evaluation on the destination image towards the gaming industry is less influential than the re-visit rate.

Concerning the exhibition market, the hypothesis is still not established on the gaming sector through the development of human resources implications. It is obvious that the gaming industry uses infrastructure and environment to impact the exhibition sector development. The evaluation of the exhibition participants and re-visit destination image will significantly affect the gaming industry, and the positive image of tourism destination development impacts is more apparent on the growth of the gambling industry.

Concerning the perspective of the festival activities expansion, the gaming industry promotion of the festival through human resources development does not support the hypothesis. The gaming industry is more recreational through the intermediary role to promote the festival activities development. Festival participants' re-visit destination image appraisal will promote the gaming industry development, including a more apparent evaluation impact of a positive destination image.

In summary, the interactive development of the gaming industry and the M.I.C.E. industry is mainly through the basic elements of infrastructure, environment, recreational activities, related support services, cost factors, a positive image of tourist destinations to visit and re-evaluation. In different market segments, there is a slightly different mechanism in the mutual influence. To this end, the conclusions can be combined for future development of Macau, it is crucial to vigorously promote the combination of the M.I.C.E. industry and the gaming industry, in order to advance common progress of the two trades.

Based on the analysis of consumer behavior of Macau M.I.C.E. and its participants as an M.I.C.E. destination, the project team finds that the current interactive effect between the gaming industry and the M.I.C.E. industry has begun to emerge. Promoting gambling for the expansion of the M.I.C.E. industry

mainly reflects in two aspects: one is the demand for non-gaming entertainment, which makes continuing innovation development model towards the gaming industry. On the other hand, publicity reputation of the M.I.C.E. participants can enhance Macau tourism image. There is a certain influence on infrastructure and environment in the gaming industry's role in promoting the M.I.C.E. industry. Meanwhile, the above idea has also been recognized by M.I.C.E. participants.

With the relevant theory on enhancing the industrial competitiveness of clusters, the panel deems that the integrated promotion of the M.I.C.E. industry and the gaming industry should be aware of the following: a chain extension of gaming industry and M.I.C.E. industry, enhancing human resource growth; promoting gaming and M.I.C.E. strategic alliance, and intensifying the positive synergies between industries; creating non-gaming projects which can augment the positive image of Macau M.I.C.E. industry; strengthen mutual mechanism to promote the M.I.C.E. industry market segments and interactive with the gaming industry; promotion of regional M.I.C.E. industry cooperation, innovation and expansion of the gaming industry fields. In the next stage, researches should focus on the following areas: explore and study the mechanisms features of other areas interactive progression of the M.I.C.E. industry and the gaming industry. Through case studies, summarizes the gaming industry as well as other regional M.I.C.E. industry or industrial experiences in interactive development and models; On the premise of the strategic development direction, systematically explore specific measures to promote interactive advancement between Macau M.I.C.E. industry and Macau gaming industry.

10.澳門博彩業青年員工職業勝任能力研究

負責人：聶婷

21 世紀科技研究中心

資助機構：

教育暨青年局

完成時間(年／月)：

2010 年 10 月

主要參加者：

聶婷、胡喆華

課題簡介：

本研究以澳門博彩業青年員工為研究對象，主要採用文獻研究、深度訪談和統計調查相結合的方法。在建立博彩業青年員工勝任力模型基礎上，探討工作特徵、勝任力與組織成果之間的關係。瞭解澳門博彩業青年員工、工作特徵、勝任能力的現狀，以及澳門博彩業主管人員對青年員工的工作勝任能力的期望，對比兩者之間的差距，尋求較好的解決辦法，幫助澳門博彩業青年員工提高其職業勝任能力，獲得更好的職業認同和工作績效。

10. The Study on Competency of Macau Young Employees in Gambling Industry

Principal Investigator: Nie Ting
21 Century Technology Research Center

Sponsor:

Education and Youth Affairs Bureau

Completion period (Y/M) :

2010/10

Main Participants:

Nie Ting, Hu Zhehua

Introduction:

The Study on Competency of Macau Young Employees in Gambling Industry use literature research, depth interview and questionnaire to discuss relations between job characteristics, competencies and organizational outcomes on the basis of employee competency model.

We surveyed young employees and their direct supervisors to get information about current situation of employees and expectations from their supervisors, and then we contrast difference between them and try to find solutions to improve competencies of young employees and get high job satisfaction and organizational commitment.

科普項目

Promotion of Science

1. 科普夏令營之探索生命的奧秘：豐富多彩的生物大分子

負責人：黃啓來

澳門科技大學 中醫藥學院

資助機構：

科學技術發展基金

完成時間(年／月)：

2010 年 7 月

主要參加者：

黃啓來、盧智鵬、張文靜、李家璜

課題簡介：

生命是世界上最複雜、最奇妙的事物，她充滿了無盡的奧秘。本項目帶領營員們進入奇妙的生命科學的世界，去探索生命體的豐富多彩的化學組成，瞭解多種常見疾病在分子水平的發病機制。通過親自動手做實驗來鑒定各種重要的生物大分子，包括蛋白質、核酸和酶等，體驗生命科學實驗的基本過程，讓各種色彩豐富的化學反應和檢測技術激起他們的好奇心，培養他們對生命科學研究的興趣，提高實際動手和操作能力。進一步激發他們的探索精神及分析問題和解決問題的能力。

1. Summer Camp 2010—exploring the mysteries of life: the colorful Biological molecules

Principal Investigator: Huang Qilai

Faculty of Chinese Medicine, Macau University of Science and Technology

Sponsor:

Science and Technology Development Fund, MSAR

Completion period (Y/M) :

2010/7

Main Participants:

Huang Qilai, Lou Chi han, Zhang Wenjing, Li Jiahuang

Introduction:

Life is the most complicated and beautiful thing in the world. This project is aiming to bring members into the mysterious world of life science to explore the colorful chemical composition of beings, and to understand the pathogenesis of several common diseases at molecular level. They do experiments in person to recognize all kinds of important biological molecules, including protein, nucleic acid, enzyme et al. They can experience what is scientific experiment of life science and how it is performed. By these to truly inspire their exploring spirit and train their ability to analyze and dissolve problems.

2.2010 科普夏令營活動——探索人體的奧秘：人體的結構與功能

負責人：秦建強

澳門科技大學 中醫藥學院

資助機構：

科學技術發展基金（025/2010/P）

完成時間(年/月)：

2010 年 8 月 2 日—8 月 13 日

主要參加者：

盧智鵬

課題簡介：

通過理論演講、形態學觀察和機能學實驗，使澳門中學生對人體的結構和功能概況有初步瞭解，對生命科學實驗的基本過程有親身的感受，從而達到提高學習興趣、拓展知識、開闊眼界，培養探索精神，提高創新意識，使他們崇尚科學、熱愛生命。

2. Discovering the Human Body from Structures to Functions

Principal Investigator: Qin Jianqiang

Faculty of Chinese Medicine, Macau University of Science and Technology

Sponsor:

Science and Technology Development Fund, MSAR

Completion period (Y/M) :

2010.08.02—2010.08.13

Main Participants:

Lou Chi Han, Christina

Introduction:

The purpose of our Healthy Summer Camp is to make students preliminary understanding the human body from structures to functions by theoretical lecture, morphological observation and functional experiments. We also want them to experience the basic procedure of life science experiments by themselves, so that we can make them increase the interest of learning, expanding the knowledge of science, enlarging the field of view, cultivating the spirit of exploration, enhancing the sense of innovation. Finally we make them upholding science and love life.

3.天文學及月球知識科普夏令營

負責人：蔡占川

澳門科技大學 資訊科技學院

資助機構：

科學技術發展基金

完成時間(年/月)：

2010 年 8 月

主要參加者：

蕭耐園、梁延研、李堅、葉夢傑、陳偉等

課題簡介：

來自濠江中學、培道中學、新華中學、勞工子弟學校、聖保祿中學、粵華中學、陳瑞祺永援中學、化地瑪聖母女子學校、鏡平中學、SHCC (E.S)、南京師範大學、澳門理工學院、澳門科技大學以及英國 Teddington School, Middlesex 等十餘所大中學生一百三十餘人參加了是次夏令營。是次夏令營內容包括基礎知識講解；戶外星空觀測；專題講座；澳門科學館天文館觀看“3D 虛擬太空”及進行相關知識講解四部分。

本次夏令營向學員展示了多姿多彩的各種天象和天體，闡述了常見天象發生的科學原理，並就嫦娥一號工程探月的數據結果，深入淺出的講解月球地形、表面繪圖技術等。是次夏令營激發了員探索宇宙奧秘的興趣，培養了學員“學科學，愛科學和用科學”的精神。



3.Science and popularization on lunar knowledge

Principal Investigator: Cai Zhanchuan

Faculty of Information Technology, Macau University of Science and Technology

Sponsor:

Science and Technology Development Fund,MSAR

Completion period (M/Y) :

8/2010

Main Participants:

Xiao Naiyuan, Liang Yanyan, Li Jian, Ye Mengjie, Chen Wei

Introduction:

The Summer Camp programs attracted more than 130 students. They are from Hou Kong Middle School(Macau), Pooi To Middle School(Macau), Xinhua Middle School(Macau), The Workers' Children High School(Macau), ESCOLA SÃO PAULO, Yuet Wah College (Macau), Chan Sui Ki Perpetual Help College, Lady of Fatima School, Keang Peng School, Nanjing Normal University, Macao Polytechnic Institute, Macau University of Science and Technology. Our programs include: the basics knowledge explanation; outdoor observation; special lectures; watching 3D demo shows at Macao Science Center and relevant knowledge explanation.

The Summer Camp programs provided students with a colorful display of various astronomical phenomena and objects, described the scientific principles of common astronomical phenomena, and introduced the Chang'E-1 program. The Summer Camp programs has inspired students interests in exploring the mysteries of the universe, developed the students 'to study science, to like science and to use the science' spirit.

4. 數學簡史與現代數學

負責人：左明娟

澳門科技大學 通識教育部

資助機構：

科學技術發展基金

完成時間(年/月)：

2010 年 4 月

主要參加者：

左明娟、馮麗、余翠娥

課題簡介：

數學的發展跨越了整個人類歷史的進程，數學概念和定理都是在一定的歷史環境中產生。一門科學的歷史是那門科學最寶貴的一部分，科學只能給我們知識，而歷史卻能給我們以智慧。數學的力量和美，在漫長而壯麗的數學史中得以完全體現。學習數學，可以不需要聰明的頭腦，但是一定要有強烈的興趣。因為不瞭解數學背景，學生容易把數學理解為一門枯燥的學科，導致了興趣的缺乏。在實際教學中我們發現，在教學中結合教材穿插一些數學史上的名人典故或趣聞軼事，可以激發學生的學習興趣，充分調動學生探求知識的積極性。

項目通過對數學史上某些里程碑和創造這些里程碑的偉人的介紹，闡述一些重要的數學思想的來源，讓學生領會到數學的美和活力，瞭解數學是實實在在人的創造。通過生動、豐富的事例，介紹數學概念產生與發展的過程，讓學生瞭解數學背後的故事。和學生共同探討某些重要的數學定理的嚴密邏輯和精巧論證，瞭解數學家們是如何徹底地解決了這些緊迫的數學問題。將數學史與現代數學相聯繫，讓學生充分瞭解數學發展的過程，體會數學對人類進步的貢獻。使得書本上枯燥的數字、數學定理，通過背景的介紹，變成一個個生動鮮活的故事，從而提高學生學習數學的興趣，加深對數學的理解，感受數學家的嚴謹態度和鍥而不捨的探索精神。通過這種滲透教育的方式開拓學生的視野，培養更廣泛、更全面的認知能力，使學生獲得全方位素質的提高。

4. The History and the Development of Mathematics

Principal Investigator: Zuo Mingjuan

Department of General Education, Macau University of Science and Technology

Sponsor:

Science and Technology Development Fund, MSAR

Completion period (Y/M) :

2010/04

Main Participants:

Zuo Mingjuan, Feng Li, Yu Cui'e

Introduction:

The development of mathematics strode across the whole history of mankind. The concepts and theorems grew out of specific historical environments. The history of a science is the most precious part of it. Science teaches us knowledge, but the history gives us wisdom. The strength and beauty of mathematics has been totally expressed by its long and magnificent history. One needn't to be brilliant to learn math, but he has to be interested in it. Students always think of mathematics as a boring subject when they don't know the background of it. As a matter of fact, most students don't like the subject. During classes, we found that if lecturers told some interesting stories about mathematics in classes, students would pay much more attention to the courses.

By introducing some landmarks in the history of mathematics and the mathematicians who created those landmarks, the project expounded some important thoughts of mathematics. Let students to feel the life and beauty of math, to know that math is created by people. In this project, when introducing the emergence and development of mathematical concepts, we provide a great many of vivid and rich examples, which makes students know about lots of interesting stories behind the mathematics; when discussing with students about some important mathematical theorems, we highlight the rigorousness and elaboration of mathematical argumentations, which makes students know about how thoroughly mathematicians solved the pressing mathematical issues in history. We also make a connection between the history of mathematics and modern mathematics, which makes students fully understand the tortuousness and arduousness of mathematical development and at the same time lets students appreciate the contribution of mathematics to social progress.

In other words, this project makes boring mathematical concepts and theorems become vivid stories, thereby enhancing students' interest in mathematics, deepening students' understanding of mathematics' concepts, making students experience the spirit of wisdom and perseverance of mathematicians, and at a result improving the overall abilities of students.

出版書籍與章節

Published Books and Chapters

1.機器學習

INTECH

羅少龍、丁利亞

科技大學 資訊科技學院

ISBN 編號：

978-953-307-033-9

內容簡介：

知件系統 (KWS) 為 KBS 開發者提供建模工具，知件模塊，以及應用 KBS 系統的自動構建。其核心部份是知識層次結構，推理引擎，知件倉庫，以及知識描述語言。本文論述 KWS 的整體設計思想，推理流，和若干主要算法。

關鍵詞：

知件系統、KBS 的自動構建

1.Machine Learning

INTECH

Lo, SL (Lo Sio-Long); Ding, LY (Ding Li-Ya)

Faculty of Information Technology, Macau University of Science and Technology

No. of ISBN:

978-953-307-033-9

Brief Introduction:

Knowware System (KWS) provides an intelligent development tool for KBS developer to model and generate target KBS through offering knowware components and an automatic construction. The key concepts and technologies involved are: hierarchical knowledge representation, KWS inference engine, KWS warehouse, and Knowledge Description Language. The artical describes the design concepts, inference flow, and major algorithms.

Keywords:

Knowware System, Automatic construction of KBS

2. Juristische Argumentation durch Folgenorientierung Nomos Verlagsgesellschaft

張青波
澳門科技大學 法學院

ISBN 編號：

978-3-8329-5617-2

內容簡介：

考量裁判後果以論證裁判，在中國自上世紀 90 年代以來，不斷被實務部門所主張，也是德國自上世紀 70 年代以來興起的一種法律論證方式。本書探討了中國和德國相關理論的不足，即不能建立規範程式，以排除不適當的後果取向論證方式，因此，本書以法律論證的基本理論為基礎，構造出了由 16 條論證規則所組成的論證程式，以保證後果論證符合理性的要求。同時，本書還回答了這一基於西方理論傳統上的理論，能否解決中國的問題。

關鍵詞：

Folgenorientierung, Juristische Argumentation, China

2. Legal Argumentation with the Consequenceorientation Nomos Verlagsgesellschaft

Zhang, QB (Zhang Qing-Bo)
Faculty of Law, Macau University of Science and Technology

No. of ISBN:

978-3-8329-5617-2

Brief Introduction:

Considering the consequences of the possible variants by the legal decision to demonstrate the referees, as a way of legal argument, has been not only advocated in China since 1990s, but also in Germany since 1970s. This book explores the theories in China and Germany and determines that the theories in both countries lack of a normative procedure for the legal argumentation with the consequences of legal decisions. Therefore, based on the basic theory of legal argumentation, the book constructs a procedure of argumentation consist of 16 rules of argumentation, which ensures the rationality of the legal argumentation with the consequences of legal decisions. At the same time, the book answers whether this theory arising from the traditional Western theory can solve problems in China.

Keywords:

Consequenceorientation, Legal Argumentation, China

3.對澳門司法改革的一些思考 ——以終審法院第 23/2005 號上訴案 的爭議為視角

社會科學文獻出版社

林位強

澳門科技大學 法學院

ISBN 編號：

978-7-50-971823-0

內容簡介：

澳門法將公立醫院中的醫療行為定性為公共管理行為，而把私立醫療機構中的醫療行為定性為私法管理行為，引發了不少司法上的爭議。本文認為，如把醫療行為視為醫生的職業行為。那麼，無論公私立醫院，一旦發生醫療糾紛，可以統一歸屬初級法院管轄，法律適用可直接由民法典中的民事責任制度規範，不必通過 4 月 22 日第 28/91/M 號法令轉介。這樣，法官也更為專業，賠償標準也更容易達到統一，司法判決也更為公正。同時，本文還對澳門司法文書的改革提出了初步看法。

關鍵詞：

醫療行為、公共管理行為、私法管理行為、管轄權

3. Reflection on the Judicial Reform in Macau --A Perspective of the Disputes on Court of Final Appeal

Social Sciences Academic Press (China)

Lin, WQ (Lin Wei-Qiang)

Faculty of Law, Macau University of Science and Technology

No. of ISBN:

978-7-50-971823-0

Brief Introduction:

It has caused many judicial disputes that medical behavior in public hospital is characterized as public management behavior, while as private management behavior in private hospital in the law of Macau. This paper points out, medical behavior can be regarded as the professional behavior of the doctor. Once it comes to a medical dispute, no matter where it happens, the lower court always has the jurisdiction over the case then. The application of law can be directly standardized by civil liability system in civil law without referring April 22 decree No. 28/91/M. As a result, the more professional of the judges, the more unified of the standard of compensations, and the more impartial of judicial decisions will be. Meanwhile, this paper also puts forward an initial idea about the reformation of judicial documents.

Keywords:

Medical behavior, Public management behavior, Private management behavior, Jurisdiction, Judicial documents

4.現代分子生物學實驗

高等教育出版社
鄭偉娟、黃啓來等
澳門科技大學 中醫藥學院

ISBN 編號：

978-7-04-029586-3

內容簡介：

- 第一章 特定基因的克隆
- 第二章 克隆基因的表達和表達產物的純化
- 第三章 特定基因的功能研究
- 第四章 蛋白質與蛋白質的相互作用
- 第五章 DNA 與蛋白質的相互作用

關鍵詞：

基因克隆、基因表達、基因功能、蛋白-蛋白相互作用、DNA-蛋白相互作用

4.Modern Molecular Biology Experiments

Higher Education Press, Beijing

Zheng,WJ (Zheng Wei-Juan); Huang,QL (Huang Qi-Lai)

Faculty of Chinese Medicine, Macau University of Science and Technology

No. of ISBN:

978-7-04-029586-3

Brief Introduction:

- Chapter 1 Cloning of target genes
- Chapter 2 Expression of cloned gene and purification of expression product
- Chapter 3 Gene function study
- Chapter 4 Protein-protein interaction assay
- Chapter 5 DNA-protein interaction assay

Keywords:

Gene cloning, Gene expression and protein purification, Gene function study, Protein-protein interaction, DNA-protein interaction

5.內科臨床常見病中醫研究要覽

澳門科技大學

趙永華

澳門科技大學 中醫藥學院

ISBN 編號：

978-99937-53-16-2

內容簡介：

本書編寫了臨床上常見的而且是中醫藥診治具有特色的 21 個內科系統疾病，涉及到呼吸、循環、消化、肝膽、泌尿、神經、內分泌七大系統的主要疾病，每個疾病內容分為概述、[病因病機]、[臨床表現]、[診斷與鑿別診斷]、[治療]、[研究進展]、[名醫經驗]七項。其中概述主要 述疾病的概念、臨床流行病學現況及與中醫內科相對應的病名範疇。[病因病機]分中醫與西醫兩部分，著重介紹中醫對該病的病理機制認識，為形成臨床辨證思維打下基礎。[臨床表現]包含症狀體征和實驗室檢查兩部分。[診斷與鑿別診斷]包括診斷標準和鑿別診斷，其中診斷標準以儘量採用目前學術界比較公認的標準為主。[治療]是本書的重要內容，包括中醫辨證治療和西醫治療兩大部分，而中醫辨證治療著重在辨證要點、治療要點、分型證治三個方面，同時根據每個疾病的特點還介紹了專方專藥、其他療法及飲食治療的有關內容。西醫治療部分主要包括治療原則與目的，以及具體的治療方法。[研究進展]主要介紹目前中醫藥對每個疾病從病因病機到辨證論治方面的新觀點、新理論和新成果。[名醫經驗]著重擷取了近代名老中醫的臨床寶貴經驗。每一疾病最後附有主要參考文獻目錄。本書是一部供廣大中醫藥臨床內科工作者和學術研究者使用的參考書。

關鍵詞：

內科常見病、中醫研究、要覽

5.The Summary of Chinese Medicine Research on Common Internal Medicine

Macau University of Science and Technology

Zhao, YH (Zhao Yong-Hua)

Faculty of Chinese Medicine, Macau University of Science and Technology

No. of ISBN:

978-99937-53-16-2

Brief Introduction:

There are 21 common internal medicine diseases with characteristics of Chinese medicine diagnosis and treatment written in the book, related to major diseases of respiratory, circulatory, digestive, liver and gallbladder, urinary, nervous and endocrine systems. Each disease is divided into 7 departments of Overview, Pathogenesis, Clinical manifestations, Diagnosis and differential diagnosis, Therapy, Research and Clinical experience of famous doctors. The department of Overview includes the key concepts described, clinical epidemiology and disease name corresponding to Chinese internal medicine. The department of Pathogenesis includes the theory of Chinese medicine and Western medicine, focuses on understanding the pathogenesis of Chinese medicine in order to lay the thinking foundation for the formation of syndrome differentiation. The department of Clinical manifestations includes two parts of symptoms signs and laboratory. The department of Diagnosis and differential diagnosis includes diagnostic criteria and differential diagnosis, in the part of diagnostic criteria maximized the use of currently accepted standards-based academic comparison. The department of Therapy is an important part of the book, including the treatment of Chinese medicine and Western medicine treatment of two parts, the Chinese medicine syndrome differentiation and treatment of focus points in the syndrome differentiation, treatment and type, while According to the characteristics of each disease also describes the effective drugs and prescription, other therapy and dietary treatment etc. the part of Western medicine includes major principles and objectives of treatment, and specific treatment. The department of Research describes the current Chinese medicine new ideas, new theories and new results for each disease from pathogenesis to diagnosis and syndrome differentiation and treatment. The department of Clinical experience of famous doctors focuses on acquisition of modern old famous Chinese medicine doctors clinical valuable experience. Finally, each disease with the main reference lists. This book is for the majority of clinical Chinese internal medicine practitioners and academic researchers to use reference books.

Keywords:

Common Internal Medicine Diseases, Chinese Medicine Research, Summary

6. 休閒項目策劃

重慶大學出版社

李昕

澳門科技大學 國際旅遊學院

ISBN 編號：

978-7-5624-5364-2

內容簡介：

本書在全面論述了休閒服務基本理論的基礎上，基於北美休閒服務領域的職業實踐，對如何以服務為中心和採用利益方法進行休閒項目的策劃和開發進行了討論。主要內容包括當代社會中的休閒、休閒服務項目策劃的基本理論、休閒項目策劃者、休閒顧客的行為、休閒需要的識別和評估、確定休閒方向、休閒項目開發、休閒項目領域、休閒項目形式、休閒項目宣傳推廣、休閒項目預算和資源、休閒項目提供、休閒項目評估和質量保證、休閒康寧與教育、休閒活動的發展趨勢。本書系統地總結了國外休閒服務產業發展的理論成果和實踐經驗，有助於推動中國休閒服務產業的理論發展和學科建設。

關鍵詞：

休閒、旅遊、項目策劃

6. Leisure Programming

Chongqing University Press

Li, X (Li Xin)

Faculty of International Tourism, Macau University of Science and Technology

No. of ISBN:

978-7-5624-5364-2

Brief Introduction:

Based on the thorough elaboration of the basic theories of leisure service and the professional practices in the field of leisure service in North America, this book discussed how to develop leisure programs in service-centered and benefits approach. The contents of the book include leisure in contemporary society, basic theories of leisure service programming, leisure service programmer, leisure customer behavior, leisure needs identification and assessment, establishing leisure direction, leisure program development, leisure program areas, leisure program formats, leisure program promotion, program budgeting and resource attainment, delivering leisure program, evaluation and quality assurance, leisure wellness and education, and future trends of leisure service. The book systematically encapsulated the theoretical achievements and practical experience developed in the field of leisure service industry in the world and will be helpful in the development of Chinese leisure theories and leisure education.

Keywords: Leisure, Tourism, Programming

7. 美國人爲什麼破產

重慶大學出版社

李昕

澳門科技大學 國際旅遊學院

ISBN 編號：

978-7-5624-5503-5

內容簡介：

本書從心理學和行爲經濟學的視角，探討了當代美國社會中日益加深的債務危機的原因。作者結合現代社會中的諸多變革，尤其是近 30 年的社會和科學技術的發展，分析了美國人自我毀滅性的消費習慣產生的原因和美國消費者與金錢關係的複雜變化。在目前世界性金融危機的背景下，本書對培養中國消費者的理性消費習慣，保持個人和家庭的財務穩定，具有很大的借鑒參考價值。

關鍵詞：

美國人、破產、消費方式

7. Going Broke: Why Americans Can't Hold on to Their Money

Chongqing University Press

Li, X (Li Xin)

Faculty of International Tourism, Macau University of Science and Technology

No. of ISBN:

978-7-5624-5503-5

Brief Introduction:

The book discussed the causes of the increasing debt crisis in current America from the perspectives of psychology and behavioral economics. Based upon the examination of the remarkable changes in modern world, especially the rapid social and technological development happened in the recent 30 years, the author illuminated the causes of the America's self-destructive spending habits and the perplexingly changed relationship between American consumers and the money. In the current background of worldwide financial crisis, the book is helpful for the Chinese people to develop rational consumption habits and to keep the family finance stable.

Keywords:

Americans, Going Broke, Consuming Pattern

8.實用旅遊心理學教程（第3版）

中國財政經濟出版社

李昕

澳門科技大學 國際旅遊學院

ISBN 編號：

978-7-5095-1208-1/F•1022

內容簡介：

本書（第三版）為普通高等教育“十一·五”國家級規劃教材和教育部高職高專規劃教材。本書針對旅遊專業學生的特點和需要，力求做到理論系統、難易適度、實踐性強。根據學生學習的特點和需要，本書分為兩大部分：理論篇和實踐篇，系統地介紹了旅遊心理學的基本理論及在實踐中的應用。導論部分主要論述現代社會中旅遊與休閒觀念的變化、旅遊產品的特性和學習旅遊心理學的意義；理論篇根據中外旅遊心理學研究的最新成果，重點討論心理學的一些基本理論和旅遊消費者的基本行為；實踐篇運用心理學的一些基本理論和觀點探討了旅遊工作者在旅遊服務實踐中的服務心理和服務藝術，並簡要討論了旅遊工作者的心理保健問題。

關鍵詞：

旅遊、心理學、旅遊行為、旅遊消費、旅遊服務

8.Applied Course for Tourism Psychology (3rd Ed.)

China Financial & Economic Publishing House

Li, X (Li Xin)

Faculty of International Tourism, Macau University of Science and Technology

No. of ISBN：

978-7-5095-1208-1/F•1022

Brief Introduction：

The book Applied Course for Tourism Psychology (3rd Ed.) has been granted the title of the National Planned Textbooks for General Higher Education in the Eleventh Five-year Plan and the title of Ministry of Education Planned Textbooks for Higher Professional Education. Focused on the needs of tourism students, the book features the characteristics of systematic theories, suitable degree of difficulty and strong practicality. Based on the characteristics and needs of students, the book is primarily divided into two parts: Theories and Practice, to systematically elaborate the basic theories of tourism psychology and their applications. The introduction section discusses the changing tendency of people's ideas towards tourism and leisure, the characteristics of tourism products, and the importance of studying tourism psychology. The section of theories focuses on the basic theories of psychology and behaviors of tourism consumers according to the latest developments in the field of tourism psychology in the

world. The section of practice discusses the psychology of service and the arts of service for the practitioners in tourism industry, and the problems of mental health for tourist practitioners are also addressed.

Keywords :

Tourism, Psychology, Tourist Behavior, Tourism Consumption, Tourism Service

9.中國著名旅遊景區導遊詞精選（英漢對照）

旅遊教育出版社

王浪（主編）、李昕（副主編）

澳門科技大學 國際旅遊學院

ISBN 編號：

978-7-5637-1914-3

內容簡介：

導遊質量的高低會直接影響一個地區的旅遊總體形象，而高質量的導遊服務需要高質量的導遊人才，高質量的導遊人才培訓則需要高質量的導遊參考書。本書以英漢對照的形式系統地編寫了中國 34 個省、直轄市、自治區和特別行政區內的 120 個著名旅遊景區的導遊詞，力圖最大限度地展示中國多樣豐富的旅遊資源和與這些旅遊資源相關民族文化，以推動國際間跨文化的傳播和弘揚中華民族的優秀文化。

關鍵詞：

導遊詞、旅遊景區

9.Selected Tour Commentaries for China's Famous Tourist Attractions (English-Chinese)

Tourism Education Press

Wang, L (Wang Lang) (Chief Editor); Li, X (Li Xin) (Vice Chief Editor)

Faculty of International Tourism, Macau University of Science and Technology

No. of ISBN:

978-7-5637-1914-3

Brief Introduction:

The quality of tour guide will directly affect the tourism image of an area. The high quality tour guide service needs high quality tour guides, and in turn the training of high quality tour guides needs high quality reference books for tour guides. In both English and Chinese, this book systematically composed tour commentaries for 120 famous tourist attractions in the thirty-four provinces, municipalities, autonomous regions and special administrative regions in China, trying to demonstrate China's diversified tourism resources and the related ethnic cultures, promoting the transnational cultural exchange, and disseminating the Chinese culture.

Keywords:

Tour Commentaries, Tourist Attraction

10. 澳門文化遺產旅遊和城市互動發展研究

中國科學出版社

梁文慧、馬勇

澳門科技大學 國際旅遊學院

ISBN 編號：

978-7-03-029109-7

內容簡介：

本書是系統研究澳門文化遺產旅遊與城市發展互動的專著。書中從國內外文化遺產旅遊發展的背景、特徵和趨勢入手，總結了歐美以及亞洲一些國家和地區文化遺產旅遊與城市互動發展的成功模式。在此基礎上提出了澳門文化遺產旅遊發展的戰略目標和模式選擇，構築了澳門文化遺產旅遊發展體系，並進一步提出了澳門文化遺產旅遊與城市互動發展的實施策略。本書讀者對象為國內外旅遊院校師生、旅遊規劃研究人員、政府決策官員、文化產業工作者及旅遊行業培訓管理人員。

關鍵詞：

文化遺產旅遊、城市發展、澳門

10. Macau Cultural Heritage Tourism and the Interaction of City Development

Science Press, Beijing, China

Leong, MW (Leong Man-Wai); Ma, Y (Ma Yong)

Faculty of International Tourism, Macau University of Science and Technology

No. of ISBN:

978-7-03-029109-7

Brief Introduction:

The authors take the domestic and international cultural heritage tourism development as the background, characteristics and trends, sum up successful models in Cultural Heritage Tourism and Urban Development like Europe, the United States, some Asian countries and regions; put forward on strategic objectives and mode selection on the basis of cultural heritage tourism development of Macao; build a cultural heritage tourism development system of Macao; and the further development of the Macao cultural heritage tourism implementation strategy.

The audiences will be interested in the monograph include: faculty members and students in higher education institutions, researchers in tourism planning, decision makers and government officers, cultural industry practitioners, and administrators/trainers in tourism related fields.

Keywords: Cultural and heritage tourism, city development, Macau

11. 計算機輔助高等數學

澳門科技大學出版

盧曉平、宋雲琳

澳門科技大學 通識教育部

ISBN 編號：

978-99937-53-18-6

內容簡介：

本書主要面向學習高等數學的文科類大學生以及相關教授文科高等數學的老師參考所用，也可以作為數學建模參考用書。書中以專題的形式介紹了初等數學、函數極限、函數導數、函數積分、行列式、矩陣計算、線性方程組求解等高等數學常用的概念，同時給出了理論計算與軟體操作命令做對比。可供讀者參考，也可作為相關內容的習題練習使用。

關鍵詞：

計算機、高等數學、輔助

11. Computer-Aided Instruction for Higher Mathematics

Macau University of Science and Technology

Lu, XP (Lu Xiao-Ping); Song, YL (Song Yun-Lin)

Department of General Education, Macau University of Science and Technology

No. of ISBN:

978-99937-53-18-6

Brief Introduction:

This book mainly introduces the basic mathematical concepts and provides the detailed solution of practices in two ways: traditional and numerical ways. In traditional way students can learn the whole process step by step. In the other numerical way students can learn how to deal with the mathematical problems by computer software. This book gives out some common topics including Element Mathematics, Limitation, Derivative, Integral, Determinant, Matrix, Linear System and so on.

Keywords:

Computer Higher Mathematics Aid

12. 教學實習指南 (修訂五版)

Routledge
Keith Morrison

ISBN 編號：

978-0-415-48558-6

內容簡介：

教學實習指南是英國新任教員培訓課程的基本綜合教材，該書的重點在於教學質量及考慮到最新的規章及指導方針，並確保切合英國學校培訓與發展處(TDA)與英格蘭教育及兒童服務與技能標準局(OFSTED)的框架。這部富權威性而又易於理解的新修訂教材涵蓋所有教師學生在其實習，諸如：計劃、課堂組織、行為管理及評核，以及下述章節中所需顧及的各種重要基本技巧及問題：

- 基礎階段
- 早期階段
- 法律問題
- 教與學以及在課堂上使用資訊及通訊科技(ICT)
- 教授及學習運算能力
- 教授及學習讀寫能力
- 兒童權利，及
- 資優兒童

此書為新任教員培訓課程最為重視及廣泛採用，並將會成為教師學生最重要的資源；同時當中的網站為教師學生提供的額外教學資源，包括進一步的研究、重要連結及可下載資源。

關鍵詞：

Teaching, learning, pedagogy, assessment, curriculum planning

(中文翻譯僅供參考，請以英文版本為準)

12.A Guide to Teaching Practice (Revised 5th Edition)

Routledge
Keith Morrison

No. of ISBN:

978-0-415-48558-6

Brief Introduction:

A Guide to Teaching Practice is the most comprehensive text available for students on initial teacher training courses in the UK. The book's focus on the quality of teaching and learning and consideration of the latest regulations and guidelines ensures that it fits comfortably within TDA and OFSTED frameworks.

Fully revised and updated, this authoritative yet accessible textbook covers all the important basic skills and issues that students need to consider during their practice, such as planning, classroom organisation, behaviour management and assessment, as well as chapters on:

- the foundation stage
- the Early Years
- legal issues
- learning and teaching and using ICT in the classroom
- teaching and learning numeracy
- teaching and learning literacy
- children's rights, and
- gifted and talented children.

This book is the most respected and widely used textbook for initial teacher training courses and will be an essential resource for any student teacher. Additional learning resources for students will be provided on a companion website, which contains further research, important links and downloadable materials.

Keywords:

Teaching, learning, pedagogy, assessment, curriculum planning

13. 澳門法律改革與法制建設索 - 澳門法制現代化思索

社會科學文獻出版社

黃明健

澳門科技大學 法學院

ISBN 編號：

9787509718230

內容簡介：

近幾年澳門經濟快速發展，凸顯了相關法律制度的滯後，加上“歐案”這類貪腐大案的發生，動搖了政府的管治權威及民間對政府的信任度，暴露了澳門法制建設的缺失。法制建設的缺失已經成為澳門社會經濟發展的絆腳石。為了保障澳門社會的持續、穩定、健康快速地發展，正確處理各種複雜利益關係，積極回應市民的訴求，就必須加強澳門的法制現代化建設，使法制現代化的變革運動成為澳門社會現代化的強有力保障。

關鍵詞：

法制改革、法律發展、法制現代化、法律全球化

13. Legal Reform & Legal Development in Macau - Deliberation on Legal System Modernization of Macau

Social Sciences Academic press (China)

Huang, MJ (Huang Ming-Jian)

Faculty of Law, Macau University of Science and Technology

No. of ISBN:

9787509718230

Brief Introduction:

The last few years Macau the economy be fast development and highlighted related law system. Legal system's imperfection of the construction has already become Macau society economy development of stumbling block. For the sake of guarantee Macau society of keep on, stability, health quickly development, exactitude processing various complications benefits relation, aggressive respond to citizen of claim, have to strengthen the legal system of Macau modernization construction, make legal system modern of change sport become Macau society modernization of powerful guarantee.

Keywords:

Legal system reform, Law development, Legal system modernization, Law globalization

14. 澳門人文社會科學研究文選·法律卷(下卷) - 澳門水污染防治 和循環經濟立法探析

社會科學文獻出版社

黃明健

澳門科技大學 法學院

ISBN 編號：

9787509711323

內容簡介：

水污染防治與循環經濟的立法已成為全球經濟一體化和國際環境保護所致力重點目標之一，澳門作為地球村中的一員，亦應明白環境保護是一場全民皆兵的戰役，在這場關乎人類及所有生物物種的存亡及可否持續發展的戰役中，我們能動用的最佳防禦武器就是法律。本文擬就澳門水污染防治工作及立法作出分析和歸納，試圖說明澳門是否有進行循環經濟立法的必要，並對循環經濟立法內容提出一些構想，希望能為澳門環境保護和經濟發展實踐提供借鑒。

關鍵詞：

水污染防治、循環經濟、立法、區際合作

14.The Selection of Studies in Humanities and Social Sciences of Macau: Legal Studies - Legislation on prevention and control of water pollution and recycling economy in Macau

Social Sciences Academic Press (China)

Huangm MJ(Huang Ming-Jian)

Faculty of Law, Macau University of Science and Technology

No. of ISBN:

9787509711323

Brief Introduction:

Legislation on prevention and control of water pollution and recycling economy has become a major goal targeted by integration of world economy and international environmental protection. As a member of the global village, Macao should come to realize that environmental protection, in relation to the subsistence of mankind and other living species and sustainable development, is a battle demanding collective efforts and participation of the entire people. Law is the best weapon we can employ to fight the battle. This paper is intended to present a careful analysis and conclusion of the work and legislation on prevention and control of water pollution completed in Macao to illuminate the necessity for legislation on recycling economy. Proposals on legislation on recycling economy in Macao are also presented in the paper.

Keywords:

Prevention and control of water pollution, Recycling economy, Legislation, Inter-regional cooperation

學術論文

Academic Papers

1.從 GF 系統到 V 系統：V 系統的一種新的構造方法

陳偉、蔡占川、齊東旭、唐澤聖
澳門科技大學 資訊科技學院

會議/刊物名稱：

澳門科技大學學報, 3 (2): 8-14 DEC 2009

內容簡介：

k 次 GF 系統是一類正交樣條函數系， k 次 V 系統是一類分段 k 次多項式正交函數系 ($k=0,1,2,\dots$)。兩者的構造方式不同， k 次 GF 系統由一組綫性無關的函數組，經正交化過程得到；而 k 次 V 系統通過對生成元的“壓縮、平移”生成。本文從正交函數系的構造方式出發，探討並證明瞭上述兩類正交函數系的關係。當 $k=0$ 時，零次 GF 與零次 V 系統皆為 Harr 函數；當 $k \geq 1$ 時，由 GF 系統的綫性無關組添加適當的項正交化後，即得到相應的 V 系統。

關鍵詞：

正交、GF 系統、V 系統

1.The From GF-System to V-System: A new construction method of V-System

**Chen,W (Chen Wei); Cai,ZC (Cai Zhan-Chuan); Qi, DX (Qi Dong-Xu);
Tang, ZS (Tang Ze-Sheng)**

**Faculty of Information Technology, Macau University of Science and Technology
Name of Conference/Journal:**

Journal of Macau University of Science and Technology, 3 (2): 8-14 DEC 2009

Abstract:

GF-System of degree k is a new class of orthogonal spline function system, and V-System of degree k is a class of piecewise polynomials orthogonal function. They are constructed by different ways, GF-System is obtained by the orthogonalization from a set of linearly independent functions, and V-System is generated by the multiscale squeezing, shifting and duplicating operations on the generators. In this paper, we explore and prove the relationship of two kinds of orthogonal function systems about the method of construction. If $k=0$, GF-System and V-System are both Haar function, and If $k \geq 1$, V-System can be obtained by the orthogonalization from a set of functions which is added some appropriate items in the set of linearly independent functions of GF-System.

Keywords:

Orthogonal, GF-System, V-System

2.嫦娥一號激光測高數據的月球等高綫圖繪製

蔡占川、楊雄力、唐澤聖
澳門科技大學 資訊科技學院

會議/刊物名稱：

澳門科技大學學報，3 (2): 1-8 DEC 2009

內容簡介：

月球等高綫可以通過成組的一維曲綫來傳遞月球地形的高度、走向及陡緩等資訊，它能較為科學地表達月表地貌的宏觀特徵。爲了生成高精度的月球等高綫圖，利用嫦娥一號激光高度計獲取的八百多萬個有效記錄點，採用克裏金演算法對嫦娥一號激光測高數據進行插值計算，得到了月球表面的規則網格模型。基於該規則網格模型，採用張力樣條插值的方法，對等高綫進行平滑處理，繪製了月球地形的等高綫圖。同時，也探討了等高綫圖的應用。

關鍵詞：

嫦娥一號、等高線、激光測高數據

2.The Plotting of Lunar Contour Map bade on Chang'E-1 Laser Altimeter

Cai, ZC (CaiZhan-Chuan); Yang, XL (Yang Xiong-Li); Tang,ZS (Tang Ze-Sheng)
Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 3 (2): 1-8 DEC 2009

Abstract:

Lunar Contours denote lunar elevation, depth and terrain. From these contours, a sense of general features can be determined. More than 8 million range measurements from the Chang'E-1 Laser Altimeter have been used to produce a global Digital Elevation Model (DEM) of the Moon with Kriging interpolation methods. A lunar contour map drafting from regular Digital Elevation Model, by performing smoothing processing with the tension spline function, has been done and also explored the application of the contours.

Keywords:

Chang'E-1, Contour, LAM Data

3.基於嫦娥一號衛星測光高數據的月球 DEM 及高程分布特徵模型

蔡占川、鄭才目、唐澤聖、齊東旭
澳門科技大學 資訊科技學院

會議/刊物名稱：

中國科學：技術科學，40: 1247-1388 NOV 2010

內容簡介：

嫦娥一號衛星激光高度計獲取了 820 多萬個有效記錄點，為了探索利用嫦娥一號衛星激光測高數據生成高精度的月球數字高程模型，提出了層次多結點樣條算法，該算法利用一系列從粗糙到精細的多結點樣條控制網路來逐步逼近或插值給定的激光高程數據。基於該算法，利用嫦娥一號衛星激光測高數據，生成了空間分辨率為 $0.0625^{\circ} \times 0.0625^{\circ}$ 的全月球數據高程模式，並將該模型分別與 ULCN2005、CLTM-s01 及日本“月女神”模型進行了對比。同時，為了探索月面高程分布規律，建立了嫦娥一號衛星高程的分布規律，建立了嫦娥一號衛星高程的分布特徵模型。全月球，月球正面高程呈正偏態、高峰態的正太分布；月球背面高程呈正偏態，低峰態的正態分布。

關鍵詞：

嫦娥一號、激光測光 DEM、分布特徵模型

3.Lunar DEM and Elevation Distribution Model Based on Chang'E-1 LAM data

Cai, ZC (Cai Zhan-Chuan); Zheng, CM (Zheng Cai-Mu);

Tang, ZS (Tang Ze-Sheng); Qi, DX (Qi Dong-Xu)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Science China: Technological Science, 40: 1247-1388 NOV 2010

Abstract:

More than 8.2 million effective data samples were obtained by the Chang'E-1 Laser Altimeter. In order to produce a global topographic model of the Moon with improved accuracy, a hierarchical many-knot spline was proposed in this paper. This algorithm makes use of a hierarchy of control lattices to approximate or interpolate the LAM data. Based on the proposed algorithm, a $0.0625^{\circ} \times 0.0625^{\circ}$ grid of global lunar DEM was obtained and it was compared with ULCN2005, CLTM-s01 and Kaguya model, respectively. At the same time, this paper explored the elevation distribution law and established distribution model. It is shown that global lunar and nearside elevation distribution is positively skewed and leptokurtic distribution, and the farside elevation distribution is a positively skewed and platykurtic distribution.

Keywords:

Chang'E-1 , LAM, distribution model

4.基於 GF 系統的散亂數據最佳平方逼近及其分析

蔡占川、陳偉、葉夢傑、齊東旭
澳門科技大學 資訊科技學院

會議/刊物名稱：

全國第 16 屆計算機輔助設計與圖形學學術會議，ISBN:9787302231899，會議文章

內容簡介：

本文提出了一種散亂數據的正交表示方法。該算法利用 GF 系統來逼近或插值給定的散亂數據點集。k 次 GF 系統是一類正交樣條函數係。Haar 函數及 Franklin 正交函數恰好分別是及時的特殊情況。基於 GF 系統，提出了求解散亂數據問題的新的能量模型，根據該能量模型的頻譜，可以對不同層面的曲面重構。實驗結果表明該方法是高效且效果良好。

關鍵詞：

散亂數據、最佳平方逼近、GF 系統

4.Least Square Approximation and Analysis for Scattered Data Based on GF System

Cai, ZC (Cai Zhan-Chuan); Chen, W (Chen Wei); Ye, MJ (Ye Meng-Jie);
Qi, DX (Qi Dong-Xu)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 China 16th CAD/CG conference, ISBN: 9787302231899, conference paper

Abstract:

An orthogonal representation algorithm for scattered data is proposed in this paper. Base on GF system, an algorithm for scattered data approximation is described. When and, GF System are Haar functions and Franklin functions respectively. A new energy model is proposed to solve this problem based on GF system. According to GF spectrum, different hierarchical surfaces could be reconstructed for scattered data. The experiments show that the method proposed is efficient and can produce pleasing results.

Keywords:

Scattered data, Lease square approximation, GF system

5.橫琴開發背景下的珠澳科技產業合作策略

劉效鋒、蔡智明、李怡平

澳門科技大學 資訊科技學院

會議/刊物名稱：

珠海經濟特區建立三十周年理論研討會，P.452-458，會議文章

內容簡介：

珠澳科技產業合作的受制於多種因數。科技政策協調，管理機製兼容是前提，國際化戰略是關鍵，科技中介是保障。橫琴新區偉珠澳科技合作提供了最佳平臺，有望率先實現政策突破和製度創新。科技資源和要素應當向橫琴聚集，通過統籌規劃園區平臺，創新開發模式，可以實現以較低的投入收穫聚集所帶來的溢出效應，協調效應，推動珠澳科技合作邁上新台階。

關鍵詞：

橫琴開發、珠澳、科技產業

5.The Cooperation of Hi-Tech Industries between Zhuhai and Macao with the HengQin development

Liu, XF (Liu Xiao-Fen); Cai, ZM (Cai Zhi-Ming); Li, YP (Li Yi-Ping)

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Name of Conference/Journal:

The Forum of the 30th anniversary of Zhuhai Economic Region, P.452-458, conference paper

Abstract:

The Cooperation of Hi-Tech Industries between Zhuhai and Macao are concerning many issues. The key points are corresponding of policy, managing mechanism. HengQin will provide excellent platform for the cooperation of Hi-Tech Industries between Zhuhai and Macao. The Hi-Tech resouces should be congregated to HengQin and the field would be planed. The productive forces will beinspiring with the creative developing mode.

Keywords:

Hi-Tech Industries, Zhuhai and Macao, HengQin development

6.Implicit Relationship Deduction in one/more Judgment Templates

蔡智明、殷俊、周穎婕

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會議/刊物名稱：

International Conference on Convergence and Hybrid Information Technology, Korea, P.322-326, ISBN 978-1-60558-662-5, 會議文章

內容簡介：

多 Agent 多目標分布式建模系統可支持不同地點的專家以可視建模的方式判定各個方案及其各種關係，判定模板中的隱蔽關係難以直接觀察發現。本論文基於 AHP 度量推演隱蔽關係。首先尋找任意兩目標之間的關係鏈，再基於各目標與關係的權重計算各個關係鏈的比重。文中給出了搜索與計算算法。試驗結果表明，可以此方法發現任意一或多模板中任何隱蔽關係。

關鍵詞：

隱蔽關係、分布式建模、決策支持

6.Implicit Relationship Deduction in one/more Judgment Templates

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Name of Conference/Journal:

International Conference on Convergence and Hybrid Information Technology, Korea, P.322-326, ISBN 978-1-60558-662-5, Conference paper

Abstract:

The MAMG distributed selection modeling system supports experts at different sites to judge the solutions with many relationships in the visualized modeling. The implicit relationships in judgment modeling templates are hard to find by directly surveying the templates. The paper deducts the implicit relationship based on the dimensions established by AHP. Firstly, search for all the relationship-chains between any two objects; secondly, calculate the weight ratio of every relationship-chain by means of the weight of every object and every relationship. The detailed searching algorithm and calculation are given and an example with computing process in MAMG is followed. The result indicates any implicit relationship between any two objects in one/more templates can be found out and evaluated.

Keywords:

Implicit relationship, Distributed modeling, Decision support

7.多 Agent 多目標模板與 1-1, n-1, 1-n, n-n 的關係鏈演算

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會議/刊物名稱：

International Journal of Hybrid Information Technology, 3(1): 49-64 JAN 2010

內容簡介：

多 Agent 多目標判定模板中的隱蔽關係是難以直接觀察發現的。隱蔽關係推演中有多種類型的隱蔽關係鏈,如 1-1, n-1, 1-n, n-n 推演.本論文在 AHP 度量基礎上,首先尋找任意兩目標之間的關係鏈,再基於各目標與關係的權重計算比較各個關係鏈,文中給出了搜索與計算算法,任意一或多模板中任意兩點間的任何隱蔽關係都可以 1-1, n-1, 1-n, n-n 推演方式發現。

關鍵詞：

多 Agent/多目標、判定模板、關係鏈

7. Multi-Agent/Multi-Goal Modeling Templates and The 1-1, n-1, 1-n, n-n Deductions of Relationship-chain

Cai, ZM (Cai Zhi-Ming); Yin, J (Yin Jun); Zhou, YJ (Zhou Ying-Jie)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

International Journal of Hybrid Information Technology, 3(1): 49-64 JAN 2010

Abstract:

The implicit relationships in MAMG judgment modeling templates are hard to find by directly surveying the templates. There are many different types of relationship chains to compute the implicit relationships, such as: 1-1, n-1, 1-n, n-n deductions. The paper deducts the implicit relationship based on the dimensions established by AHP. Firstly, search for all the relationship-chains between any two objects; secondly, calculate the weight ratio of every relationship-chain by means of the weight of every object and every relationship. The detailed searching algorithm and calculation are given. Any relationship-chain between any two objects in one/more templates can be discovered, including 1-1, n-1, 1-n, n-n deductions.

Keywords:

Multi-Agent/Multi-Goal, Judgment Templates, Relationship-chain

8.使用定向天線的多信道無線網絡信道數上限

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會議/刊物名稱：

IEEE 無線通信與網絡國際會議，會議文章

內容簡介：

最近的一些研究發現使用多信道可以將多個並發的傳輸分開，從而能夠顯著提高網絡吞吐量。然而，目前這些研究僅僅考慮使用導致較高干擾的全向天線。另一方面，其他一些研究者發現在無線網絡中使用定向天線能夠減少干擾從而能夠提高網絡性能。然而他們的研究假定在這種定向天線網絡中只使用單信道。將定向天線與多信道這兩種技術結合起來有可能能帶來更多的好處。最近的一些研究表明，將這兩種技術結合可以提高網絡容量。然而，我們發現在這種結合了定向天線與多信道技術的網絡中，信道分配問題仍然還沒有得到很好的研究。

在這篇論文中，我們研究了使用多信道與定向天線的網絡的信道分配問題。具體的說，我們研究了這樣一個問題：給定一個無線網絡節點（這些節點上安裝了定向天線）集合，我們至少需要多少信道才能保證無衝突的傳輸？我們推導出信道數的上限，且我們發現該上限依賴於節點密度。此外，我們還構建了幾種網絡從而驗證該上限的緊密程度。我們的結論可以用於估計實際無線網絡的所需的信道數。另外，對於一個給定信道數的網絡，我們的結果還能給網絡部署提供一些建議。

關鍵詞：

上限、無線網絡、多信道、定向天線

8.Upper Bounds on the Number of Channels to Ensure Collision-free Communications in Multi-Channel Wireless Networks Using Directional Antennas

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Name of Conference/Journal:

IEEE Wireless Communications and Networking Conference (IEEE WCNC), conference paper

Abstract:

Recent studies have found that using multiple channels can separate concurrent transmissions and significantly improve network throughput. However, these studies have only considered wireless nodes that are equipped with omni-directional antennas, which have high interference. On the other hand, other researchers have found that using directional antennas in wireless networks can reduce interference and improve the network performance. But their studies have only considered single channel to be used in wireless networks with directional antennas. Thus, integrating the two technologies of multiple channels and directional antennas together can potentially bring more benefits. Some previous works have studied the capacity on the multi-channel wireless networks using directional antennas. However, the channel assignment problem of such networks has not been well studied.

In this paper, we study the channel assignment problem in the multi-channel wireless networks using directional antennas. In particular, we study the problem: given a set of wireless nodes equipped with directional antennas, how many channels are needed to ensure collision-free transmission? We derive the upper bounds on the number of channels, which depend on the node density. We also construct several scenarios to examine the tightness of the derived bounds. In practical application, our result can be used to estimate the number of channels required for a wireless network. Besides, our results can also be used to provide a suggestion on the proper node density in the node deployment when the number of channels is given for a wireless network.

Keywords:

Upper bound, Wireless Networks, Multiple Channels, Directional Antennas

9.混合邏輯在知件系統推理中的應用

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澳門科技大學 資訊科技學院

會議/刊物名稱：

第 9 屆機器學習及控制論國際會議，P.1078-1083，EI Compendex，會議文章

內容簡介：

開發智能系統時，需要表達人類知識並且處理其不確定性。在真實世界中，存在著各種不同類型的不確定性，其中隨機性和不確定性是最基本的兩種。怎樣處理在一個系統中同時出現的兩種不確定性是一個重要的議題。本文在引進混合邏輯和機會論的基礎上，提出了為 KBS 的不確定性建模，以及在 KWS 推理中處理混合不確定性的方法。

關鍵詞：

不確定性、知件系統、混合邏輯、隨機性、模糊性、機會論、可信度理論

9.Application of Hybrid Logic in Inference of Knowware System

Lo, SL (Lo Sio-Long); Ding, LY (Ding Li-Ya); Chen, Y (Chen Yuan)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

The 9th International Conference on Machine Learning and Cybernetics, P.1078-1083, EI Compendex, conference paper

Abstract:

It is necessary to represent human knowledge and modeling its uncertainty when developing an intelligent system. There are various types of uncertainty in the real world, and randomness and fuzziness are of two basic kinds. How to handle these two kinds of uncertainties appearing simultaneously in a system is an important issue in intelligent system development. This article represents the modeling of KBS with possible uncertainty, and propose handling hybrid uncertainty in inference of KWS, based on the hybrid logic and chance theory.

Keywords:

Uncertainty, Knowware System, Hybrid logic, Randomness, Fuzziness, Chance theory, Credibility theory

10.利用知件系統構造的智能福利分房系統

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澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 IEEE 管理科學和信息工程國際會議，V3，P.85-89，EI，會議文章

內容簡介：

本文提出了通過利用知件系統的智能組件構造生成的一個混合的 KBS，基於管理者提供的反饋給管理者推薦優化的房屋分配方案。在知件系統的框架下，當相關政策有變化調整時，目標系統可以很容易地根據管理者的需要進行更新和重建。

關鍵詞：

混合 KBS、知件系統、決策系統

10.Welfare- Oriented Public House Distribution System by Knowware System

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Chen, DL (Chen Dong-Liang); Ding, LY (Ding Li-Ya)

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Name of Conference/Journal:

2010 IEEE International Conference on Management Science and Information Engineering (ICMSIE 2010), V3. P.85-89, EI, conference paper

Abstract:

This article purposes a solution of constructing hybrid knowledge-based system using intelligent components in Knowware System (KWS), for the recommendation of an optimal house distribution plan to management based on manager's feedback. The target system is customized and can be easily modified or reconstructed according to manager's specific need when relevant policies and constraints are considered.

Keywords:

Hybrid KBS, Knowware System, Decision system

11. 中心稀薄的原子核電荷密度分佈

楚衍運、任中洲、王再軍、董鐵礦
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會議/刊物名稱：

美國物理評論 C, 82 (2): Art. No. 024320 AUG 27 2010, SCI-E 檢索

內容簡介：

我們用參數化的電荷密度和相對論平均場研究了中心稀薄的電荷密度分佈，相應的電形狀因子由相移分析法求得。相對論平均場的計算結果表明在 ^{46}Ar 和 ^{44}S 的中心電荷密度很小。計算結果表明 ^{46}Ar 和 ^{44}S 的價質子處於 $1d_{3/2}$ 軌道而不是 $2s_{1/2}$ 軌道，這與Ar和S的較輕的豐中子同位素不同。因此， ^{46}Ar 和 ^{44}S 中心的質子（電荷）密度嚴重降低了。我們給出了Ar和S的同位素鏈電形狀因子，當中心密度降低較多時形狀因子的極小點向內向上移動。此外，我們還用參數化電荷密度研究了在均方根半徑保持不變時中心電荷密度降低對電形狀因子的影響。

關鍵詞：

電形狀因子、相移分析法、相對論平均場

11. Central Depression of Nuclear Charge Density Distribution

**Chu, YY (Chu Yan-Yun); Ren, ZZ (Ren Zhong-Zhou);
Wang, ZJ (Wang Zai-Jun); Dong, TK (Dong Tie-Kuang)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Physical Review C, 82 (2): Art. No. 024320 AUG 27 2010, SCI-E indexed

Abstract:

The center-depressed nuclear charge distributions are investigated with the parametrized distribution and the relativistic mean-field theory, and their corresponding charge form factors are worked out with the phase shift analysis method. The central depression of nuclear charge distribution of ^{46}Ar and ^{44}S is supported by the relativistic mean-field calculation. According to the calculation, the valence protons in ^{46}Ar and ^{44}S prefer to occupy the $1d_{3/2}$ state rather than the $2s_{1/2}$ state, which is different from that in the less neutron-rich argon and sulfur isotopes. As a result, the central proton densities of ^{46}Ar and ^{44}S are highly depressed, and so are their central charge densities. The charge form factors of some argon and sulfur isotopes are presented, and the minima of the charge form factors shift upward and inward when the central nuclear charge distributions are more depressed. Besides, the effect of the central depression on the charge form factors is studied with a parametrized distribution, when the root-mean-square charge radii remain constant.

Keywords:

Charge form factor, Phase shift analysis, Relativistic mean-field theory

12.用電子散射研究不穩定核的電荷密度

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澳門科技大學 資訊科技學院

會議/刊物名稱：

理論物理通訊，54 (2): 347-354 AUG 2010，SCI-E 檢索

內容簡介：

我們把相對論平均場和相移分析法結合起來研究電子與不穩定核的庫倫散射。爲了分析電子散射對能量的依賴性我們研究了不同能量下的電子散射，並進行比較。我們發現 200MeV 或 300MeV 的電子散射可以用來研究在第一個衍射極小點附近電子散射的信息。

相對於 ^{16}O ， ^{17}F 的基態和第一激發態的形狀因子的第一個衍射極小點向相反的方向移動， ^{18}Ne 也有類似的現象。此外，我們還研究了 $N=8$ 的豐中子同中子鏈。結果表明電子散射將是研究豐質子和豐中子核的重要手段。

關鍵詞：

相對論平均場、相移分析法

12. Charge Densities of Unstable Nuclei with Electron Scattering

**Chu, YY (Chu Yan-Yun); Ren, ZZ (Ren Zhong-Zhou);
Wang, ZJ (Wang Zai-Jun); Dong, TK (Dong Tie-Kuang)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Communications in Theoretical Physics, 54 (2): 347-354 AUG 2010, SCI-E indexed

Abstract:

Relativistic mean-field theory and phase-shift analysis are combined together to investigate the elastic Coulomb scattering between electrons and unstable nuclei. Electron scattering at several different energies is studied and compared, in order to see the energy dependence of electron-nucleus scattering. It is shown that electron scattering at 200 MeV or 300 MeV can be used to reveal electron-nucleus scattering information around the first diffraction minimum.

Shifts in opposite directions are obtained for the first diffraction minima of the electron scattering off the ground and first excited states of ^{17}F with ^{16}O as reference, and similar effects are obtained for ^{18}Ne . Besides, some neutron-rich $N = 8$ isotones are also studied. Results show that electron scattering will be very useful and important in studying both proton- and neutron-rich nuclei in the future.

Keywords:

Relativistic mean-field theory, Phase-shift analysis

13.基於液滴模型的超重核 alpha 衰變能公式

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會議/刊物名稱：

美國物理評論 C, 82 (3): Art. No. 034320 SEP 22 2010, SCI-E 檢索

內容簡介：

我們根據宏觀模型+壳修正的辦法提出了一個超重核的 alpha 衰變能公式。公式的宏觀部分由 Bethe-Weizsäcker 結合能公式導出， $N = 152$ 和 $N = 162$ 處的壳修正由墨西哥帽小波函數表示。公式的參數是通過擬合 170 個從 $Z=90$ 到 $Z=118$ ， $N \geq 140$ 的原子核的 alpha 衰變能得到。結果顯示，這已有的 170 個核的 alpha 衰變能算得非常好，平均偏差和標準偏差分別為 0.177 MeV 和 0.226 MeV。新合成的核素 $^{293, 294}_{117}$ 和它們的 alpha 衰變產物 alpha 衰變能都能重複得很好。此外，我們預言了 $Z=110-120$ 的同位素鏈的 alpha 衰變能並與宏觀-微觀模型所得的結果進行比較。由於宏觀-微觀模型預言的雙幻核 $^{298}_{114}_{184}$ 附近的壳效應，兩公式所得的 alpha 衰變能在 $Z \geq 116$ ， $N \geq 176$ 時差別很大。因此，通過比較將來測得的實驗數據和這兩種方法預言的結果，我們可以獲得下一個質子幻數和中子幻數的信息。

關鍵詞：

超重核、Alpha 衰變能

13. α -decay energy formula for superheavy nuclei based on the liquid-drop model

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Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

PHYSICAL REVIEW C, 82 (3): Art. No. 034320 SEP 22 2010, SCI-E indexed

Abstract:

A formula of α -decay energy for superheavy nuclei based on the method of macroscopic model plus shell corrections is proposed. The macroscopic part of this formula is derived from the Bethe-Weizsäcker binding energy formula, and the shell corrections at $N = 152$ and $N = 162$ are expressed by the Mexican hat wavelet functions. The parameters of this formula are obtained through fitting to 170 α -decay energies for nuclei ranging from $Z = 90$ to $Z = 118$ with $N \geq 140$. Numerical results show that 170 existing α -decay energies can be reproduced very well; the average and standard deviations between theoretical results and experimental data are 0.177 and 0.226 MeV, respectively. The α -decay energies of newly synthesized nuclei $^{293, 294}_{117}$ and their α -decay products are also reproduced very well. In addition, the α -decay energies for nuclei with $Z = 110-120$ are predicted and compared with the results calculated by the macroscopic-microscopic model. Great differences are found for nuclei with $Z \geq 116$ and $N \geq 176$ due to the shell effects near the hypothetical doubly magic nucleus $^{298}_{114}_{184}$ in the macroscopic-microscopic model. Therefore, by comparing experimental α -decay energies measured in the future with the ones predicted by these two methods, one can obtain useful information about the next proton and neutron magic numbers.

Keywords:

Superheavy nuclei, Alpha decay energy

14. 上行認知蜂窩網路中機會調度的性能分析

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會議/刊物名稱：

通信快報, 14 (9): 827-829 SEP 2010, SCI-E 檢索, EI 檢索

內容簡介：

在本文中，我們研究上行認知蜂窩網路中機會調度的性能，包括調度用戶的平均容量和平均誤比特率。在考慮的系統中，認知用戶與主用戶共用同一基站。與現有的認知用戶調度方案不同的是，對主用戶干擾最小的認知用戶被選擇傳輸資料。除此之外，被選擇認知用戶的發射功率還需滿足主用戶的中斷概率要求。一個有趣的觀察是調度用戶的平均容量和平均誤比特率上限都與認知用戶和主用戶的發射功率無關。

關鍵詞：

認知蜂窩網路、機會調度、平均容量、平均誤比特率

14. Performance Analysis of Uplink Cognitive Cellular Networks with Opportunistic Scheduling

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Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

IEEE Communications Letters, 14 (9): 827-829 SEP 2010, SCI-E indexed, EI indexed

Abstract:

In this letter, we investigate the performance of uplink cognitive cellular networks with opportunistic scheduling with respect to the mean capacity and the average bit error rate (BER) of the scheduled cognitive user (CU). In the considered system, both CUs and the primary user (PU) share the same base station (BS). In contrast to existing CU scheduling schemes, the CU which causes the minimum interference to the PU is selected for transmission. Besides, the transmit power of the selected CU should also satisfy the outage probability requirement of the PU. An interesting observation is that both the mean capacity and the upper bound on the average BER of the scheduled CU are independent of the number of CUs and the transmit power of the PU.

Keywords:

Cognitive cellular networks, Opportunistic scheduling, Mean capacity, Average BER

15. 認知無線電網路中的聯合功率速率以及自適應調製

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會議/刊物名稱：

無線個人通信，DOI: 10.1007/s11277-010-0149-7，SCI-E 檢索，EI 檢索

內容簡介：

有效的資源分配是認知無線電網路中主要問題，尤其當認知用戶與主用戶共用同一頻譜。在本文中，我們考慮通過功率、速率控制以及自適應調製來最小化發射功率。我們分析了功率控制博弈中納什均衡點的存在性、唯一性以及帕累托最優性，並且提出了一種迭代演算法來找到納什均衡點，然後在收斂功率的基礎上調整傳輸速率和調製方案。如果與已有的工作對比的話，提出方案的主要特點是每個認知用戶可以延長電池的使用壽命以便在能量受限的網路中支援各種不同傳輸速率和調製方案需求的業務。仿真結果驗證了提出方案在功率節省、速率和頻譜效率提高以及實現簡單的方面的有效性。

關鍵詞：

資源分配、認知無線電、頻譜共用、博弈論

15. Joint Power and Rate Control Combined with Adaptive Modulation in Cognitive Radio Networks

Li, D (Li Dong)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Wireless Personal Communications, DOI: 10.1007/s11277-010-0149-7, SCI-E indexed, EI indexed

Abstract:

Efficient resource allocation is a major challenge in cognitive radio networks, especially when Cognitive Users (CUs) share the same frequency band with the Primary User (PU). In this paper, we consider minimizing the total power consumption by combining power control, rate control and adaptive modulation. We analyze the existence, uniqueness and Pareto optimality of Nash Equilibrium (NE) in the power control game, and propose an iterative algorithm to find the NE followed by the adjustment of both the transmission rate and modulation scheme based on the convergent power. If compared with previous works, the key feature of the proposed strategy is that each CU can prolong its battery life in energy-constrained networks to support heterogeneous services with different transmission rates and modulation schemes requirements. Simulation results are provided to confirm the effectiveness of the proposed method in power saving, improvement of both the transmission rate and the spectral efficiency and the simplicity of implementation.

Keywords:

Resource Allocation, Cognitive Radio, Spectrum Sharing, Game Theory

16. 多用戶認知無線電網路中的有效功率控制

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會議/刊物名稱：

無線個人通信，DOI: 10.1007/s11277-010-9926-6，SCI-E 檢索，EI 檢索

內容簡介：

認知無線電近來被認為是改善頻譜利用率的 一種靈活的頻譜使用模型。在本文中，我們通過幾何規劃提出了一種新的功率分配演算法來實現認知用戶和主用戶的頻譜共用。該演算法的目標是最小化認知用戶總的功率損耗同時既保護主用戶又可以滿足多個認知用戶的服務品質，這是與先前工作的不同之處。為了簡化中心式的計算，一種分散式的演算法被提出來自適應地調整認知用戶的發射功率。仿真結果驗證了提出演算法在功率節省方面的有效性。

關鍵詞：

功率控制、認知無線電、幾何規劃

16. Efficient Power Allocation for Multiuser Cognitive Radio Networks

Li, D (Li Dong)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Wireless Personal Communications, DOI: 10.1007/s11277-010-9926-6, SCI-E indexed, EI indexed

Abstract:

Cognitive radio has been recently considered as a flexible spectrum usage model to improve the spectrum efficiency. In this paper, we develop a new power allocation approach by geometric programming (GP) to realize the coexistence of a primary user (PU) and multiple cognitive users (CUs) in the same frequency band. The objective is to minimize the total power consumption of CUs while guaranteeing the not only protection of PU but also the quality of service (QoS) of multiple CUs, which is different from previous works. In order to facilitate the centralized computation, a distributed algorithm is developed to adaptively adjust the transmit power of each CU. Numerical results are provided to show the effectiveness of the proposed algorithm in power saving.

Keywords: Power Allocation, Cognitive Radio, Geometric Programming

17. 認知無線電網路中暫態干擾約束下的有效容量極限

李東

澳門科技大學 資訊科技學院

會議/刊物名稱：

通信技術國際會議，pp. 218-222，會議文章

內容簡介：

在認知無線電網路中，只要對主用戶的干擾在給定的門限值以下，認知用戶可以與其共用同一頻帶。在本文中，我們研究在保證主用戶暫態服務品質的情況下認知用戶有效通道容量的性能極限。考慮一個和多個主用戶接收機的情況，我們分別推導了兩種情況下的有效通道容量的閉式運算式。當接收信號的帶寬趨於無窮大時，我們還進一步地分析了其漸近性能並同樣給出閉式運算式。仿真結果驗證了理論結果的有效性。

關鍵詞：

有效容量、認知無線電、暫態干擾約束

17. Effective Capacity Limits of Cognitive Radio Networks under Peak Interference Constraint

Li, D (Li Dong)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

In Proceedings of the 2010 IEEE International Conference on Communications and Technology (ICCT 2010), pp. 218-222, conference paper

Abstract:

In cognitive radio networks, a cognitive user (CU) can share the same frequency band with the primary user (PU) as long as the interference introduced to the PU is below a given interference limit. In this paper, we study the performance limits of CU's effective capacity by taking the instantaneous quality of services (QoS) of the PU into consideration. Considering the case with either single or multiple primary receivers, we derive closed-form expressions for the effective capacity for both of the above scenarios. We further analyze the performance limits of the asymptotic capacity when the received signal bandwidth approaches infinity, and obtain the closed-form expressions by taking both single and multiple primary receivers into consideration. Numerical results are provided to confirm the effectiveness of our theoretical analysis.

Keywords:

Effective capacity, Cognitive radio, Peak interference constraint

18. 在帶有非均勻氣隙的感應電機的建模和分析中使用改進的繞組方程分析法之最新進展

Subhasis Nandi、李曉東、T. Ialamparithi

澳門科技大學 資訊科技學院

會議/刊物名稱：

第一屆能量轉換技術最新進展國際會議 (ICAECT)，Manipal，India，JAN 7-10, 2010，會議文章

內容簡介：

使用繞組方程對感應電機進行建模是常用的方法，可以廣泛應用於感應電機的性能評估。但是此方法不適用在氣隙不均勻的情況下。改進的繞組方程最早用於凸極型同步電機的分析，最近也被廣泛用於偏心的感應電機，定轉子槽和飽和的建模。儘管此方法不如有限元法精確，基於改進的繞組方程的仿真計算量小而且速度快。本文中的實驗數據清晰地證明了此方法的優越性。

關鍵詞：

改進的繞組方程分析、感應電機的建模、無傳感器速度偵測

18.Recent Developments in the Modeling and Analysis of Induction Machines with Non-uniform Air-gap using the Modified Winding Function Approach

Subhasis Nandi; Li, XD (Li Xiao-Dong); T. Ialamparithi

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

1st International conference on Advances in Energy Conversion Technologies (ICAECT), 1st International Conference on Advances on Energy Conversion Technologies (ICAECT), Manipal, India, Jan. 7-10, 2010, conference paper

Abstract:

Modeling of induction machines using winding function approach (WFA) is well known. It has been used extensively to evaluate performance for induction machines. However, when the air-gap is non-uniform WFA is no longer applicable. Modified winding function approach (MWFA), which was originally developed for modeling dynamic eccentricity in salient pole synchronous machines has been more recently used for modeling of eccentric induction machine, stator and rotor slotting and saturation. While not as accurate as finite element (FE) methods, MWFA based simulations are computationally far less intensive and yield results lot quicker. Experimental results presented in the paper clearly establish the credibility of the MWFA.

Keywords:

MWFA, Induction motor modeling, Sensorless speed detection

19. 高頻隔離式雙橋串聯諧振直流直流變換器的分析與設計

李曉東、Bhat, AKS (Bhat, Ashoka K. S.)

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會議/刊物名稱：

國際電氣電子工程師協會電力電子雜誌，25 (4): 850-862 April 2010，SCI-E 檢索，EI 檢索

內容簡介：

由於體積小能量密度高，高頻隔離型雙向雙橋直流直流變換器在可再生能源系統中日益受到關注。本文使用兩種簡單的改進型交流等效電路法對一個雙橋串聯直流直流變換器進行分析，分別針對與電壓源負載和純電阻負載。在兩種方法中，只有電壓和電流的基波被考慮。所有的開關都工作於零電壓或者零電流狀態，儘管電壓放大倍數變化很大。這一特點對於可再生能源發電很重要。並且第二種方法中負載側的電路可以有一個等效阻抗代替。此阻抗相角的 \cos 值代表了能量的流動方向。數字仿真的結果證明了這兩種方法的可行性。用於驗證的實際電路實驗數據也被包括在本文中。

關鍵詞：

諧振變換器、建模、分析和設計、可再生能源系統、直流/直流變換器

19. Analysis and Design of High-Frequency Isolated Dual-Bridge Series Resonant dc/dc Converter

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Name of Conference/Journal:

IEEE Transactions on Power Electronics, 25 (4): 850-862 April 2010, SCI-E indexed, EI indexed

Abstract:

Bidirectional dual-bridge dc/dc converter with high-frequency isolation is gaining more attentions in renewable energy system due to small size and high power density. In this paper, a dual-bridge series resonant dc/dc converter is analyzed with two simple modified ac equivalent circuit analysis methods for both voltage source load and resistive load. In both methods, only fundamental components of voltages and currents are considered. All the switches may work in either ZVS or ZCS for a wide variation of voltage gain, which is important in renewable energy generation. It is also shown in the second method that the load side circuit could be represented with an equivalent impedance. The polarity of cosine value of this equivalent impedance angle reveals the power flow direction. The analysis is verified with computer simulation results. Experimental data based on a 200W prototype circuit is included for validation purpose.

Keywords:

Resonant converters, Modeling, analysis and simulation, Renewable energy systems, DC-to-DC converters

20. 一個雙橋串並聯諧振變換器的設計和性能評估

孫斯亮、李曉東、Akshay Rathore

澳門科技大學 資訊科技學院

會議/刊物名稱：

第三屆電力電子與智能交通系統國際會議，IEEE Catalog No. CFP1075E-PRT，ISBN 978-1-4244-9162-9，pages:179-182，會議文章

內容簡介：

本文使用了基波分析法分析了一個雙橋串並聯諧振變換器。每一個橋式電路的軟開關範圍都被推導出來了。基於此分析一個設計的例子被給出來了。數字仿真的結果也包括與文中以證明分析的正確性。

關鍵詞：

直流/直流變換、諧振變換器、軟開關

20.Design and Performance Evaluation of a Dual-Bridge Series-Parallel Resonant Converter

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Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

3rd International conference on Power Electronics and Intelligent Transportation system (PEITS), IEEE Catalog No. CFP1075E-PRT, ISBN: 978-1-4244-9162-9, pages: 179-182, conference paper

Abstract:

A dual-bridge series-parallel resonant converter is analyzed using fundamental analysis approach. Soft-switching ranges of both bridges are derived. A design example is given and digital simulation results are included as the purpose of validation.

Keywords:

Dc/dc conversion, Resonant converter, Soft-switching

21. 一個帶有二次側開關的 LC-LC 型諧振變換器的改進型複頻域 交流分析

趙辰成、李曉東、Akshay Rathore
澳門科技大學 資訊科技學院

會議/刊物名稱：

第三屆電力電子與智能交通系統國際會議，IEEE Catalog No. CFP1075E-PRT，ISBN 978-1-4244-9162-9，pages:183—186，會議文章

內容簡介：

在本文中，一個改進的複頻域交流分析法被用於帶有二次側開關的串並聯諧振變換器。二次側電路由一個等效阻抗所代替，而非傳統諧振變換器中的等效電阻。每一個橋式電路的軟開關範圍都被推導出來了。基於此分析一個設計的例子被給出來了。數字仿真的結果也包括與文中以證明分析的正確性。

關鍵詞：

複頻域交流分析、諧振變換器

21.Modified Complex Ac analysis of a LC-LC Resonant Converter with Secondary Switching

Zhao, CC (Zhao Chen-Cheng); Li, XD (Li Xiao-Dong); Akshay Rathore

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

3rd International conference on Power Electronics and Intelligent Transportation system (PEITS), IEEE Catalog No. CFP1075E-PRT, ISBN:978-1-4244-9162-9, pages:183-186, conference paper

Abstract:

A modified complex ac analysis is used for a series-parallel resonant converter with secondary switching. The secondary is represented with an equivalent impedance instead of a pure resistance in the conventional resonant converter. Soft-switching ranges of both bridges are derived. A design example is given and digital simulation results are included for the purpose of validation.

Keywords:

Complex ac analysis, Resonant converter

22.基於展開和分裂的多循環並行化

林粵明、Coutinho, JGF (Coutinho, José Gabriel F.)、Ho, CH (Ho Chun-Hok)、
Leong, PHW (Leong, Philip Heng-Wai)、Luk, W (Luk Wayne)

澳門科技大學 資訊科技學院

會議/刊物名稱：

國際可重構計算期刊，Vol. 2010 JAN 2010

內容簡介：

本論文提出一種在異構系統上的多循環並行化技術。循環首先被展開，然後再分解成多個工作。一個性能驅動的優化技術被用於發現在硬體限制條件下的每個循環的最佳展開系數。三個應用被用於證明這種方法：語音識別，圖象處理和 N-BODY 問題。使用 N-BODY 問題的實驗結果顯示，在一個 274MHz 的 FPGA 上，得到比在一個 2.6GHz 微處理器上 34 倍的增加速度，這比一種沒有應用展開的方法高 4.1 倍。

關鍵詞：

並行化、可重構硬件、循環展開

22.Multiloop parallelisation using unrolling and fission

**Lam, YM (Lam Yuet-Ming); Coutinho, JGF (Coutinho, José Gabriel F.);
Ho, CH (Ho Chun-Hok); Leong, PHW (Leong, Philip Heng-Wai);
Luk, W (Luk Wayne)**

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Name of Conference/Journal:

International Journal of Reconfigurable Computing, Vol. 2010 JAN 2010

Abstract:

A technique for parallelising multiple loops in a heterogeneous computing system is presented. Loops are first unrolled and then broken up into multiple tasks which are mapped to reconfigurable hardware. A performance-driven optimisation is applied to find the best unrolling factor for each loop under hardware size constraints. The approach is demonstrated using three applications: speech recognition, image processing, and the N-Body problem. Experimental results show that a maximum speedup of 34 is achieved on a 274MHz FPGA for the N-Body over a 2.6GHz microprocessor, which is 4.1 times higher than that of an approach without unrolling.

Keywords:

Multiloop parallelisation, Loop unrolling, Reconfigurable computing

23.Lunar digital elevation model and elevation distribution model based on Chang'E-1 LAM data

蔡占川、鄭才目、唐澤聖、齊東旭
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會議/刊物名稱：

中國科學：技術科學，53(9): 2558-2568 SEP 2010，SCI-E 檢索

內容簡介：

嫦娥一號激光高度計獲取了 800 多萬個有效記錄點,為了探索利用嫦娥激光測高數據生成高精度的月球數字高程模型,提出了層次多結點樣條算法,該算法利用一系列從粗糙到精細的多結點樣條控制網格來逐步逼近或插值給定的激光高程數據。基於該算法,利用嫦娥激光測高數據,生成了空間分辨率為 $0.0625^{\circ} \times 0.0625^{\circ}$ 的全月球數字高程模型,並將該模型分別與 Clementine、ULCN2005 與 CLTM-s01 進行了對比。同時,為了探討地面高程分布規律,建立了嫦娥一號高程的分布特徵模型。全月球、月球正面高程呈正偏態、高峰態的正態分布;月球背面高程呈正偏態、低峰態的正態分布。

關鍵詞：

嫦娥一號、激光測高、DEM、分布特徵模型

23.Lunar digital elevation model and elevation distribution model based on Chang'E-1 LAM data

Cai, ZC (Cai Zhan-Chuan); Zheng, CM (Zheng Cai-Mu); Tang, ZS (Tang Ze-Sheng); Qi, DX (Qi Dong-Xu)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Science China-Technological Sciences, 53(9): 2558-2568 SEP 2010, SCI-E indexed

Abstract:

More than 8.2 million effective data samples were obtained by the Chang'E-1 Laser Altimeter (LAM). In order to produce a global topographic model of the moon with improved accuracy, a hierarchical many-knot spline method was proposed in this paper. This algorithm makes use of a hierarchy of control lattices to approximate or interpolate the LAM data. Based on the proposed algorithm, a $0.0625^{\circ} \times 0.0625^{\circ}$ grid of global lunar DEM was obtained and it was compared with ULCN2005, CLTMs01 and Kaguya models, respectively. At the same time, this paper explored the elevation distribution law and established the elevation distribution model. It is shown that the global lunar and nearside elevation distribution is positively skewed and leptokurtic normal distribution, and the farside elevation distribution is a positively skewed and platykurtic normal distribution.

Keywords:

Chang'E-1, LAM, DEM, Distribution model

24. 基於嫦娥一號衛星激光測高數據的月球數字高程模型

蔡占川、梁延研、李堅、唐澤聖、齊東旭
澳門科技大學 資訊科技學院

會議/刊物名稱：

地球物理學進展，25(4): 1153-1160，中文核心期刊要目總覽(2008)

內容簡介：

利用嫦娥一號激光高度計獲取的 800 多萬個有效記錄點科學數據，描述了一種基於 Kriging 插值方法來生成空間分辨率為 $0.25^{\circ} \times 0.25^{\circ}$ 全月球均勻網格的數字高程模型。即對激光高度計科學數據進行加權插值，通過引進以距離為自變量的變差函數來計算權值。因變差函數既可以反映激光測高數據的空間結構特性，又可以反應激光測高數據的隨機分布特性，故採用 Kriging 方法插值可以得到較理想的月球高程模型。同時，基於生成的全月球數字高程模型得到了月球的漢麥爾投影、麥卡托投影、正面、反面、南極、北極等月球地形圖。該模型也與國際上的月球模型 Clementine、ULCN2005 與 CLTM-s01 進行了對比。由於嫦娥一號激光測高數據達 800 多萬個記錄點，得到的月球數字高程模型的精度更高。

關鍵詞：

嫦娥一號、激光高度計、Kriging 插值、數字高程模型

24.Digital elevation model of the Moon from the Chang'E-1 Laser altimeter

**Cai, ZC (Cai Zhan-Chuan); Liang, YY (Liang Yan-Yan); Li, J (Li Jian); Tang,
ZS (Tang Ze-Sheng); Qi, DX (Qi Dong-Xu)**

**Faculty of Information Technology, Macau University of Science and Technology
Name of Conference/Journal:**

Progress in Geophysics, 25(4): 1153--1160, A Guide to the Core Journals of China(PKU)

Abstract:

More than 8 million range measurements from the Chang'E-1 Laser Altimeter have been used to produce a global Digital Elevation Model (CEDEM) of the Moon with Kriging Interpolation methods. Through extracting and making grid of the moon's globe PSD data which was got by the chang'e-1, obtains the Lunar global $0.25^{\circ} \times 0.25^{\circ}$ grid model, this model regards the lunar center of mass as reference core, regards the moon's average radius 1738km as basis reference. In order to make the Chang'e lunar model perform directly and accurately, we use Chang'e $0.25^{\circ} \times 0.25^{\circ}$ lunar global grid to create lunar maps with Orthographic projection, Hammer projection and Robinson projection. By comparing and analyzing the lunar CEDEM, Clementine, ULCN2005, CLTM-s01, the model CEDEM have not only obvious improvement on space coverage, model accuracy and reliability and resolution ratio but also on the two poles due to its better global samplings.

Keywords:

Chang'E-1, Laser altimeter, Kriging interpolation, Digital elevation model (DEM)

25.三角域上正交 W 系統的結構

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澳門科技大學 資訊科技學院

會議/刊物名稱：

計算機輔助設計與圖形學學報，22(9): 1538-1544 2010，EI 檢索

內容簡介：

W 系統是通過 Haar 函數系和 Legendre 多項式構造得到的一類新的空間的正交函數系，相應的快速算法已經得到。本文繼續對二維情形的 W 系統進行研究，給出了三角域上正交 W 系統的構造，證明了它與三角域上 V 系統的等價性，W 系統的構造過程較 V 系統更簡捷。實例表明利用三角域上 W 系統可以實現對曲面和曲面組的正交分解，從而實現對幾何曲面和曲面組的精確重構。

關鍵詞：

三角域、三角剖分、正交函數系、Haar 函數系、W 系統、V 系統

25.The Structure of W- system over Triangular Domains and its Application

Wang, XC (Wang Xiao-Chun); Song, RX (Song Rui-Xia); Qi, DX (Qi Dong-Xu)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Jisuanji Fuzhu Sheji Yu Tuxingxue Xuebao/Journal of Computer-Aided Design and Computer Graphics，22(9):1538-1544 2010, EI indexed

Abstract:

W-system on $L_2[0,1]$ is a new kind of orthogonal function system constructed by the authors using Haar function and Legendre polynomials. Its fast algorithm has been obtained. In this paper we continue the study of the W-system. A scheme to construct the orthogonal bases of the W-system over triangular domain is presented. Although the W-system is equivalent to the V-system over triangular domain, its construction process is much simpler than that of the V-system. The experiment results as well as the equivalence between finite W-system and V-system show that the geometric surface or a group of surfaces can be perfectly reconstructed using W-system over triangular domain.

Keywords:

Triangular domain, Triangulation, Haar function system, W system, V system

26. 一種新的基於嫦娥一號衛星激光測高數據的月球趨勢面分析

方法

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會議/刊物名稱：

Proceedings of International Symposium on Lunar Science, 會議文章

內容簡介：

利用嫦娥一號激光高度計獲取的 800 多萬個有效記錄點科學數據，本文基於一類正交樣條函數系—GF 系統，提出了一種新的趨勢面分析方法。該方法不僅降低了計算量，而且能夠得到不同分辨率水平下的月球表面模型。

關鍵詞：

TSA、GF 系統、多分辨分析

26.A Novel Method for Lunar Tread Surface Analysis Based on Chang'E-1 LAM Data

Chen, W (Chen Wei); Cai, ZC (Cai Zhan-Chuan); Ye, MJ (Ye Meng-Jie);

Qi, DX (Qi Dong-Xu)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of International Symposium on Lunar Science, conference paper

Abstract:

More than 8.4 million effective range measurements from the Chang'E-1 Laser Altimeter (LAM) have been obtained. This paper presents a novel method for Lunar Trend Surface Analysis (TSA) base on a class of orthogonal spline functions, named as GF system. The method proposed could not only greatly reduce the computational complexity, but also can obtain a series of the surface models at different resolution levels.

Keywords:

TSA, GF system, Multi-resolution

27.基於非均勻矩形剖分及插值的圖像去噪算法

余建德、何曉宇、楊波、齊東旭、唐澤聖
澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 年多媒體通訊國際會議，AUG 2010, pp. 9-12，會議文章

內容簡介：

有別於傳統的去噪算法，本文提出基於非均勻矩形剖分後所得到的圖像表面擬合特性的 一種新的圖像去噪算法。一個給定的圖像可以被非均勻地剖分為不同大小的矩形，同時所選擇的二元多項式是用於為每個子矩形上的圖像素數灰度作最小平方逼近。一旦逼近精度及二元多項式被選定了，可以得到一組特定的圖像剖分結果。剖分所得到的 一組編碼可以用來重構原圖，通常，逼近精度越小，重構圖像的質量越好。然而，我們應該選擇一個合適的逼近精度來逼近原圖而不是逼近帶噪的圖像。另一方面，為了減少此逼近去噪方法所引起的三角形效應從而得到更佳的去噪效果,插值放大縮小的方法被應用於非均勻矩形剖分的去噪前後。實驗結果證明本方法可以獲得在一定程度上比其他現存去噪方法更佳的效果。

關鍵詞：

圖像去噪、圖像的非均勻剖分、矩形剖分、插值

27.A Novel Image Denoising Algorithm based on Non-Uniform Rectangular Partition and Interpolation

**U, KT (U Kin-Tak); He, XY (He Xiao-Yu); Yang, B (Yang Bo);
Qi, DX (Qi Dong-Xu); Tang, ZS (Tang Ze-Sheng)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 International Conference on Multimedia Communications (Mediacom 20), Aug 2010, pp. 9-12, conference paper

Abstract:

This paper proposes a novel denoising algorithm according to the image approximation after the Non-Uniform Rectangular Partition. A given image can automatically be partitioned into different sub-rectangles with different dimensions and the bivariate polynomial is used to do the Optimal Quadratic Approximation to gray values of image in each sub-rectangle. When the approximation error and bivariate polynomial are specified, a specific image partition result is obtained. Generally, the smallest the error, the better approximation effect is obtained. However, a suitable error should be selected to get the best approximation to original image instead of the noised image. On the other hand, in order to avoid the square effect after denoising and obtain a better denoising result, the interpolation method is used before and after the denoising by Non-Uniform Rectangular Partition. Experimental results show that this method can obtain a better denoising effect by comparing with other methods.

Keywords:

Image denoising, Non-uniform partition of image, Rectangular partition, Interpolation

28.基於非均勻三角剖分及插值的圖像去噪算法

余建德、紀念、宋瑞霞、齊東旭、唐澤聖
澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 年未來能源工程國際會議，JUN 2010，p.67-70，會議文章

內容簡介：

有別於傳統的去噪算法，本文提出基於非均勻三角剖分後所得到的圖像表面擬合特性的 一種新的圖像去噪算法。一個給定的圖像可以被非均勻地剖分為不同大小的三角形，同時所選擇的二元多項式是用於為每個子三角形上的圖像素數灰度作最小平方逼近。一旦逼近精度及二元多項式被選定了，可以得到一組特定的圖像剖分結果。剖分所得到的 一組編碼可以用來重構原圖，通常，逼近精度越小，重構圖像的質量越好。然而，我們應該選擇一個合適的逼近精度來逼近原圖而不是逼近帶噪的圖像。另一方面，為了漸少此逼近去噪方法所引起的三角形效應從而得到更佳的去噪效果，插值放大縮小的方法被應用於非均勻三角剖分的去噪前後。實驗結果證明本方法可以獲得在一定程度上比其他現存去噪方法更佳的效果。

關鍵詞：

圖像去噪、圖像的非均勻剖分、三角形剖分、插值

28.A Novel Image Denoising Algorithm based on Non-Uniform Triangular Partition and Interpolation

**U, KT (U Kin-Tak); Jia, N (Jia Nian); Song, RX (Song Rui-Xia);
Qi, DX (Qi Dong-Xu); Tang, ZS (Tang Ze-Sheng)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 International Conference on Future Power and Energy Engineering (ICFPPEE2010), JUN 2010, pp. 67-70, conference paper

Abstract:

Distinguishing from the traditional denoising methods, this paper proposes a novel denoising algorithm according to the image-surface fitting after the Non-Uniform Triangular Partition. A given image can automatically be partitioned into different triangles with different dimensions and the bivariate polynomial is used to do the Optimal Quadratic Approximation to gray values of image in each sub-triangle. When the approximation error and bivariate polynomial are specified, a specific image partition result is obtained. The partitioning codes obtained can be used to reconstruct the original image. In general, the smallest the error, the better approximation effect is obtained. However, we should select a suitable error to get the best approximation to original image instead of the noised image. On the other hand, in order to avoid the triangle effect after denoising and obtain a better denoising result, the interpolation method is used before and after the denoising by Non-Uniform Triangular Partition. Experimental results show that this method can obtain a better denoising effect by comparing with other methods to some extend.

Keywords:

Image denoising, Non-uniform partition of image, Triangular partition, Interpolation

29.基於非均勻矩形剖分及離散餘弦變換-奇異值分解的魯棒性圖

像水印算法

余建德、胡盛頓、齊東旭、唐澤聖
澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 年檢測技術與機電自動化國際會議，MAR 2010，p.327-330，ISBN 978-0-7695-3962-1/10，EI Compendex, 會議文章

內容簡介：

圖像水印嵌入到 8x8 離散餘弦變換塊的直流係數時會大大增加水印的抗 JPEG 壓縮攻擊能力，但如果按均勻方格來嵌入相同的水印強度，那麼載水印的圖像會有較大的失真，為了解決這個問題，本文提出一種按非均勻矩形剖分來選擇水印嵌入強度的魯棒性圖像水印算法。首先按非均勻剖分算法將圖像分成能反映圖像灰度分佈特性的子區塊，然後按每個子區塊所包含的矩形數來判定水印的嵌入強度，置亂後的水印信息的奇異值被非均勻及順序重覆地嵌入到原圖每個 8*8 區域的離散餘弦變換塊的直流係數上，這樣可以大大提高水印的抗各種攻擊能力。同時為了增加水印的抗剪裁攻擊能力及安全性，在嵌入水印前先對其作置亂操作，置亂算法選擇了 Arnold 算法，經大量實驗證明，在載水印的圖像沒有明顯失真下，水印算法對噪音、濾波及剪裁攻擊均有良好的魯棒性，尤其對抗 JPEG 壓縮攻擊能力更強。

關鍵詞：

圖像的非均勻剖分、矩形剖分、圖像水印、離散餘弦變換、奇異值分解

29.A Robust Image Watermarking Algorithm Based on Non-uniform Rectangular Partition and DCT-SVD

**U, KT (U Kin-Tak); Hu, SD (Hu Sheng-Dun); Qi, DX (Qi Dong-Xu);
Tang, ZS (Tang Ze-Sheng)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 International Conference on Measuring Technology and Mechatronics Automation (ICMTMA2010), MAR 2010, p.327-330, ISBN 978-0-7695-3962-1/10, EI Compendex, conference paper

Abstract:

When embedding the watermark information into DC coefficient of each 8x8 DCT block of the host image, it is more likely to obtain a stronger antiattack function against JPEG-compression attack. However, embedding the watermark with the same intensity into them may distort the watermarked image to a large extent. To solve this problem, a novel robust image-watermark algorithm is proposed with the characteristics of selective embedding intensity based on the non-uniform partition. In the meanwhile, Arnold Scrambling Algorithm is applied before the watermark is embedded to increase the security of the algorithm. The SVD values of the scrambled watermark will be embedded into the DC coefficient of each 8x8 DCT block of the host image in order and repeatedly and this may enhance the various anti-attack ability of the whole algorithm. The experimental results have showed that this algorithm is robust against cropping attack, filtering attack and noising attack, especially the JPEG-compression attack and no obvious distortion appeared in the watermarked image.

Keywords:

Rectangular partition, Non-uniform partition of image, Image watermarking, DCT-SVD

30.基於三維 HILBERT 曲線的彩色圖像置亂算法

周挺發、田小林、夏紹璋
澳門科技大學 資訊科技學院

會議/刊物名稱：

澳門科技大學學報，3 (2): 15-19 DEC 2009

內容簡介：

本文將常規的基於二維 Hilbert 曲線的彩色圖像置亂算法，推廣為應用三維 Hilbert 曲線置亂算法。常規的基於二維 Hilbert 曲線的圖像置亂算法，或需對圖像進行多次置亂，或要求將一幅灰階圖像補成邊長 $2n$ 的正方形圖；對彩色圖像的置亂則更需將彩色圖像的三個分量作為三個灰階圖分次置亂，或把三個分量拼成一幅大的灰階方圖再做置亂。本文提出的新算法僅要求圖像的行列數分別為偶數，即可直接把彩色圖像作高維數據矩陣進行一次性置亂。實驗結果表明，與常規的基於二維 Hilbert 曲線的置亂算法相比，新算法在彩色圖像置亂上不但節省了大量的運算空間與時間，使置亂更有效，且置亂效果非常滿意。

關鍵詞：

彩色圖像置亂、信息隱藏、三維 Hilbert 曲線

30.Color image scrambling algorithm based on three dimensional Hilbert Curve

Chao, TF (Chao Teng-Fat); Tian, XL (Tian, Xiao-Lin); Xia, SW (Xia Shao-Wei)
Faculty of Information Technology, Macau University of Science and Technology
Name of Conference/Journal:

Journal of Macau University of Science and Technology, 3 (2): 15-19 DEC 2009

Abstract:

A new color image scrambling algorithm based on 3-D Hilbert curve has been proposed, which is an extending of color image scrambling algorithms based on 2-D Hilbert curve. Conventional color image scrambling algorithms based on 2-D Hilbert curve have to either do scrambling separately for each of color components of the color image, after every color components had been changed to squares with $2n$ length, or merge 3 color components to be a larger gray level image with $2n+1$ length. The new proposed scrambling algorithms based on 3-D Hilbert curve could scramble a color image directly as a 3-D matrix, and it only asks that the length and width of a color image should be even numbers. It is clear that the new algorithm could save a lot of processing time and spaces, comparing with the conventional algorithms based on 2-D Hilbert curve, because the new algorithm only scramble the color image once, without asking to merge it to a bigger square. Testing results are satisfied in both of effective and outcome.

Keywords:

Color image scrambling, Information hiding, 3-D Hilbert curve

31.基於 3-D Hilbert 曲線圖像置亂

胡猛越、田小林、夏紹璋、秦鈺
澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 3rd International Congress on Image and Signal Processing (CISP 2010), ISBN: 978-1-4244-6514-9, IEEE Catalog Number: CFP1094D-PRT, EI Compendex, 會議文章

內容簡介：

本文提出一個新的基於三維 Hilbert 曲線的圖像置亂算法。該算法擴展了基本 Hilbert 單元并將其用於圖像置亂，同時討論了混合運用排序算法以提高算法的效率。

關鍵詞：

分量、Hilbert 單元、圖像置亂

31. Image scrambling based on 3-D Hilbert curve

Hu, MY (Hu, Meng-Yue); Tian, XL (Tian Xiao-Lin); Xia, SW (Xia Shao-Wei);
Qin, Y (Qin Yue)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 3rd International Congress on Image and Signal Processing (CISP 2010), ISBN 978-1-4244-6514-9, IEEE Catalog Number: CFP1094D-PRT, EI Compendex, conference paper

Abstract:

This paper presents a new scrambling algorithm based on 3-D Hilbert curve. This algorithm extends basic Hilbert cells and uses them for scrambling. Another sorting method mixed with basic Hilbert cells algorithm is discussed to make the algorithm more effective.

Keywords:

Component, Hilbert cell, Image scrambling

32.基於信息熵融合的眼前節組織 OCT 圖像的多尺度形態學弱邊 檢測

張昂、黃思尉、田小林、孫延奎
澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 First International Conference on Cellular, Molecular Biology, Biophysics and Bioengineering (CMBB 2010)，會議文章

內容簡介：

光學相干層析技術 (OCT) 近年來快速發展，其中，眼前節組織 OCT 圖像中中央角膜的邊緣檢測是急需解決的問題。本文根據傳統形態學的邊緣檢測算法，先對所用的結構元素進行多尺度膨脹，再計算膨脹後各個圖像的邊緣檢測結果的信息熵，最後用各個邊緣檢測結果的信息熵與相應圖像的總信息熵之比作為圖像融合的權值系數進行圖像融合，得到最終的眼前節組織 OCT 圖像的上下角膜邊緣。實驗結果表明，本文提出的算法能很好的適應眼前節組織 OCT 圖像的特徵，邊緣檢測效果清晰，抗噪聲能力強。

關鍵詞：

OCT 圖像、多尺度形態學、信息熵、弱邊緣檢測

32. Multi-scale Morphologic Weak Edge Detection in Anterior Chamber OCT Images Based on Information Entropy Fusion

**Zhang, A (Zhang Ang); Huang, SW (Huang Si-Wei); Tian, XL (Tian Xiao-Lin);
Sun, YK (Sun Yan-Kui)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 First International Conference on Cellular, Molecular Biology, Biophysics and Bioengineering (CMBB 2010), conference paper

Abstract:

Optical coherence tomography (OCT) has developed rapidly in recent years; edge detection of the central cornea in anterior chamber OCT image is an urgent problem in the area. A new weak edge detecting algorithm based on the classical morphological edge detecting algorithm has been proposed. The proposed algorithm expands the structuring elements at multi-scales to detect edges first, then calculates the entropy of the detected edges, and uses the ratio of the detected edge entropy and the total entropy in every detected edge image as the weight to fusion edge images together to obtain the final edges of the upper and lower corneal in anterior chamber OCT images. The testing results have shown that the proposed algorithm works well in anterior chamber OCT images. It could not only obtain more clear edges but also have better de-noise results.

Keywords:

OCT image, Multi-scale morphology, Information entropy, Weak edge detection

33.基於小波－奇異值分解的數字水印新算法

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澳門科技大學 資訊科技學院

會議/刊物名稱：

計算機應用研究，27 (5): 1896-1897+1910 MAY 2010，中文核心期刊要目總覽(2008)

內容簡介：

爲了有效地保護數字作品的版權，提出了一種以離散小波多級分解與奇異值分解相結合的數字水印新算法。該算法充分利用小波與奇異值的固有性質，對原始圖像進行多級小波分解，並對部分子帶作奇異值分解。將水印置亂來保證一定的安全性，再對其進行分塊離散余弦變換，然後將它嵌入到中間奇異值及其周圍的部分矩陣塊中。實驗表明，該方法不僅有較好的透明性，而且能抗大多數處理攻擊，有較好的魯棒性。

關鍵詞：

數字水印、Arnold 變換、離散小波分解、離散余弦變換、奇異值分解

33.Digital Watermarking Algorithm Based on DWT and SVD

**Zhou, PY (Zhou Peng-Ying); Shen, L (Shen Lei); Tian, XL (Tian Xiao-Lin);
Xia, SW (Xia Shao-Wei)**

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Application Research Of Computers, 27 (5): 1896-1897+1910 MAY 2010, A Guide to the Core Journals of China(PKU)

Abstract:

To protect copyrights of digital products effectively, proposed a new scheme of digital image watermarking based on the combination of discrete wavelet transformation (DWT) and singular value decomposition (SVD). The algorithm used DWT and SVD inherent characteristic fully, and decomposed the original image to the subbands of multi-DWT, then applied SVD to transform some of subbands. The Arnold transformation could increase the security of watermark, and decomposed the gray-level watermark image with blocked-DCT transform after being Arnold scrambled. Then classified DCT coefficients and inserted into the middle of third level of SVD of original image. The experimental based on this algorithm demonstrates that the watermark is invisible, and it is robust to the common signal processing technology.

Keywords:

Digital watermarking, Arnold transformation, Discrete wavelet transformation, Discrete cosine transformation, Singular value decomposition

34.基於圖像位平面的數字圖像混合置亂算法

沈磊、周鵬穎、田小林、夏紹瑋
澳門科技大學 資訊科技學院

會議/刊物名稱：

微計算機信息，2010, 5-2: 209-211

內容簡介：

本文在運用已有置亂方法的基礎上，提出了一種基於位平面分解的混合置亂方法，實現了同種置亂算法有多種圖像置亂效果。該算法利用圖像位平面進行置亂，通過像素位置置亂的方式達到灰度置亂的效果。算法在不同位平面選用不同的置亂算法，並且多種置亂算法有不同的組合。提高了保密信息的迷惑性，減小了攻擊者的注意力，仿真實驗結果證明了算法的有效性。

關鍵詞：

位平面分解、混合置亂、灰度置亂

34.Digital Image Blend Scrambling Based on Image Bit Plane Disassembles

Shen, L (Shen Lei); Zhou, PY (Zhou Peng-Ying); Tian, XL (Tian Xiao-Lin);
Xia, SW (Xia Shao-Wei)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Microcomputer Information, 2010, 5-2: 209-211

Abstract:

More and more people pay attention to the digital image scrambling because of the development of internet and digital work. In the paper, a new Blend scrambling method is introduced based on some other image scrambling methods, realized the purpose of image scrambling time after time based on image scrambling once. It improves the secrecy property of an image and reduces the attacker's notice; It has the less calculated capacity. Simulations show that it is practicable.

Keywords:

Image Bit Plane Disassembles, Blend Scrambling, Digital image Watermarking

35.基於人類視覺系統和 DCT 的數字水印算法

沈磊、周鵬穎、田小林、夏紹璋
澳門科技大學 資訊科技學院

會議/刊物名稱：

微計算機信息，2010, 6-2: 212-213

內容簡介：

隨著計算機網絡及各種數字作品製作技術的迅速發展，數字水印技術越來越受到人們的關注。本文提出了一種基於圖像分塊和人類視覺系統的數字水印算法，結合人類視覺系統的掩蔽特性，對載體圖像分成平滑區、邊緣區、和紋理區，然後對載體圖像分塊進行離散余弦變換，通過子人類視覺特性決定嵌入強度，將水印圖像嵌入到載體圖像的中頻系數中，該算法增強了圖像的保密性，有較好的魯棒性，能抗大多數處理攻擊，通過試驗仿真證明，該算法具有較好的實用性。

關鍵詞：

圖像分塊、人類視覺特性、離散余弦變換、數字水印

35.An Digital Watermarking Algorithm Based on Image Blocks and HVS

Shen, L (Shen Lei); Zhou, PY (Zhou Peng-Ying); Tian, XL (Tian Xiao-Lin);
Xia, SW (Xia Shao-Wei)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Microcomputer Information, 2010, 6-2: 212-213

Abstract:

More and more people pay attention to the digital watermarking technology because of the development of internet and digital work. In the paper, a new algorithm is introduced based on image blocks and HVS, based on in light of the masking characteristics of the human vision system, the image is demarcated into the smooth area, edge area and texture area, then transform the image area by DCT, then inset intensity is decided by characteristic of HVS and inserted the watermarking into the middle frequency coefficient of DCT of original image area. It improves the secrecy property of an image, simulations show that it is practicable.

Keywords:

Image blocks, Human vision system, Discrete cosine transformation, Digital watermarking

36.基於 J2EE 和被動式超高頻 RFID 技術的澳門車輛

自動過關系統

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澳門科技大學 資訊科技學院

會議/刊物名稱：

The 2010 International Conference on e-Commerce, e-Administration, e-Society, e-Education, and e-Technology 2010, JAN 2010, 會議文章

內容簡介：

本文描述了一個新的基於 J2EE 和被動式超高頻 RFID 技術的澳門車輛自動過關系統。該系統可以自動篩查并快速放行符合規定的低風險車輛，同時可以使海關官員對存疑車輛做進一步的檢查。對於在其它 RFID 系統中常出現的信號衝突問題也提出了有效的改善方法。通過測試，該系統的性能遠優於過去的系統，有 80%的效率改進和在實際環境中 12000 車輛上平均 99%的識別率。

關鍵詞：

E-Government、智能交通系統、車輛自動過關系統、J2EE、RFID

36.Macao Automated Vehicle Border Crossing System Based on J2EE and Passive UHF RFID Technologies

Sam, KT (Sam Kam-Tong); Tian, XL (Tian Xiao-Lin)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

The 2010 International Conference on e-Commerce, e-Administration, e-Society, e-Education, and e-Technology 2010, JAN 2010, conference paper

Abstract:

A new automated vehicle border crossing system in Macao, which were implemented by J2EE and passive UHF RFID technologies, has been described in the paper. The system allows compliant and low-risk vehicles to be identified, screened automatically, and to pass quickly through the checkpoint while enabling customs officers rapidly screen out high-risk or non-compliant vehicles for further inspection. Some effective improvement methods are also demonstrated to solve the collision and interference problems which are commonly faced by many other RFID projects. The performance of the system presented gives superior results to the previous system, with 80% operational efficiency improvement and the vehicle identification rate of 99% in average over 12,000 vehicle movements in real environment.

Keywords:

E-Government, Intelligent Transportation System, Automated Vehicle Identification, J2EE, RFID

37.基於 Modest AdaBoost 和模板匹配的快速車牌檢測

岑錦棠、田小林

澳門科技大學 資訊科技學院

會議/刊物名稱：

2nd International Conference on Digital Image Processing, 26 - 28 February 2010, EI Compendex, 會議文章

內容簡介：

車牌檢測和識別對於執法機構仍是一項充滿挑戰的任務。本文提出了一種基於 Modest AdaBoost 和模板匹配的快速車牌檢測技術。首先運用 Modest AdaBoost 算法實時的找出車牌的各種可能位置，再利用模板匹配從選出的可能位置上篩選出車牌。實驗表明，原用於人臉識別的 Modest AdaBoost 算法可以被成功的運用到車牌檢測上。本文提出的算法在實驗中呈現了很高的準確率和效率。

關鍵詞：

車牌檢測、AdaBoost、Modest AdaBoost、模板匹配、K-均值聚類

37.Rapid license plate detection using Modest AdaBoost and template matching

Sam, KT (Sam Kam-Tong); Tian, XL (Tian Xiao-Lin)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2nd International Conference on Digital Image Processing, February 26, 2010 - February 28, 2010, EI Compendex, conference paper

Abstract:

License plate detection and recognition are vital yet challenging tasks for law enforcement agencies. This paper presents a license plate detection system using Modest Adaboost combined with template matching technique. Firstly, a machine learning algorithm, based on Modest AdaBoost which mostly aims for better generalization capability and resistance to overfitting, was applied to find out candidate license plates over the input images in real-time. In the second stage, template matching technique was employed to verify the license plate appearances in order to achieve low false positive rate. This paper shows that the AdaBoost algorithm, which was originally used for face detection, has successfully been applied to solve the problems of license plate detection. Experimental results demonstrate high accuracy and efficiency of the proposed method.

Keywords:

License plate detection, AdaBoost, Modest AdaBoost, template matching, K-means clustering

38.基於模糊推理和模糊判決的車輛顏色識別

岑錦棠、田小林

澳門科技大學 資訊科技學院

會議/刊物名稱：

2010 年信息安全與人工智能國際會議，Vol. 3: 411-414 2010，會議文章

內容簡介：

車輛顏色識別在車輛識別系統中仍是一項充滿挑戰的任務，因為車輛的顏色在戶外環境下會受到諸如日光照射，陰影，反光等等因素的影響。本文提出了一種基於模糊集合理論的車輛顏色識別算法。算法首先通過前期車牌檢測和識別分割出感興趣的區域，再將分割出的感興趣區域轉換成 Lab 彩色模型並對每個分量根據模糊集合理論計算其模糊隸屬函數。最後運用 COM 模糊判決得到其主要顏色。在澳門車輛自動過關系統的不同室外條件下得到的彩色圖像上測試了本算法，測試結果表明本文提出的算法可以達到很高的準確率和效率。

關鍵詞：

車輛顏色識別、模糊集合理論、模糊推理、模糊判決

38. Vehicle Color Recognition Using Fuzzy Rules and COM Defuzzification

Sam, KT (Sam Kam-Tong); Tian, XL (Tian Xiao-Lin)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

2010 International Conference on Information Security and Artificial Intelligence (ISAI 2010), Vol. 3:411-414, 2010, conference paper

Abstract:

Color recognition is a vital yet challenging task in vehicle identification system as the vehicle color is affected by various factors such as daylight illumination, shadows and reflection in outdoor environment. This paper presents a solution for vehicle color recognition based on fuzzy set theory. The region of interest (ROI) is firstly segmented with the coordinates which are computed by using prior license plate detection result. Then the ROI is converted into L*a*b* color space, fuzzified with membership functions for each component, and inferred by using a set of fuzzy rules. Finally, COM defuzzification is employed to obtain the dominant color. The algorithm was tested on color images of Macao border crossing vehicles in various outdoor conditions. Experimental results show that high accuracy and efficiency were achieved by the proposed method.

Keywords:

Vehicle color recognition, Fuzzy set theory, Fuzzy rule, Defuzzification

39.信號分析中的 Hardy-Sobolev 空間分解

黨培、錢濤、尤眾
澳門科技大學 資訊科技學院

會議/刊物名稱：

Fourier 分析和應用雜誌，DOI: 10.1007/s00041-010-9132-7，SCI-E 檢索

內容簡介：

本文使用 Hardy-Sobolev 空間，把可微函數的幅度相位表示和測不准原理擴展到具有有限能量的信號上。

關鍵詞：

平均頻率、平均時間、協方差、測不准原理、Hilbert 變換、Hardy-Sobolev 空間、信號的幅度相位表示、相位導數

39. Hardy-Sobolev Spaces Decomposition in Signal Analysis

Dang, P (Dang Pei); Qian, T (Qian Tao); You, Z (You Zhong)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Fourier Analysis and Applications, DOI: 10.1007/s00041-010-9132-7, SCI-E indexed

Abstract:

Some fundamental formulas and relations in signal analysis are based on the amplitude-phase representations $s(t)=A(t)\exp(i\varphi(t))$ and $S(\omega)=B(\omega)\exp(i\psi(\omega))$, where the amplitude functions $A(t)$ and $B(\omega)$ and the phase functions $\varphi(t)$ and $\psi(\omega)$ are assumed to be differentiable. They include the amplitude-phase representations of the first and second order means of the Fourier frequency and time, and the equivalence between two forms of the covariance. A proof of the uncertainty principle is also based on the amplitude-phase representations. In general, however, signals of finite energy do not necessarily have differentiable amplitude-phase representations. The study presented in this paper extends the classical formulas and relations to general signals of finite energy. Under the formulation of the phase and amplitude derivatives based on the Hardy-Sobolev spaces decomposition the extended formulas reveal new features, and contribute to the foundations of time-frequency analysis. The established theory is based on the equivalent classes of the L^2 space but not on particular representations of the classes. We also give a proof of the uncertainty principle by using the amplitude-phase representations defined through the Hardy-Sobolev spaces decomposition.

Keywords:

Mean of frequency, Mean of time, Covariance, Uncertainty principle, Hilbert transform, Hardy space, Sobolev space, Hardy-Sobolev space, Amplitude-phase representatio

40.同構 802.11 網絡中一個新穎的呼叫許可控制策略

趙慶林、Tsang, DHK (Tsang, Danny H. K.)、Sakurai, T (Sakurai, Taka)

澳門科技大學 資訊科技學院

會議/刊物名稱：

IEEE 無線通信學報，9(3): 1168 - 1174 MAR 2010，SCI-E 檢索

內容簡介：

本文提出了一個新的呼叫許可控制策略。這個策略適用於單跳同構的 802.11 DCF 網絡。使用這個策略，我們可以快速的執行呼叫許可控制，而不需要進行網絡測量以及複雜的計算。雖然這個策略是在某些漸進條件下取得的，但是大量的網絡模擬表明，這個策略在現實的 DCF 網絡中工作地很好。

關鍵詞：

IEEE 802.11、同構、流量負載、許可控制

40.A Novel CAC Scheme for Homogeneous 802.11 Networks

Zhao, QL (Zhao, Qinglin); Tsang, DHK (Tsang, Danny H. K.);

Sakurai, T (Sakurai, Taka)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

IEEE Transactions on Wireless Communications, 9(3): 1168 - 1174 MAR 2010, SCI-E indexed

Abstract:

This paper proposes a new call admission control (CAC) scheme for one-hop homogeneous 802.11 DCF networks. Using the proposed scheme, we can perform admission control quickly and easily without the need for network performance measurements and complex calculations. The CAC rule is derived under asymptotic conditions, but our extensive numerical examples show that it works well for practical-sized networks with a finite retransmission limit and realistic nonsaturated traffic.

Keywords:

IEEE 802.11, Homogeneous, Traffic load, Admission control

41. 一種用於無線局域網的協作式移動追蹤框架

鄭澤峰、林聯鋒、蔡智明、吳建平
澳門科技大學 資訊科技學院

會議/刊物名稱：

第 12 屆 IEEE 通訊技術國際會議 2010 會議論文集，ISBN: 978-1-4244-6868-3, p.1422-1425，會議文章

內容簡介：

移動追蹤是一種在無線網絡中估計移動用戶位置或軌跡的技術。位置估計的準確性和計算的複雜性是實時移動追蹤算法的兩個關鍵因素。本文提出了一種基於擴展卡爾曼濾波的無線局域網中移動追蹤的協作式框架，使移動節點不僅使用固定的參考點，例如接入點，而且還會考慮相鄰移動節點之間的測量值來進行位置估計。仿真結果表明，與現有傳統的非協作式方法相比，我們提出的算法能夠獲得更準確的位置估計，同時能夠保持一般實時追蹤算法的效率。

關鍵詞：

移動追蹤、協作式、擴展卡爾曼濾波

41.A Cooperative Framework for Realtime Mobility Tracking in WLANs

**Cheang, CF (Cheng Chak-Fong); Lin, LF (Lin Lian-Feng);
Cai, ZM (Cai Zhi-Ming); Wu, JP (Wu Jian-Ping)**

**Faculty of Information Technology, Macau University of Science and Technology
Name of Conference/Journal:**

In Proceedings of 12th IEEE International Conference on Communication Technology (ICCT),
2010, ISBN: 978-1-4244-6868-3, p.1422-1425

Abstract:

Mobility tracking is the technology to estimate the mobile users' location or trajectory in wireless networks. The accuracy of location estimation and the complexity of computing are the two critical factors for realtime mobility tracking algorithms. This paper proposes a Extended Kalman Filter based cooperative framework for mobility tracking in WLANs, in which the mobile nodes determine their locations not only based on the measurements from the fixed reference nodes, e.g. access points, but also consider the measurements between their mobile neighbors. Comparing with other existing conventional noncooperative schemes, the simulation results demonstrate that our proposed algorithm can achieve better accuracy of location estimation, while can keep efficient as normal realtime tracking algorithms.

Keywords:

Mobility Tracking, Cooperative, Extended Kalman Filter

42. 領導-部屬關係與員工工作成果：驗證中介性調節模型

孫立雲、Chow, I (Chow, I)、Chiu, R (Chiu, R.)

澳門科技大學 行政與管理學院

會議/刊物名稱：

中國管理研究國際學會 2010，上海-英文論壇，會議文章

內容簡介：

這項研究探討了領導-部屬關係與員工工作成果關係的過程。

關鍵詞：

領導-部屬關係

42. Leader-Member Exchange and Employee Work Outcomes: Test of a Multi-Level Mediated Moderation Model

Sun, LY (Sun, Li-Yun); Chow, I (Chow, I); Chiu, R (Chiu, R.)

Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

IACMR Shanghai, English Forum, conference paper

Abstract:

The study investigates the process through which LMX influences employee work-outcomes.

Keywords:

Leader-Member Exchange

43. 變革式領導與下屬的職業成功：下屬的組織自尊的中介作用

Aryee S.、孫立雲、Zhou Q.
澳門科技大學 行政與管理學院

會議/刊物名稱：

中國管理研究國際學會 2010，上海-英文論壇，會議文章

內容簡介：

這項研究探討的是變革式領導對員工成功的影響。

關鍵詞：

變革式領導

43. Transformational Leadership and Follower Career Success: The Mediating Role of Follower Organization-Based Self-Esteem

Aryee S.; Sun, LY (Sun, Li-Yun); Zhou, Q (Zhou, Q.)
Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

IACMR Shanghai 2010, English Forum, conference paper

Abstract:

The study examines the mechanism through which transformational leadership influences follower career success.

Keywords:

Transformational Leadership

44.高績效人力資源實踐與企業的創新績效

孫立雲、Hu, ZH (Hu, Z. H.)、聶婷、楊菁

澳門科技大學 行政與管理學院

會議/刊物名稱：

第十一屆國際人力資源會議，英國伯明翰 (2010)，會議文章

內容簡介：

這項研究分析的是高績效人力資源實踐對企業績效的影響機制。

關鍵詞：

高績效人力資源實踐

44.High-Performance Human Resource Practices and Firm Innovative Performance

Sun, LY (Sun, Li-Yun); Hu, ZH (Hu, Zhe-Hua); Nie, T (Nie, Ting);
Yang, J (Yang Jing)

Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

The 11th IHRM, Birmingham, UK(2010), conference paper

Abstract:

The study examines the processes through which HPHR practices influence firm performance.

Keywords:

High performance human resource practices

45. 主管輔導與員工職業成果

潘雯、孫立雲、周巧笑
澳門科技大學 行政與管理學院

會議/刊物名稱：

第十一屆國際人力資源會議，英國伯明翰 (2010)，會議文章

內容簡介：

我們分析了主管輔導與員工工作績效的關係。

關鍵詞：

輔導

45. Supervisory Mentoring and Career Outcomes

Pan, W (Pan Wen); Sun, LY (Sun, Li-Yun); Chow, IHS (Chow Irene Hau-Siu)
Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

The 11th IHRM, Birmingham, UK(2010), conference paper

Abstract:

We investigated the relationship between supervisory mentoring and employee performance.

Keywords:

Mentoring

46. 內部人身份與公民行爲：一種歸屬的角度

Aryee Samuel、Qin Zhou、孫立雲、Susanna Lo

澳門科技大學 行政與管理學院

會議/刊物名稱：

(美國)管理學會年會 2010，加拿大蒙特利爾，會議文章

內容簡介：

本文探討了內部人身份與公民行爲的關係。

關鍵詞：

內部人身份

46. Perceived Insider Status and Citizenship Behavior: A Belongingness Perspective

Aryee, S (Aryee Samuel); Zhou, Q (Zhou, Qin); Sun, LY (Sun, Li-Yun);
Lo, S (Lo Susanna)

Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

Academy of Management, Montreal, Canada (2010), conference paper

Abstract:

We explored the relationship between perceived insider status and citizenship behavior.

Keywords:

Perceived Insider Status

47. 領導-部屬關係與員工創新：組織結構的調節作用

潘雯、孫立雲、周巧笑
澳門科技大學 行政與管理學院

會議/刊物名稱：

第七屆亞洲管理學會(2010)，澳門，會議文章

內容簡介：

本文分析了領導-部屬關係與員工創新的關係。

關鍵詞：

領導-部屬關係，員工創新

47. Leader-Member Exchange and Creativity: Moderating Effect of Organizational Structure

Pan, W (Pan Wen); Sun, LY (Sun, Li-Yun); Chow, IHS (Chow Irene Hau-Siu)
Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

The 7th Asian Academy of Management, Macau (2010), conference paper

Abstract:

The study examines the mechanisms through which LMX affects employee creativity.

Keywords:

LMX, Employee creativity

48. 複合調度算法的魯棒縮放參數值的確定

陳艷、Pfund, ME (Pfund, Michele E.)、Fowler, JW (Fowler, John W.)、
Montgomery, DC (Montgomery, Douglas C.)、Callarman,
TE (Callarman, Thomas E.)

澳門科技大學 行政與管理學院

會議/刊物名稱：

IIE Transactions, 42 (11): 842-853 2010, SCI-E 檢索

內容簡介：

成功實施和運用複合調度算法需要確定算法中調節參數的合適的值。文章提出一種分四個步驟的確定複合調度算法中縮放參數的值的的方法。對給定的排程問題，利用此方法，可在較短的運算時間裏找到複合調度算法的具魯棒性的縮放參數的值。方法的第一個步驟是確定每個平行工作機器組的待處理工作的特性因子值；第二個步驟利用立方體面心試驗設計方法確定在特性因子值空間中的實驗組合；第三個步驟利用混料實驗設計為每個實驗組合找到最佳的縮放參數的值；在第四個步驟中，所有實驗組合的最佳縮放參數值的中心被找出作為給定的排程問題的魯棒性縮放參數值。建議中的方法在案例分析中被用於確定 ATCS 算法的魯棒性縮放參數值，對比實驗結果表明，與文獻中的既有方法比較，該方法可以顯著地改善 ATCS 算法在最小化總加權延誤時間上的排程表現，同時大大降低排程表現的不穩定性。

關鍵詞：

複合調度算法、ATCS 算法、魯棒縮放參數、混料實驗設計

48. Robust scaling parameters for composite dispatching rules

Chen, JY (Chen, Jenny Yan); Pfund, ME (Pfund, Michele E.); Fowler, JW (Fowler, John W.); Montgomery, DC (Montgomery, Douglas C.); Callarman, TE (Callarman, Thomas E.)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

IIE Transactions, 42 (11): 842-853 2010, SCI-E indexed

Abstract:

The successful implementation of composite dispatching rules depends on the values of their scaling parameters. A unified four-phase method to determine robust scaling parameters for composite dispatching rules is proposed, with the goal of achieving reasonably good scheduling performance with the least computational effort in implementation. In phase 1, factor ranges that characterize the problem instances in each tool group (one or more machines operating in parallel) are calculated. In phase 2, a face-centered cube design is used to decide the placement of design points in the factor region. The third phase involves using mixture experiments to find good scaling parameter values at each design point. In the last phase, the central point of the area in which all of the good scaling parameters lie is identified with the robust scaling parameter. The proposed method is applied to determine the robust scaling parameter for the Apparent Tardiness Cost with Setups (ATCS) rule to solve the Pmls jkl wjTj scheduling problem in a case study.

The results of this case study show that the proposed method is more efficient and effective than existing methods in the literature.

It requires many fewer experiments and achieves more than a 30% improvement in the average scheduling performance (i.e., total weighted tardiness) and more than a 60% improvement in the standard deviation of the scheduling performance.

Keywords:

Composite dispatching rules, Apparent tardiness cost with setups rule, Robust scaling parameters, Mixture experiments

49. 利用多變量自適應回歸樣條函數(MARS)確定 ATCS 複合分派規則的縮放參數

陳艷、楊菁、李會敏
澳門科技大學 行政與管理學院

會議/刊物名稱：

控制與決策，24 (12): 1816-1820+1825 2009，EI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

文章提出一種利用多變量自適應回歸樣條函數(MARS)來確定 ATCS 複合分派規則中縮放參數的方法，以優化 ATCS 分派規則在最小化總加權延誤時間(TWT)上的表現。通過利用 MARS 模型在高維空間上的彈性建模能力，構建排程作業組與縮放參數之間的非綫性模型以靈活地捕捉更多的局部映射關係。對比實驗結果表明，與文獻中的既有方法比較，該方法可以顯著地改善 ATCS 規則在最小化總加權延誤時間上的表現，同時降低排程表現的不穩定性。

關鍵詞：

多變量自適應回歸樣條函數(MARS)、考慮作業間準備時間(setup times)的直觀延誤成本、分派規則(Apparent Tardiness Cost with Setups, ATCS)、縮放參數(Scaling Parameters)

49.Using MARS to Determine the Scaling Parameter Values for Composite Dispatching Rule ATCS

Chen, Y (Chen Yan); Yang, J (Yang Jing); Li, HM (Li Hui-Min)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Kongzhi yu Juece/Control and Decision, 24 (12): 1816-1820+1825 2009, EI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

A Multivariate Adaptive Regression Splines (MARS) based method is proposed to determine appropriate scaling parameter values for composite dispatching rule ATCS to generate good schedules, which aim at minimizing the total weighted tardiness. With the flexible piecewise structure in high-dimensional space, the MARS based model is able to reflect the local nonlinear relationship between the scaling parameter values and scheduling problem instances. Computational result shows that the proposed method outperforms the existing method in the literature in terms of scheduling result (i.e. Total Weighted Tardiness),and its variation.

Keywords:

Multivariate adaptive regression splines, Composite dispatching rules, Apparent tardiness cost with setups rule, Scaling parameters

50.住房抵押貸款支持證券的利率風險度量 - 基於"建元 2005-1MBS" A 證券的實證

丁浩

澳門科技大學 行政與管理學院

會議/刊物名稱：

當代經濟科學，32 (2): 45-53 2010，CSSCI 檢索

內容簡介：

住房抵押貸款支持證券中隱含期權的存在導致未來現金流不確定，久期和凸度等利率風險管理工具不再適用。本文基於 OAS 理念建立了住房抵押貸款支持證券的利率風險度量過程：採用多項式樣條函數法構建零息票收益率曲線，採用 Vasicek 模型描述動態利率期限結構，通過蒙特卡羅方法類比利率路徑並確定未來現金流，採用 ARMA 模型描述和預測提前償付率，進而計算出 OAS、有效久期和有效凸度的值。最後以“建元 2005—1MBS” A 證券為物件進行了實證研究。

關鍵詞：

住房抵押貸款支持證券、隱含期權、利率風險、期權調整利差

50. Interest Rate Risk Measurement of Mortgage-backed Securities: Experience Analysis on "Jianyuan 2005-1MBS" Security A

Ding, H (Ding Hao)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Modern Economic Science, 32 (2): 45-53 2010, CSSCI indexed

Abstract:

The embedded options in MBS result in the uncertainty of future cash flows, which makes duration and convexity no longer applicable in measuring interest rate risk. Based on the OAS system, the process of measuring the interest rate risk of MBS is established as follows: constructing the zero-coupon bond's yield curve by polynomial spline functions, describing the dynamic interest rate structure with Vasicek model, simulating the interest rate paths with the Monte Carlo method and determining the future cash flows, describing and forecasting the prepayment rate with ARMA model. The effective duration and effective convexity are calculated according to their definitions with the calculated OAS. Finally, a case of "Jianyuan 2005-1 MBS" security A is given as an empirical analysis.

Keywords:

Mortgage-backed Securities, Embedded option, Interest rate risk, Option adjusted spread

51.公營部門與私營機構合作 (PPP) – 外國及香港的經驗

黃湛利

澳門科技大學 行政與管理學院

會議/刊物名稱：

第四屆“廿一世紀的公共管理：機遇與挑戰”國際學術研討會，會議文章

內容簡介：

公營部門與私營機構合作 (PPP) 是指一種由公私營部門雙方共同提供公共服務或進行計劃項目的安排。在這種安排下，雙方透過不同程度的參與和承擔，各自發揮專長，產生協同效應(synergy)，收相輔相成之效，達到雙贏。目前，PPP 在全世界的應用已相當流行。本文先以個案形式介紹 PPP 在外國的經驗 – 包括 PPP 在英國、澳洲及加拿大的推行情況，特別是其創新融資及風險分擔方法。然後再概述香港的經驗 – 主要是一些大型基建工程項目的建造及營運。毫無疑問，公營部門與私營機構合作代表新公共管理 (New Public Management, NPM) 一種趨勢及價值 -- 符合建立起催化作用的政府的精神，即將掌舵與劃槳分開，政府應“掌舵” (政策和規則制定)，而不是“劃槳” (服務提供和執行)。

關鍵詞：

公營部門與私營機構合作、建造—營運—移交、新公共管理、協同效應

51.Public-Private Partnership (PPP) – The Experiences of Foreign Countries and Hong Kong

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Name of Conference/Journal:

The 4th International Conference on Public Management in the 21st Century: Opportunities and Challenges, conference paper

Abstract:

Public-Private Partnership (PPP) refers to an arrangement between the public and private sectors in delivering a public service or planning a project together. Under this arrangement, both parties will participate, share the burden and use their own expertise, so as to produce a synergy effect and a win-win situation. At present, PPP has been in popular use all over the world. This paper will first introduce the experiences of foreign countries by case studies including the implementation of PPP in Britain, Australia and Canada, and with a focus on financing and risk management. It will be followed by a discussion on the Hong Kong experience – chiefly the building and operation of a number of infrastructural projects. Undoubtedly, PPP represents a trend and reflects the value of New Public Management (NPM) – that of building a government specializing in “steering” (policy planning and making) and not “rowing” (service delivery and execution).

Keywords:

Public-Private Partnership, Build-Operate-Transfer, New Public Management, Synergy Effect

52. 消費者產品購買決策中不同類型參照群體影響力比較研究

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澳門科技大學 行政與管理學院

會議/刊物名稱：

華東經濟管理，24(6): 112-115 2010，CSSCI 檢索

內容簡介：

基於參照群體影響理論，研究集中考察了消費者在 4 類不同消費特徵的產品購買決策中所感受到的參照群體影響程度。研究表明：在公開消費奢侈品的購買決策中，消費者受價值表達性影響最大，其次是功利性影響；在公開消費大眾品的購買決策中，消費者受功利性影響最大，其次是價值表達性影響；在私下消費奢侈品的購買決策中，受信息性影響最大，其次是價值表達性影響；在私下消費大眾品的購買決策中，受信息性影響最大，其次是功利性影響。研究的管理意義在於企業可針對產品特徵，運用最有效的產品信息交流策略，使品牌推廣事半功倍。

關鍵詞：

參照群體、購買決策

52. Comparison of Reference Group Influence on Purchase Decision of Different Type Product

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Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

East China Economic Management, 24(6): 112-115 2010, CSSCI indexed

Abstract:

According to Reference Group Influence Theory, this study tests the purchase decision of differences in reference group influence. The study finds that value-expressive reference group influence is most significant in purchase decision of publicly consumed luxury brand. And utilitarian influence is most significant in purchase decision of publicly consumed mass-market brand. But informational influence is most significant in purchase decision of privately consumed luxury brand, and informational influence is most significant in purchase decision of privately consumed mass-market brand. Make use of the most efficient method to influence the consumer can get better result for brand management.

Keywords:

Reference group, Purchase decision

53. 中國擴展型企業基準性能標準的研究

賴嘉偉

澳門科技大學 行政與管理學院

會議/刊物名稱：

Benchmarking: An International Journal, 17(5): 692-704

內容簡介：

本文的目的是制定和審查擴展式企業的基準績效指標。研究在一個研究模型的基礎上，構建了八大類 16 個績效指標。通過在線問卷調查，調查結果受到適當的統計測試，以確定模型的可靠性和有效性。調查結果顯示，運作和客戶類別的績效指標比別的績效指標更重要。擴展式企業可以利用這些指標來設計他們的業績基準。這項研究的價值是在目前的文獻為基礎開發了一個新的概念模型，然後通過問卷調查確認其有效性。

關鍵詞：

業績計量、企業、製造業、標杆

53. Benchmarking Performance Measures For Extended Enterprise in China

Lai, IKW (Lai Ivan Ka-Wai)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Benchmarking: An International Journal, 17(5): 692-704

Abstract:

Purpose – The paper aims to develop and examine benchmarking performance measures for the extended enterprise (EE).

Design/methodology/approach – A research model was constructed based on 16 performance measures in eight categories. An online survey by questionnaire is conducted with manufacturing industries in China. There is an evaluation of the level of importance among these performance measures. Results of the survey are subjected to appropriate statistical tests to establish reliability and validity.

Findings – Results of the empirical research provide the benchmarking performance measures of a successful EE. Results of the survey indicate that performance measures in operation and customer categories are more important than others.

Research limitations/implications – The paper has a limitation on the sample size. Further, data collection would be beneficial.

Practical implications – Participants of EEs can use these performance measures to design their benchmarking and key performance indicators to pursue the continued success of their EEs.

Originality/value – The paper builds on current literature and develops a conceptual model, which is then tested via a questionnaire survey. Only a limited literature has addressed the benchmarking performance measures for EE.

Keywords:

Performance measures, Business enterprise, Manufacturing industries, Benchmarking

54. 移動商務用戶採用的消極行爲：來自中國大學生的實證研究

賴嘉偉、黎志輝

澳門科技大學 行政與管理學院

會議/刊物名稱：

In Proceedings of the 8th International Conference on Supply Chain Management and Information Systems, 香港, 2010 年 10 月 6-8 日, EI 檢索, 會議文章

內容簡介：

本研究旨在探討用戶接受移動商務的積極和消極因素。技術接受模型由五個因素建造。本研究收集 156 名澳門大學生為數據。探索因子分析是研究模型的可靠性和有效性, 回歸分析找到行爲意向和各因素之間的關係。移動電子商務的接受因素包括: 預期的業績, 社會影響, 促進條件和干擾問題; 而努力期望在這種情況下是不顯著的。結果研究有助移動商務服務提供商調整自己的戰略來促進移動電子商務服務。這項研究提供了一個移動商務用戶技術接受模型, 它可以作為未來研究的基礎。

關鍵詞：

移動電子商務、用戶接受因素、干擾問題、UTAUT

54.Negative User Adoption Behaviors of Mobile Commerce: An Empirical Study from Chinese College Students

Lai, IKW(Lai, Ivan Ka-Wai); Lai, DCF (Lai, Donny C.F.)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

In Proceedings of the 8th International Conference on Supply Chain Management and Information Systems, Hong Kong, 6-8 Oct 2010, EI indexed, conference paper

Abstract:

This study aims to examine the positive and negative factors that can significantly explain user acceptance of mobile commerce (m-commerce) in China. A technology acceptance model for m-commerce with five factors is constructed. The proposed model is tested using data collected from 156 college students in Macau. Exploration factor analysis is performed to examine the reliability and validity of the model and regression analysis is performed to access the relationship between behavior intention and each factor. The acceptance of m-commerce is influenced by the factors including performance expectancy, social influence, facilitating conditions, and disturbance concerns; while effort expectancy is insignificant in this case. The results of the study are useful for m-commerce service providers to adjust their strategies for promoting m-commerce services. This study contributes to the practice by providing a user technology acceptance model for m-commerce that can be used as a foundation for future research.

Keywords:

Mobile commerce, User acceptance, Disturbance concerns, UTAUT

55.不同人口對服務提供商的感知,組織因素,工作滿意度和預期的行為反應-在中國環境中的研究

馬吳坤鈴、賴嘉偉

澳門科技大學 行政與管理學院

會議/刊物名稱：

In Proceedings of Business and Information, 日本, 會議文章

內容簡介：

研究找到員工工作滿意度 (JS) 的在一個組織是很重要的,因為它影響到個人的意圖的行為反應 (IT),如勞動力流動。頻繁的人事變動是前線服務提供者的一個重要組織的問題。

一些組織的研究還發現,組織因素,如組織的身份 (OI),領導者/主管的行為 (LB),知覺組織支持系統(POS),都對 JS 有影響。而且 JS 對 OI, JB 和 POS 亦有影響。然而,這些組織因素在許多人口變數對於個人代理人可能有顯著性差異。有鑑於此,本研究收集 387 位一線保險業代理人的數據,本研究探討是否特定的人口變量,如教育程度/年齡/性別/經驗對保險代理人的人員流動產生影響。這種研究的結果表明,年齡和教育程度對三個組織因素 (IO, POS, LB) 有顯著影響,這三個組織因素也影響員工的 JS 和 IT。因此,這項研究從理論和實踐上提供了具價值貢獻。

關鍵詞：

前線服務提供者、保險業和保險代理人、人口因素、預期的行為反應

55. Demographic Influence on Service Provider's Perception on Organizational Factors, Job Satisfaction and Intended Behavioral Reactions - The Chinese Context

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Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

In Proceedings of Business and Information, Kitakyushu, Japan, conference paper

Abstract:

Research has indicated workforce job satisfaction (JS) is important for an organization because it affects individual's intended behavioral reactions (IT) like turnovers. Turnover rate is a significant issue for organizations with direct sales workforce. Some organization studies also revealed that organizational variables such as organization identity (OI), leader / supervisor behavior (LB), and perceived organizational support (POS), have impacts on JS which in turn affects IT. However, for many demographic variables there may be significant differences between individual agents. In view of this, using a sample of 387 frontline service providers from the insurance industry, this study examines whether specific demographic variables such as educational level / age / sex-gender / years of experience affect insurance agent's turnover. Results of the study indicate that both age and educational level have significant impacts on agent's perception on the three organizational factors: OI, POS, and LB, which also exert influence on agent's perception on JS and IT. Hence, specific managerial implications for both theory and practice are offered.

Keywords:

Frontline service providers, Insurance industry and insurance agents, Demographic factors, and Intended behavioral reactions

56. 研究用戶採用移動商務行爲的一個模型

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會議/刊物名稱：

International Journal of Enterprise Network Management , 4(1): 16-25

內容簡介：

因為新移動設備的電腦能力和通訊能力在臺式電腦的網路衝浪和進行電子商務方面已經足夠成熟，所以，近年來移動商務得到了巨大的發展和商機。然而用戶對移動商務的接受程度仍然低於期望值。針對用戶接受移動商務的研究已經證實了，用戶因此積極採用此項技術取決於用戶接受了新資訊系統的模型。但是卻只有少數的調查針對用戶的消極使用行爲。在文章中，一個從 UTAUT 模型中延伸出來的概念模型將被提出作為影響移動用戶接受移動商務的消極情感和行爲的研究。建立這個被擴展的 UTAUT 模型的目的是幫助移動商務服務的提供者們理解能夠顯著解釋用戶使用意圖和使用行爲的積極和消極因素。它同時也為資訊系統技術採用模型的進一步研究提供了基礎。

關鍵詞：

電子商務、移動商務、通過用戶行爲、TAM、UTAUT

56.A Model for the Study of User Adoption Behaviours of Mobile Commerce

**Lai, DCF (Lai, Donny C.F.); Lai, IKW (Lai Ivan Ka-Wai); Jordan Ernest
Faculty of Management and Administration, Macau University of Science and
Technology**

Name of Conference/Journal:

International Journal of Enterprise Network Management, 4(1): 16-25

Abstract:

Mobile commerce (m-commerce) extends electronic commerce by allowing people to conduct business transactions through mobile devices. Since the computing power and the communication capability of new mobile devices are sophisticated enough for surfing internet and conducting e-commerce as on the desktop computers, there is significant opportunities and growth of m-commerce business in the coming years. Hong Kong, with the highest mobile phone penetration in Asia, had 11.66 million mobile phone subscribers at the end of April 2009 as reported by OFTA (2009), significantly outnumbering the total population. However, the user acceptance of m-commerce is below expectation (Harris et al. 2005). Researches of the user acceptance of m-commerce have proven the positive user adoption determinants based on the user acceptance models of new Information Systems (IS), but only few explore the negative adoption factors. This paper aims to extend the Unified Theory of Acceptance and Use of Technology (UTAUT) model for the study of the negative emotion and behaviour that affects the user acceptance of m-commerce by the mobile users of Hong Kong. In this paper, a proposed conceptual model, which is extended from the UTAUT model, will be presented. The extended UTAUT model consists of five key constructs, they are: performance expectancy, effort expectancy, social influence, facilitating conditions, and disturbance concerns. The key constructs will be the direct determinants of behavioural intention and/or use behaviour. In order to validate this model, further research is suggested with two sets of instruments for the study of user acceptance of m-commerce in Hong Kong. The extended UTAUT model aims to help m-commerce service providers to understand both the positive and negative factors that can significantly explain user adoption intention and use behaviour so that they can adjust their strategies for providing successful m-commerce services. It also provides a base for further research on the Technology Adoption Models of IS.

Keywords:

E-commerce, M-commerce, User adoption behaviours, TAM, UTAUT

57. 香港建造業利益相關者的各種知覺性能指標研究

賴嘉偉、林建新

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會議/刊物名稱：

Construction Management and Economics, 28(4): 377-391, ISSN: 0144-6193, EI 檢索

內容簡介：

本研究的目的是從不同參與者的觀點來探討建設項目的知覺績效標準的重要性的業績成果。研究模型的結構是根據九個績效標準。數據是 324 個香港建設項目的從業人員。單向方差分析 (ANOVA) 及重複測量變異數分析了九個績效標準的相對重要性和業績成果。及時完成項目是最重要的性能標準，其次是利潤，環保和質量。這項研究發現，在 (1) 不同的建設項目中的參與者 (2) 不同的項目類型和 (3) 不同的職能，各種知覺性能指標存著重要性和業績成果的差異。為了進一步了解各績效標準的重要性相對其業績成果，本研究對項目合作夥伴和建築行業存在的問題進行了審查。這項研究的目的是激發進一步研究以提高整體建造業業績成果。

關鍵詞：

績效改進、績效評估、合作夥伴、供應商關係、性能標準

57.Perception of Various Performance Criteria by Stakeholders in the Construction Sector in Hong Kong

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**Faculty of Management and Administration, Macau University of Science and
Technology**

Name of Conference/Journal:

Construction Management and Economics, 28(4): 377-391, ISSN: 0144-6193, EI indexed

Abstract:

All construction projects in Hong Kong have in common a cast of key contract participants, consisting of clients, consultants (designers) and contractors. The aim of this research is to examine, from different points of view, these practitioners in regard to the importance of perceived performance criteria and their respective performance outcomes in a construction project. A research model is structured based on nine performance criteria and their respective performances. The data were collected from 324 practitioners who have participated in construction projects in Hong Kong. One-way analysis of variance (ANOVA) and repeated measures ANOVA are used to analyse the data. The relative importance of nine performance criteria and their performances are measured. Timely completion of the project is the most important performance criterion, followed by profit, environmental protection and quality. There are differences in the importance of the performance criteria with respect to performance. The differences in the perceptions of performance that are identified are: (i) among different practitioners in a construction project; (ii) due to different project types; and (iii) between different functional roles in the partnering organizations. In order to further understand the importance of the performance criteria with respect to performance, the status quo of project partnering and congeniality problems in the construction industry is reviewed. It is intended to stimulate interest in the further exploration of solutions to improve the overall performance of the construction industry in Hong Kong.

Keywords:

Performance improvement, Performance evaluation, Partnering, Supplier relationship, Performance criteria

58.用戶採用移動商務行爲：中國和台灣的比較

賴嘉偉、許正芳、黎志輝
澳門科技大學 行政與管理學院

會議/刊物名稱：

In Proceedings of the 10th International Conference on Electronic Business, 上海，中國，
2010 年 12 月 1-4 日，p.592-600，會議文章

內容簡介：

這項研究的目的是進一步在中國和台灣檢驗移動商務技術接受模型。數據的收集來自 156 名在澳門（中國）的大學生和 173 名在高雄（台灣）的大學生。探索因子分析是研究模型的可靠性和有效性，回歸分析用以獲取行爲意向之間和每個因素的關係，t-測試用來比較中國和台灣大學生對各因素的差異。這項研究發現即使中國和台灣在文化上沒有顯著差異，但社會影響力因素在兩個地區卻存在顯著的差異。

關鍵詞：

移動商務、技術的接受程度、UTAUT

58. User Adoption Behaviors of Mobile Commerce - China VS Taiwan

**Lai, IKW (Lai, Ivan Ka-Wai); Hse, CCF (Hse, Connie C.F.);
Lai DCF (Lai, Donny C.F.)**

**Faculty of Management and Administration, Macau University of Science and
Technology**

Name of Conference/Journal:

In Proceedings of the 10th International Conference on Electronic Business, Shanghai, China, 1~4 December 2010, p.592-600, conference paper

Abstract:

This study aims to further test the technology acceptance model for mobile commerce (m-commerce) in China and Taiwan. Data was collected from 156 college students in Macau (China) and 173 college students in Kaohsiung (Taiwan). Exploration factor analysis is performed to examine the reliability and validity of the model; regression analysis is performed to access the relationship between behavior intention and each factor in these two markets; and t-tests are performed to compare the difference in the means from Chinese and Taiwan college students. This study finds out that even there is not significant culture difference between China and Taiwan, there is a significant difference in the means of social influence between these two markets.

Keywords:

M-commerce, Technology acceptance, UTAUT

59. 中國工廠接受綠色製造技術的初步研究

賴嘉偉、許正芳、鍾榮彰
澳門科技大學 行政與管理學院

會議/刊物名稱：

In Proceedings of the 8th International Conference on Supply Chain Management and Information Systems, 香港, 2010 年 10 月 6-8 日, p.726-732, 會議文章

內容簡介：

本研究旨在探討組織對使用綠色製造技術的影響因素。綠色科技接受模型構建有六個因素。本研究初步收集了 48 個數據。驗證性因素分析來驗證模型，結構方程模型用於數據分析。接受綠色製造技術的影響因素包括：便利條件，社會責任，和政府的政策，而其他因素（績效預期，預期的努力和社會影響力）在這種情況下是不顯著。本文驗證了一個可作為未來研究的基礎的綠色科技接受模型。

關鍵詞：

技術的採用、UTAUT、綠色製造、社會責任、政府的政策

59.Preliminary Study of Green Manufacturing Technology Acceptance in China

**Lai, IKW (Lai, Ivan Ka-Wai); Hse, CCF (Hse, Connie C.F.);
Chung, WWC (Chung, Walter W.C.)**

**Faculty of Management and Administration, Macau University of Science and
Technology**

Name of Conference/Journal:

In Proceedings of the 8th International Conference on Supply Chain Management and Information Systems, Hong Kong, 6-8 Oct 2010, p.726-732, conference paper

Abstract:

This study aims to examine the factors that influence the organization intention towards the use of green manufacturing technology in China. A green technology acceptance model with six factors is constructed. The model is preliminary tested using data gathered from 48 practitioners. Confirmatory factor analysis is used to validate the model, and structural equation modelling is used for data analysis. The acceptance of green manufacturing technology is influenced by the factors including facilitating conditions, social responsibility, and government policy; while others (performance expectancy, effort expectancy, and social influence) are insignificant in this case. This paper contributes to the knowledge by providing a green technology acceptance model that can be used as a foundation for future research

Keywords:

Technology adoption, UTAUT, Green manufacturing, Social responsibility, Government policy

60. 供應鏈風險管理模式 - 企業風險管理方法

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會議/刊物名稱：

In Proceedings of the 8th International Conference on Supply Chain Management and Information Systems, 香港, 2010 年 10 月 6-8 日, p.634-640, EI 檢索, 會議文章

內容簡介：

本文通過確定潛在企業的供應鏈風險，擬議企業風險管理模型下的四大支柱：金融，戰略，運營和遵守，提出<前企業風險管理>模型。本文用一個案例研究以顯示模型如何執行<前企業風險管理>。該模型將有利於企業了解潛在的供應鏈巨災風險，從而盡可能避免或降低供應鏈巨災風險對企業的影響。

關鍵詞：

風險管理、供應鏈管理、企業

60. Supply Chain Risk Management Model – ERM Approach

**Yuen, BKH (Yuen, Boscal K.H.); Lai, IKW (Lai, Ivan K.W.);
Chan, SKC (Chan, Stephen K.C.)**

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Technology**

Name of Conference/Journal:

In Proceedings of the 8th International Conference on Supply Chain Management and Information Systems, Hong Kong, 6-8 Oct 2010, p.634-640, EI indexed, conference paper

Abstract:

The aim of this paper is to propose the Pre-ERM Model through the process of identification, defining and quantifying of potential supply chain risks at enterprise level. The proposed Pre-ERM Model classifies enterprise risks under four pillars: Financial, Strategic, Operational and Compliance. A case study in logistics industry with certain common risk exposures is given. The proposed model will have beneficial insights for entrepreneurs to avoid as many as possible in supply chain catastrophic risks which may jeopardize the chances of success.

Keywords:

Risk management, Supply chain management, Enterprise

61. 綠色製造技術接受模型

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會議/刊物名稱：

In the proceedings of the 5th International Conference on Green Energy Technology & Management (GETM 2010), 台灣, 2010 年 6 月 5-6 日, 會議文章

內容簡介：

本研究試圖填補文獻的缺口, 開發綠色技術接受模型作為一種工具, 以了解組織採用綠色技術的因素。社會責任和政府的政策, 是可能影響組織使用綠色生產技術的因素, 這兩個因素被定為額外的因素增加統一理論的接受程度和使用技術模型 (UTAUT)。模型由 8 個因素構建 32 個變量組成。本文提供了一個可作為未來研究的基礎的綠色科技接受模型。

關鍵詞：

技術的採用、UTAUT、綠色製造、社會責任、政府的政策

61.Green Technology Acceptance Model for Manufacturing

Lai, IKW (Lai, Ivan Ka-Wai); Hse, CCF (Hse, Connie C.F.)

**Faculty of Management and Administration, Macau University of Science and
Technology**

Name of Conference/Journal:

In the proceedings of the 5th International Conference on Green Energy Technology & Management (GETM 2010), Changhau, Taiwan, 5-6 June 2010, conference paper

Abstract:

This study attempts to fill in the gap in the literature by developing a green technology acceptance model as an instrument to understand the likelihood of the green technology being adopted within an organization. Two factors namely, social responsibility and government policy, that may influence the organization intention towards the use of green technology in manufacturing sector are identified as additional factors apart from the Unified Theory of Acceptance and Use of Technology (UTAUT) model. 32 measurement items under 8 constructs of the model are developed. This paper contributes to the knowledge by providing a green technology acceptance model that can be used as a foundation for future research.

Keywords:

Technology adoption, UTAUT, Green manufacturing, Social responsibility, Government policy

62.非利息收入有利於降低銀行風險嗎？—基於中國銀行的數據

張羽、李黎

澳門科技大學 行政與管理學院

會議/刊物名稱：

南開經濟研究，154(4) 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

本文利用中國銀行業 1986-2008 年數據從整體層面和銀行層面考察了我國銀行業非利息收入增長與銀行風險的關係。從整體層面分析結果看，非利息收入增長具有一定的風險分散化效應。但是，由於非利息收入相比於淨利息收入具有較高的波動性和明顯的周期性，隨著非利息收入比重的增加，這種分散化所帶來的邊際收益在逐步減少。從銀行層面分析結果看，淨利息收入增長率與非利息收入增長率的相關係數在考察期內多為負值，同樣表明非利息收入增長具有一定的風險分散化效應。但是，進一步的模型分析顯示非利息收入增長對我國銀行業收益和風險的影響在統計上並不顯著。總體上，我們的研究表明，非利息收入增長對我國銀行業具有一定的風險分散化效應，但是更多地依賴非利息收入存在著惡化風險與收益之間權衡關係的可能性。

關鍵詞：

淨利息收入、非利息收入、收入分散化、銀行風險

62.Can Noninterest Income Reduce Bank Risk? -Evidence from Chinese Banking Industry

Zhang, Y (Zhang Yu); Li, L (Li Li)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

NANKAI ECONOMIC STUDIES, 154(4) 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

This paper assesses potential diversification benefits about the increasing reliance on nontraditional business activities based on the Chinese banking industry data from 1986-2008. At the aggregate level, there are diversification benefits from the increasing noninterest income. But noninterest income has higher volatility and cyclicalities than net interest income, and the marginal benefit of diversification is reducing with the increase of noninterest income. At the bank level, the correlation coefficients of growth rates of net interest income and noninterest income are most negative which also suggest that there are diversification benefits from the increasing noninterest income. But, further model analysis indicates that the effect of noninterest income share on Chinese banking industry revenue and risk is non significant. Overall, our findings suggest that noninterest income diversifies bank revenue, but more reliance on noninterest income may worsen the risk/ return trade-off for Chinese banking industry.

Keywords:

Net Interest Income, Noninterest Income, Income Diversification, Bank Risk

63. 金融衍生品交易對商業銀行的影響：基於美國銀行控股公司 的實證研究

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會議/刊物名稱：

亞太金融市場，17: 303-322 2010

內容簡介：

本文利用 2005 年第 2 季度到 2008 年第 3 季度美國 18 家銀行控股公司面板數據，考察了金融衍生品交易的影響。研究發現，在整體上非交易衍生品面值規模越大，銀行的收益越大。然而，衍生品交易提高了銀行整體風險。與此同時，我們發現相比於主導型銀行，參與型銀行可能持有更多的衍生品投機頭寸，從而增大了自身的系統風險。進一步地，美國銀行控股公司在次貸危機前持有更多的衍生品投機頭寸，從而增大了自身的系統風險。總體上，我們的發現表明商業銀行使用金融衍生品是一柄雙刃劍。如果商業銀行嚴格利用金融衍生品對沖基礎資產風險，那麼金融衍生品的利用對銀行而言也許是一種有益的管理嘗試。相反，如果商業銀行過多地用金融衍生品進行投機以獲取較高的收益，那麼金融衍生品的利用會導致銀行整體風險的上升。

關鍵詞：

衍生品交易、盈利、風險、面板數據

63.The Impact of Derivatives Activity on Commercial Banks : Evidence from U.S. Bank Holding Companies

Li, L (Li Li); Zhang, Y (ZhangYu)

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Technology**

Name of Conference/Journal:

Asia-Pacific Financial Markets, 17: 303-322 2010

Abstract:

We have examined the impact of derivatives activity on commercial banks based on panel data from 18 large U.S. bank holding companies(BHC). This paper found that in general the larger the notional values of non-traded derivatives, the more derivative positions held by banks, meaning potentially better performance. The derivatives activity increased the BHC's overall risk level, the reason is that most US BHCs are able to take more speculative positions in derivatives contracts in the name of risk management, excluding the impact of held-for -trading positions. Additionally, we found that while participative banks took more speculative positions in derivatives contracts in the name of risk management, while dominant banks preferred to hold derivatives positions for the sake of hedging the underlying risks. Furthermore, we found that the BHCs take more speculative positions in derivatives contracts in the name of risk management before the sub-prime mortgage loan crisis than after the sub-prime mortgage loan crisis. Overall, our findings suggest that the usage of derivatives for commercial banks is a double-edged sword. Using derivatives maybe a matter of managerial risk appetite to hedge underlying risks for commercial banks, however, it maybe also increase the commercial banks' overall risks if the derivatives positions are used to speculate, though derivatives activity could increase the profitability of BHCs.

Keywords:

Derivatives activity, Profitability, Risks, Commercial banks, Panel data

64.信任、承諾，關係行爲與關係績效：賣方視角

嚴興全、周庭銳、李雁晨
澳門科技大學 行政與管理學院

會議/刊物名稱：

管理學報，7 (7): 1032-1038 JUL 2010，CSSCI 檢索

內容簡介：

利用調查資料實證檢驗了 B-B 商業關係中的賣方對買方的信任和情感承諾對其行爲的影響，以及這些行爲對行銷關係績效帶來的影響。實證結果表明，賣方的信任和承諾水準越高，則越具有合作性和靈活性，但承諾的作用大於信任；賣方對買方的情感承諾越高，則機會主義行爲程度越低，而信任無助於降低機會主義行爲；信任與承諾都不能解釋賣方對不同顧客正式控制機制的差異；賣方在交換關係中表現出的合作性、靈活性都有利於提高行銷關係的績效。

關鍵詞：

信任、承諾、關係行爲、關係績效

64.Study on Trust, Commitment, Relational Behavior and Performance from the Seller's Perspective

Yan, XQ (Yan Xing-Quan); Chou, TJ (Chou Ting-Jui); Li, YC (Li Yan-Chen)
Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Chinese Journal of Management, 7 (7): 1032-1038 JUL 2010, CSSCI indexed

Abstract:

Based on survey data from seller firms, we investigate the effect of trust and commitment on sellers' relational behavior and its performance implications. Empirical results indicate that both trust and commitment positively influence seller cooperation and flexibility in business relationships, but the effect of commitment is larger than that of trust. The results also show that sellers' opportunistic behavior is less when their affective commitment is high. Another important finding is neither trust nor commitment predicts sellers' formal control mechanism usage. And last, we find out that sellers' cooperation and flexibility have significant positive influence on relational performance.

Keywords:

Trust, Commitment, Relational behavior, Relational performance

65.澳門消費者信心指數調查分析——兼評兩岸四地 2010 年首季

消費者信心指數

劉成昆

澳門科技大學 行政與管理學院

會議/刊物名稱：

澳門經濟，29: 142-150 SEP 2010

內容簡介：

本文對 2010 年第 4 季的澳門消費者信心指數調查結果進行了分析，并對比分析了兩岸四地消費者信心指數的調查結果。分析表明，2010 年第 1 季消費者信心指數的下降，預示著 2010 年兩岸四地經濟復蘇過程中可能充滿更多的不確定性和複雜性。

關鍵詞：

澳門消費者信心、兩岸四地、中華消費者信心

65.Survey Analysis of Macao Consumer Confidence Index — And Comment on Cross-Strait CCI in 4th Quarter of 2010

Liu, CK (Liu Cheng-Kun)

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Technology

Name of Conference/Journal:

Journal of Macau Economics, 29: 142-150 SEP 2010

Abstract:

This paper analyzes survey outcome of Macao CCI in the fourth quarter of 2010, and compares survey result of Cross - strait CCI. The analysis shows that, the decline of CCCI predict that there will be more uncertainty and complexity in economic recovery of Cross - strait in 2010.

Keywords:

Macao CCI, Cross-Straits, CCCI

66. 澳門私立高等教育的發展：探討政府與私立高等院校的關係

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澳門科技大學 行政與管理學院

會議/刊物名稱：

Frontiers of Education in China, ISSN 1673-341X, 5(3) SEP 2010

內容簡介：

在過去二十多年間，澳門高等教育經歷了急速的發展。從 1981 年澳門只有一間私立高等院校，到 2001 年已增加至八間。在 2007-2008 學年，澳門私立高等教育在學生人數、教師人數以及課程數量已經超越公立高等教育。本文通過整理官方的高等教育統計數字，對相關的高等教育發展趨勢和現象進行分析，並重點探討澳門政府與私立高等院校的關係。澳門政府一方面對公立高等教育投放大量資源，另一方面亦對私立高等教育提供各式各樣的支援和資助，儘管如此，政府在公立和私立夥伴關係上至今仍缺乏系統性的計劃和措施。作者認為，澳門政府對私立高等教育的態度既非權威性亦非放任性，而現行教育法律的滯後和標準化質量管理體系的缺乏是阻礙澳門私立高等教育發展有兩大因素。

關鍵詞：

澳門、私立高等教育、澳門政府、法律框架

66.Development of Private Higher Education in Macau: Exploring the Relationship between Government and Private Sector

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Technology**

Name of Conference/Journal:

Frontiers of Education in China, ISSN 1673-341X, 5(3) SEP 2010

Abstract:

The development of private higher education in Macau has experienced rapid growth in the past two decades. In 1981, there was only one private higher education institution. In 2001, there were eight. The number of students, the number of teaching staff, and the number of courses offered in the private sector were higher than that of the public sector in 2007-2008. The purpose of this paper is to understand this trend by investigating the facts and figures supplied by official sources and to analyze the role between the Government and the private sector. This paper shows that the attitude of the Macau Government is neither authoritative nor laissez-faire toward private higher education. On the one hand, the Government is investing heavily in the public sector. On the other hand, it is assisting the private sector by various means. However, there is a lack of systematic planning in the area of public-private partnership. There are also two issues which may hinder the current development of private higher education. They are an outdated legal framework and a lack of standardized quality assurance measures.

Keywords:

Private higher education, Macau Government, Legal framework

67.回顧澳門高等教育的質量評審制度

阮邦球、劉靜文

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會議/刊物名稱：

“高等教育質量保障體系建設研究”國際學術研討會，2010 年 11 月 8-10 日，澳門，
會議文章

內容簡介：

自 1981 年至今，澳門的高等院校數目從 一 所增長到十二所。現今的澳門高等教育體制是由 4 間公立院校和 8 間私立院校及高等研究機構所組成，在 2008-2009 學年的在校註冊學生人數達 31249 名。在全球化和知識化的時代，人力資源的質量是關鍵所在，而近年澳門高等教育事業迅速擴大，質量保證自然成爲重要的課題。世界各地的高等教育機構爲學校資源和學生招募進行激烈的競爭，澳門亦面臨同樣的處境。全球化的經驗強調質量評審制度的重要性，而評審制度的有效實施和發展，能爲不同持份者提供有價值的數據和質量標準來判斷高等教育機構的水平，並且能推動高等教育質量的提升。本文以高等教育評審制度爲主題，梳理澳門評審制度的演化，嘗試在高等教育的法律框架，高等教育輔助辦公室的角色和澳門高等院校質量系統的運作三個方面進行初步探討。

關鍵詞：

澳門、高等教育、教育質量、評審制度

67.Review of Higher Education Quality Assurance in Macau

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**Faculty of Management and Administration, Macau University of Science and
Technology**

Name of Conference/Journal:

International Symposium on "Higher Education Quality Assurance", 8-10 Nov 2010, Macau, conference paper

Abstract:

Higher education in Macau has grown from one institution to twelve institutions since 1981. The current system consists of four public institutions and eight private institutions. It accommodates a student population of 31249 in 2008-2009. The expansion is rapid in terms of quantity but quality is in doubt. The discussion of quality assurance is important because higher education is entering an era of intense competition. In many parts of the world higher education institutions are competing fiercely for funding and students. It is certain that Macau's institutions will face similar situation in the near future. The development and exercise of an effective quality assurance system can provide valuable data to different stakeholders to judge the standard of institutions and push the level of performance to higher grounds. The purpose of this paper is to review and study the evolution of quality assurance mechanism exercised in Macau's higher education system. The discussion will focus on three areas: the legal framework, the role of GAES and the actual practice of quality assurance in Macau's institutions.

Keywords:

Macau, Higher Education, Education Quality, Quality Assurance System

68. 消費者對企業社會責任行為的評價研究——基於期望理論和 歸因理論的探討

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會議/刊物名稱：

管理評論，22(12): 70-78 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

隨著社會經濟的發展，人們對企業承擔社會責任的要求越來越高，但相關研究忽略了消費者對企業社會責任滿意的探討。本文基於期望理論和歸因理論，通過企業社會責任事件問卷調查，對企業社會責任滿意的形成機制進行了全面系統的實證研究。研究結果表明：企業社會責任的感知績效和期望以及對企業社會責任歸因顯著影響企業社會責任滿意。最後對企業開展社會責任的實踐提出了對策建議。

關鍵詞：

企業社會責任、感知績效、期望、期望 致性、滿意

68.Consumer Evaluations to Corporate Soical Responsibility Initiatives: Integration of Expectation Theory and Attribution Theory

Lu, D (Lu Dong); Samart Powpaka

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Management Review, 22(12): 70-78 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

With social economy developing, companies are expected to shoulder more social responsibilities than before. But related researches are limited, particularly with regards to corporate social responsibility (CSR) initiatives satisfaction. Based on expectation theory and attribution theory, this paper gets a thorough understanding of CSR initiatives satisfaction mechanism by a CSR event survey. The result suggests that CSR perceived performance and expectation, as well as consumers' attribution to CSR, significantly affect CSR initiatives satisfaction. The conclusion can give practical advice to companies and help them take a more strategic tack on CSR and how "doing good" can contribute to their bottom line.

Keywords:

Corporate social responsibility, Perceived performance, Expectation congruency, Satisfaction

69. 基於消費者感知風險的在綫支付網絡信任的實證研究

楊青、龐川、Liu, L (Liu Liu)、David C. Yen

澳門科技大學 行政與管理學院

會議/刊物名稱：

第八屆武漢電子商務國際會議，會議文章

內容簡介：

當前，網上支付在我國電子支付體系和電子商務領域佔據重要戰略地位。本文基於國際流行的技術接受模型 (TAM)，考處理性行為理論 (TRA) 和計劃行為理論 (TPB)，並入網上支付信任與多維風險感知因素，構建了擴展的技術接受模型 (ETAM)，並採集上海和澳門兩地 883 個數據樣本實證檢驗模型。研究發現，網絡信任和多元感知風險是決定消費者是否選擇使用網上支付並開展正面評價的兩個關鍵要因，且感知的安全性風險和隱私風險最為重要，而感知易用性對網絡消費者決策行為影響已逐漸弱化；同時上海和澳門兩地消費者網上支付行為深受傳統文化的影響，澳門消費者依然深度依賴於傳統信任文化，網絡信任是當地居民選擇網上支付方式的關鍵要因。

關鍵詞：

在綫支付、感知風險、信任

69. Empirical Study of E-trust on Online Payments based on Consumer Perceived Risk in China

Yang, Q (Yang Qing); Pang, C (Pang Chuan); Liu, L (Liu Liu); David C. Yen
Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

8th Wuhan E-Commerce International Conference, conference paper

Abstract:

Perceived risk and trust are the most important factors influencing consumer behavior in the context of online payment in e-commerce. This paper aims to extend research into consumers' online payment behavior by looking into the elements of trust and facets of perceived risk in China. A conceptual model introducing new constructs like comparison and evaluation is proposed based on the framework of TRA, TPB, TAM and DTPB. The research methodology improves previous efforts by first studying perceived risk of 8 facets at a more granular level and then further refines the nomological fit of perceived risk within the research model framework. The results show that privacy risk is negatively related to trust, while service risk and psychological risk respectively has a positive effect on comparison and intention; perceived usefulness and ease of use still play important yet different roles with consumers mastering online payment experience in the later stage of e-commerce.

Keywords:

Online payment, Perceived risk, Trust

70. 多尺度非平衡態分子動力學模型

李少凡、盛妮

澳門科技大學 行政與管理學院

會議/刊物名稱：

國際工程數值方法雜誌，83 (8-9): 998-1038，SCI-E 檢索

內容簡介：

在本文我們提出了一個多尺度非平衡態分子動力學計算模型。目的主要在於：(1) 為熱機耦合在原子尺度的三維模擬提供一個嚴格的算法；(2) 為非平衡態多尺度模擬提供一個較為通用的計算模式。在該模型中，每個有限元結點作為一個溫度場，而假設與該節點相連的分子在每一個計算時間步長中在該溫度場處於平衡態。宏觀尺度的變量通過有限元模型進行求解，而微觀尺度的變量通過分子動力學模型進行求解。本計算模型的特點在於：(1) 微觀尺度的分佈函數服從 Boltzmann 分佈，在這個意義上講它是 canonical 的；(2) 它能夠自動自發地返回到平衡狀態。本論文給出了幾個數值模擬例子，包括模擬熱波動引起衝擊波或位錯的現象。

關鍵詞：

多尺度模擬

70.On Multiscale Non-equilibrium Molecular Dynamics Simulations

Li, SF (Li Shao-Fan); Sheng, N (Sheng Ni)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

International Journal for Numerical Methods in Engineering, 83 (8-9): 998-1038, SCI-E indexed

Abstract:

In this work, we set forth a multiscale non-equilibrium molecular dynamics (MS-NEMD) model. The main objectives of MS-NEMD model are: (1) establishing a rigorous NEMD that provides direct threedimensional simulations of thermal – mechanical motions at atomistic scale, and (2) providing a general computational paradigm for non-equilibrium multiscale simulations. The proposed MS-NEMD combines a coarse-grained continuum thermodynamics model with a fine scale NEMD simulation. A novel concept of Multiscale Canonical Ensemble is put forth, in which we argue that the coarse-grained field may provide a heat bath within the coarse scale relaxation time interval, while the fine scale motion may reach to a local equilibrium state during that time interval. In this work, we propose to use a Nosé – Hoover thermostat network that is distributed among the local Voronoi cell-ensembles, and it will then regulate the difference between the coarse scale thermodynamic temperature and kinetic temperature of the fine scale ensemble.

The proposed MS-NEMD algorithm has the following features: (1) the fine scale distribution function is canonical in the sense that it obeys a drifted local Boltzmann distribution and (2) it can spontaneously and automatically return to the equilibrium state. Several numerical examples have been carried out, in which we have simulated the activation of shock waves or dislocations due to thermal fluctuations.

Keywords:

Molecular dynamics, Multiscale simulation, Nanomechanics, Non-equilibrium thermodynamics

71. 客戶關係投資，人情與關係承諾

石貴成、Shi, YZ (Shi Yi-Zheng)、Chan, AKK (Chan, Allan K. K.)、
Liu, MTC (Liu, Matthew Ting-Chi)、Fam, KS (Fam, Kim-Shyan)

澳門科技大學 行政與管理學院

會議/刊物名稱：

營銷學會 2010 年會論文集，2010(215) 1-7，會議文章

內容簡介：

研究者對 Guanxi 營銷--被認為是中國版的關係營銷(relationship marketing)的興趣持續增加。但是很少有實證研究探討“人情”這個解釋 Guanxi 培養與維持的內在機制之變量的性質。本研究探討保險業中人情在客戶關係投資與關係承諾之關係中的中介作用。作者在中國調查了 245 位汽車保險客戶，經過研究證實了人情在上述關係中的中介作用，人情解釋了很高比例的客戶關係承諾的變化程度。該結果為如果增加在中國之企業的客戶關係承諾水平提供了寶貴的洞見和建議。

關鍵詞：

客戶關係投資、人情與關係承諾

71. Customer Relationship Investment, Renqing and Relationship Commitment

Shi, GC (Shi Gui-Cheng); Shi, YZ (Shi Yi-Zheng); Chan, AKK (Chan, Allan K. K.); Liu, MTC (Liu, Matthew Ting-Chi); Fam, KS (Fam, Kim-Shyan)
Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of Academy of Marketing Annual Conference, 2010(215) 1-7, conference paper

Abstract:

There is a growing research interest in guanxi marketing, which has been considered the Chinese version of relationship marketing. However, very little empirical research has investigated the implicit nature of renqing, the underlying mechanism that explains the cultivation and maintenance of guanxi. This study examines the role of renqing in mediating customer relationship investment and relationship commitment in the insurance industry. The authors surveyed 245 car insurance policyholders in China. The findings confirm the mediating role of renqing in such relationships and show that renqing explains a very high proportion of the variance in levels of customer relationship commitment. This result offers valuable insights and suggestions as to how to increase levels of customer relationship commitment in China.

Keywords:

Customer Relationship Investment, Renqing and Relationship Commitment

72. 相貌吸引力和代言人與產品匹配對選擇中國體育產品女性

代言人的指導

劉丁己、石貴成、王業堅、等
澳門科技大學 行政與管理學院

會議/刊物名稱：

國際消費者營銷期刊，22(2): 169-181 APR 2010

內容簡介：

本研究運用實驗的方法以 12 個不同的情景考察中國女運動員代言人之外貌吸引力與代言產品匹配和消費者購買意圖之間的關係。高吸引力的代言人比低吸引力的代言人有效是肯定的。從總體購買意圖上講，在低產品匹配的條件下，中等吸引力與低吸引力的女運動員代言作用沒有顯著差別。吸引力一般的女運動員只有在高匹配的條件下才有代言效果。研究結果表明在中國女運動員代言人的外貌吸引力比產品匹配因素對消費者的購買意圖影響更大。本研究在挖掘代言人中等吸引力之衡量方面拓展了傳統代言理論。

關鍵詞：

女性體育明星代言人、相貌吸引力、匹配、購買意願

72.How Physical Attractiveness and Endorser-Product Match-up Guide Selection of a Female Athlete Endorser in China

Liu, MTC (Liu Matthew Ting-Chi); Shi, GC (Shi Gui-Cheng); Wong, AIK (Wong Anthony Ip-Kin); Aaron Hefel; Chen, CY (Chen Chen-Yueh)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Journal of International Consumer Marketing, 22(2): 169-181 APR 2010

Abstract:

This research used an experimental method (with 12 different scenarios) to investigate the relationship among the physical attractiveness of female athlete endorsers, endorser-product match-up, and consumers' purchase intention in the context of China. It is certain that highly attractive endorsers work better than less-attractive endorsers. In terms of generation of purchase intention, there is no difference between a middle-attractive female athlete endorser and a low-attractive one under low match-up conditions. The normal attractive-level female athlete endorser works only in a high match-up condition. The results show that female athlete endorsers' attractiveness could affect consumers' purchase intentions more significantly than the match-up factor in China. The findings not only compare the strength between attractiveness and match-up, but also extend traditional endorser theories farther by examining a middle-level attractiveness measurement as this research digs into the effect of a middle attractive female endorser. Besides theoretical implications, practical suggestions were given based on the discussion on research findings and traditional Chinese cultural influences.

Keywords:

Female athlete endorser, Physical attractiveness, Match-up, Purchase intention

73.平衡計分卡的演變及新發展

石永東、張濤、何偉
澳門科技大學 行政與管理學院

會議/刊物名稱：

科技進步與對策，27: 30-36 MAY 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

平衡計分卡理論備受學界和業界的關注。本文首先根據創始人卡普蘭和諾頓具有代表性的學術成果和實踐活動，回溯了平衡計分卡理論從提出雛形至今不斷完善成熟的演變歷程，然後指出了該理論在中國發展傳播過程中的標誌性事件，最後重點介紹了近五年來其創始人在理論開創與應用推廣方面的新動態和新成果。

關鍵詞：

平衡計分卡、演變、歷程、發展、新成果

73.The Evolvement Process of Balanced Scorecard and New Development

Shi, YD (Shi Yong-Dong); Zhang T (Zhang Tao); He, W (He Wei)
Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Science & Technology Progress and Policy, 27: 30-36 MAY 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

The Balanced scorecard theory raises the world-wide attention among academia and practice field. This paper reviews the development process of BSC according to the representative academic outcomes and activities of the creator, Kaplan and Norton. And then it concludes the landmarks during the spread process of BSC in China. Finally, the authors emphasize the new achievements of BSC in recent five years.

Keywords:

Balanced scorecard, Evolvement, Development process, New achievement

74. 自然人流動政策選擇政治經濟學分析-基於公共選擇理論視角

宋雅楠

澳門科技大學 行政與管理學院

會議/刊物名稱：

世界經濟研究，9: 34-37 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

自然人流動是國際貿易的新興課題，雖然現有研究證明自然人流動將促進世界福利增加，但各國依然對自然人流動自由化小心翼翼。本文以公共政策選擇理論為視角，構建理論模型分別從經濟維度和國家利益的政治維度分析自然人流動政策的選擇，說明自然人流動政策的形成是利益衝突條件下經濟及政治綜合利益目標權衡的過程，解釋了自然人流動自由化與國家利益現實間的矛盾。

關鍵詞：

自然人流動、公共選擇、政治經濟分析

74.The Political Economy Analysis on Movement of Natural Persons Policies ——Based on the Perspective of Public Choice Theory

Song, YN (Song Ya-Nan)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

World Economy Study, 9: 34-37 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

Movement of natural persons is a emerging subject for international trade. Although many researches have proved that the liberalization of movement of natural persons would promote the world welfare, there are many countries still set up high barriers on it. Based on the perspective of public choice theory, this paper established the policy choice framework of movement of natural persons, and proved that choice were the trade-off of economic and political goals and interests.

Keywords:

Movement of Natural Persons, Public Choice, Political Economy Analysis

75. 澳大利亞辦公環境滿意度影響因素分析

宋宇

澳門科技大學 行政與管理學院

會議/刊物名稱：

Information - An International Interdisciplinary Journal , 13(4): 1195-1205 JUL 2010 , SCIE

檢索

內容簡介：

本研究運用層次分析模型對影響澳大利亞辦公室雇員對辦公環境的滿意程度的影響因素進行了分析。研究發現為相關研究提供了新的視角。

關鍵詞：

辦公環境滿意度、雇員、層次分析法、澳大利亞

75. Quantifying Critical Factors for Office Environmental Satisfaction in Australia

Song, Y (Song Yu)

Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

Information - An International Interdisciplinary Journal, 13(4): 1195-1205 JUL 2010, SCIE indexed

Abstract:

Some critical factors related to office environment context have been well investigated. Researchers reported that a number of different factors can influence employee satisfaction with their workspaces. Research showed that satisfaction with one or more environmental factor does not necessarily produce equal satisfaction with the total environment and not all factors are equally important. In order to gain a better understanding of the influential factors of office environmental satisfaction in Australia, this paper hence aims to the apply analytic hierarchy process (AHP) model to quantify the critical influential factors for the employees' satisfaction with the office environment in Australia. The findings from this research have provided some insights for the quantitative measurement of critical factors for office environmental satisfaction.

Keywords:

Office environmental satisfaction, Employee, Analytic hierarchy process, Australia

76.能源消耗與中國建築材料出口的關係研究

宋宇、魏龍

澳門科技大學 行政與管理學院

會議/刊物名稱：

Proceedings of 8th International Conference on Supply Chain Management and Information systems (SCMIS 2010), 香港, 2010 年 10 月 6-8 日, 會議文章

內容簡介：

本研究使用重力模型研究能源消耗及中國建築材料出口之間的關係。通過對 1992-2009 年數據的研究發現能源消費與中國建築材料出口之間呈顯著正向關係。

關鍵詞：

建築材料、出口、能源消耗、重力模型、中國

76.Relationships of Energy Consumptions and Chinese Construction Material Export

Song, Y (Song Yu); Wei, L (Wei Long)

Faculty of Information Technology, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of 8th International Conference on Supply Chain Management and Information systems (SCMIS 2010) Hong Kong, China, 6-8 Oct 2010, conference paper

Abstract:

This paper aims to apply a gravity model to estimate the relationships of energy consumptions of construction industry and Chinese construction material export over the period 1992-2009. The empirical result shows that energy consumptions of construction industry have a significant and positive influence on the construction material export of China.

Keywords:

Construction material, Export, Energy consumptions, Gravity model, China

77.政府相關政策對房地產市場影響事件研究

魏龍、宋宇、Chunlu Liu
澳門科技大學 行政與管理學院

會議/刊物名稱：

澳門科技大學學報，4 (2): 82-91 DEC 2010

內容簡介：

本文運用事件研究法分析政府房地產相關政策和銀行利率調整對房屋銷售價格指數、土地交易價格指數和房屋租賃價格指數的影響。研究表明，政府房地產政策和銀行利率調整對房地產相關價格指數的影響效果有所不同：其中政府房地產政策對土地交易價格影響最為顯著，對房屋租賃價格指數的影響最小；而銀行利率調整對房屋租賃價格指數的影響最顯著，對房屋銷售價格指數的影響最小。同時，政府房地產政策和銀行利率調整對我國東、中、西部地區房地產相關價格指數的影響程度也因地區而異

關鍵詞：

混合 KBS、知件系統、決策系統

77.An Event Study of the Effects of Government Relative Policies on the Chinese Real Estate Market

Wei, L (Wei Long); Song, Y (Song Yu); Chunlu Liu

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 82-91 DEC 2010

Abstract:

This paper analyses the effects of real estate policies and interest rate adjustment on the housing index, land index and rent index using the event study approach. Empirical results show the impacts of real estate policies on all the real estate price indices are different from that of interest rate adjustment. The findings indicate government policies on real estate have a higher influence on the land index than that of the rent index. On the contrary, the interest rate adjustment impacts on the rent index significantly, while the rent index not. Simultaneously, the impacts of government real estate policies and interest rate adjustment on China's eastern, central and western regions' real estate price index vary from region to region.

Keywords:

Hybrid KBS, Knowware System, Decision system

78.比較研究兩個宏觀經濟模型：考察中美經濟在聯匯制度下對 香港經濟的影響

譚戈平

澳門科技大學 行政與管理學院

會議/刊物名稱：

第六屆香港經濟學會雙年會，天津，2010 年 12 月 18-19 日，會議文章

內容簡介：

本文運用結構性向量自回歸方法考察了 1984 至 2007 年香港經濟情況，其中關注到一些外生變量(來自中國和美國)的影響。本文主要研究了聯匯制度下美國對香港經濟的影響，同時也分析了香港特區與中國內地的緊密經濟聯繫。本文關注到轉口貿易所扮演的重要角色。本文通過實証分析找到一些有力的証据，証實了中國內地對香港發揮較大的影響，美國對香港經濟的影響不如內地的影響大。

關鍵詞：

聯匯制度、經濟增長、通貨膨脹、外生變量影響、轉口貿易、結構性向量自回歸

78. Comparing Two Macroeconomic Models of Hong Kong during the Currency Board Period (1984-2007): Considering the Impacts of the US and the Chinese Economy on Hong Kong

Tam, KP (Tam Kwo-Ping)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

The Sixth Biennial Conference of Hong Kong Economic Associationm, Tianjin China, 18-19 Dec 2010, conference paper

Abstract:

This paper investigates Hong Kong's currency board regime from 1984 to 2007, by considering some exogenous variables which have significant impacts on Hong Kong's economy via a SVAR framework. This study examines the economic relationships with the US economy under the currency board regime and the close economic relationships with China under a Closer Economic Partnership Agreement with Mainland China. This study emphasises the importance of entrepot trade for Hong Kong's economy. Evidence shows that those exogenous variables have significant impacts on Hong Kong's economy, and they are one of the important factors when considering the choice of exchange rate regimes. New evidence from this study indicates that the Chinese factors play a more significant role to the Hong Kong's economy. The evidence contradicts existing studies which conclude that the Chinese economy is less significant than the US economy in explaining Hong Kong's output variance.

Keywords:

Currency board, Output growth, Inflation, Exogenous impact, Entrepot trade, Structural vector autoregression (SVAR)

79.基於減排考量的澳門“發財巴”優化方案

石雲鼎、唐華軍、張昊辰、胡旭陽、孫博
澳門科技大學 行政與管理學院

會議/刊物名稱：

澳門科技大學學報，4 (2): 49-58 DEC 2010

內容簡介：

本文旨在研究澳門“發財巴”的優化營運以減少其污染物排放量。通過實地觀測統計，採集獲取了澳門十五間娛樂場“發財巴”的運行資料，包括其班次、運力及運量，選取澳門道路網路的三十五個結點，計算出了“發財巴”往返娛樂場的實際距離，並由此計算出了澳門“發財巴”的平均空載率和年平均運行總里程數。然後利用澳門機動車的氣態污染物和顆粒污染物排放係數，分別計算出“發財巴”尾氣污染物 CO，NO_x，HC，PM₁₀ 和 PM₂₅ 的年均排放量。本文通過對各間娛樂場的區位分析，提出“發財巴”區域整合優化方案，運用規劃求解對娛樂場“發財巴”的班次進行優化。經過優化，所研究之“發財巴”可比現今減少 62.7% 的平均空載率和 60.39% 的年平均運行里程，同時 CO，NO_x，HC，PM₁₀ 和 PM₂₅ 的年排放量可分別減少 73.53%，49.24%，66.24%，49.19% 和 48.06%。因此，本文提出的優化方案具有相當的實務價值，為澳門政府相關部門提供了科學有效的決策依據。此外，本文所給出的大量有效數據對今後進一步研究澳門車輛路徑問題提供了重要的學術價值。

關鍵詞：

車輛路徑問題、發財巴、減排、優化

79.Study on the Optimal Operation of Free Shuttle Buses in Macau

Shi, YD (Shi Yun-Ding); Tang, HJ (Tang Hua-Jun); Zhang, HC (Zhang Hao-Chen); Hu, XY (Hu Xu-Yang); Sun, B (Sun Bo)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 49-58 DEC 2010

Abstract:

This paper focuses on the optimal operations for the free shuttle buses in Macau to reduce the emissions. Firstly, it investigates the operational conditions of the shuttle buses among the fifteen casinos of Macau on the spot, and calculates the exact distance between the shuttle bus stop and the casino. Then the paper estimates the average no load ratio, mean annual operational distance for the shuttle bus, with which it computes the annual emission values of CO, NO_x, HC, PM₁₀, and PM₂₅, using Macau motor gas pollutants and particular emission factors. Furthermore, a constructive and practical integrated model is proposed in order to optimize the daily operational times of the shuttle bus. Finally, it concludes that average no load ratio, the annual operational distance of the shuttle bus, and the annual emission values of CO, NO_x, HC, PM₁₀, and PM₂₅, can reduce 62.7%, 60.39%, 75.53%, 49.24%, 66.24%, 49.19% and 48.06%, respectively. Therefore, this paper provides the local government with some scientific and practical suggestion to improve the environment situation in Macau. In addition, it provides a set of real data for academia to apply different framework to solve vehicle routing problems in further studies.

Keywords:

Vehicle Routing Problem, Free Shuttle Bus, Emission Reduction, Optimization

80. 探索社會網路對澳門中小企業績效的影響作用

田青、陳蝶英、張立成

澳門科技大學 行政與管理學院

會議/刊物名稱：

澳門科技大學學報，4 (2): 31-40 DEC 2010

內容簡介：

本研究之目的在於探求澳門中小企業管理者的社會網路與企業績效的關係。本研究通過實證調研發現，澳門中小企業管理者的社會網路對企業績效具有相關性和顯著之影響性。籍此，在當今競爭激烈的環境下，澳門中小企業管理者應注重社會網路的建構，從而提高企業績效。

關鍵詞：

澳門中小企業、社會網路、績效

80. Social Network of Managers and Firms' Performance in the SMEs of Macao

Tian, J (Tian Jing); Chen, DY (Chen Die-Ying); Zhang, LC (Zhang Li-Cheng)
Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 31-40 DEC 2010

Abstract:

The purpose of this study is to explore the social network of managers and their firms' performance in the SMEs of Macao. Empirical survey is made in this study. Social network of managers is proved to be an important factor influencing firms' performance. The study suggests managers build strong social network with outside world so as to improve their enterprise's performance.

Keywords:

SMEs of Macao, Social network, Performance

81.關於中國國企員工容忍不道德行爲的模型測試

田青、Juan I Sanchez

澳門科技大學 行政與管理學院

會議/刊物名稱：

第三屆世界商業倫理論壇，2010 年 10 月 26-28 日，會議文章

內容簡介：

研究提出並實證測試了一個來自中國內地 10 個城市 442 位受訪者的解釋容忍不道德行爲的模型。文獻回顧有關態度，領導，以及組織環境等理論並整合了一個通過個人價值觀，權力距離，對組織環境的認知和道德領導構成的對不道德行爲的容忍。回歸分析指出權力距離和一個鬆散的組織環境負面影響個人對道德的信仰，作為反饋，這種道德信仰又中介了對不道德行爲的影響。此外，道德領導強化了道德環境的正面作用。此研究對發展國有企業的道德環境提出了管理上的建議，包括提升高層領導的重要作用。

關鍵詞：

容忍不道德行爲、權力距離、道德領導、企業環境

81. Testing a Model of Tolerance towards Unethical Behavior amongst Employees of State-Owned Companies in China

Tian, J (Tian Qing); Juan I Sanchez

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of the 3rd World Business Ethics Forum (WBEF) 2010, Conference paper

Abstract:

We propose and empirically test a model intended to explain tolerance of unethical behavior amid 442 employees of 76 state-owned companies located in 10 different Chinese cities. The literature is reviewed and integrated together with attitude, leadership, and organizational climate theories, thereby outlining a model through which individual values regarding power distance, perceived company climate, and ethical leadership shape individual beliefs towards unethical practices, which in turn carry on the effects of these variables onto tolerance of specific cases of unethical behavior in the organization. Indeed, hierarchical regression analyses suggested that power distance and a lax organizational climate negatively influence individual beliefs about ethics, which in turn functioned as a mediator of these effects onto tolerance of unethical behavior. In addition, ethical leadership strengthened the positive effect of an ethical climate, whereas tenure attenuated the negative effect of power distance on ethical beliefs. Management recommendations for the development of an ethical climate in state-owned companies, including the key role of mid and top-level management, are formulated.

Keywords:

Tolerance of unethical behavior, Power distance, Individual values, Ethical climate, Ethical leadership

82.綠色供應鏈管理研究趨勢的文本挖掘分析(2000-2010)

伍向豪、郭建中

澳門科技大學 行政與管理學院

會議/刊物名稱：

第八屆供應鏈管理和信息系統國際會議，EI 檢索，會議文章

內容簡介：

近年來，許多研究都著重在綠色供應鏈管理上，但很少有針對研究趨勢的相關研究出現，因此本研究以文本挖掘法就研究趨勢進行分析，發現綠色供應鏈管理研究在 2000-2010 年間由環境議題轉向為可持續發展和生產過程。

關鍵詞：

綠色供應鏈管理、文本挖掘、趨勢、KNIME

82.The Trend of Green Supply Chain Management Research(2000-2010): A Text Mining Analysis

Wu, SH (Wu Shiang-Hau); Guo, JJ (Guo Jiann-Jong)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of 2010 8th International Conference on Supply Chain Management and Information System, EI indexed, conference paper

Abstract:

In recent years, much research has been devoted to the exploration of the green supply chain management (GSCM); however, few have deployed the study of the trend of green supply chain management research. In fact, grasping the trend of the green supply chain management is imperative for enterprises and researchers. The study aims at analyzing the trend change of the green supply chain management from 2000 to 2010. The contribution of the study includes the following two points. First, the study has found the shift of the green supply chain research from the environmental focus to the topics of sustained development and manufacturing. Second, the study finds a new way of literature survey by using the text mining method in order to explore the trend change.

Keywords:

Green supply chain management, Text mining, Trend, Konstanz Information Miner (KNIME)

83.海水去鹽化技術研究趨勢 (2000-2010)

伍向豪、郭建中
澳門科技大學 行政與管理學院

會議/刊物名稱：

2010 國際管理科學會議論文集，會議文章

內容簡介：

近年來，海水去鹽化技術雖然由相關論文出現，但是極少有研究針對當前的研究趨勢進行探討。本文的主要貢獻在於發現從2000年至2010年海水去鹽化技術的趨勢從與太陽能有關的議題轉變為和細胞膜與能源有關的議題。本文也提供了從文本挖掘作文獻探討的新方法。

關鍵詞：

海水去鹽化技術、文本挖掘、趨勢、細胞膜、KNIME

83.A Study on the Trend of Water Desalination Technologies Research (2000-2010)

Wu, SH (Wu Shiang-Hau); Guo, JJ (Guo Jiann-Jong)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of 2010 International Conference of Management Science, conference paper

Abstract:

In recent years, much research has been devoted to the water desalination technologies; however, few have deployed the study of the research trend. In fact, grasping the trend of the water desalination technologies research is imperative for enterprises and researchers. The study aims at analyzing the trend change of the water desalination technologies research from 2000 to 2010. The contribution of the study includes the following two points. First, the study has found the shift of the water desalination technologies research from the solar-related issues to the topics of membrane and energies. Second, the study finds a new way of literature survey by using the text mining method in order to explore the trend change.

Keywords:

Water Desalination Technologies, Text mining, Trend, Membrane, Konstanz Information Miner (KNIME)

84. 澳門特區施政報告的文本挖掘分析(2000-2009)

伍向豪、郭建中
澳門科技大學 行政與管理學院

會議/刊物名稱：

互聯網及應用國際研討會，中國武漢，2010 年 8 月 21-23 日，EI Compendex，會議文章

內容簡介：

本文應用文本挖掘法分析澳門特區 2000-2009 年的施政報告，發現澳門特區的政策焦點在與治理及發展，忽略文化及產業政策。

關鍵詞：

文本挖掘、政府資訊處理、政策、文本分析

84.The Study on Policy Addresses of Macao SAR (2000-2009): A Text Mining Analysis

Wu, SH (Wu Shiang-Hau); Guo, JJ (Guo Jiann-Jong)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of ITAP2010, Wuhan, China, 21-23 Aug 2010, EI Compendex, conference paper

Abstract:

The study applies the text mining method to analyze the policy addresses of Macau Special Administrative Region (SAR) government from 2000 to 2009, and finds the main policy focuses of Macao SAR government are governance and development and ignore cultural and industrial policies.

Keywords:

Data mining, Government Data processing, Government policies, Text analysis

85.無線射頻辨識在供應鏈管理的應用趨勢分析(2009-2010)

伍向豪、石永東
澳門科技大學 行政與管理學院

會議/刊物名稱：

企業網絡管理國際期刊，4 (2): 92-102

內容簡介：

本文以文本挖掘法探討無限射頻辨識在供應鏈管理應用的趨勢，發現從 2009 年至 2010 年，趨勢從技術層面轉向為系統和企業應用。本文提供以文本挖掘法探討趨勢轉變的新方法。

關鍵詞：

RFID、供應鏈管理、文本挖掘、KNIME

85.The Trend of RFID Application to the Supply Chain Management (2009-2010): A Text Mining Analysis

Wu, SH (Wu Shiang-Hau); Shi, YD (Shi, Y. D.)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Int. J. Enterprise Network Management, 4 (2): 92-102

Abstract:

In recent years, much research has been devoted to the exploration of the application of RFID to the supply chain management; however, few have deployed the study of the trend of RFID application. In fact, grasping the trend of the RFID application in the supply chain management is imperative for enterprises and researchers. The study aims at exploring the trend change of the RFID application from the year of 2009 to 2010. The contribution of the study includes the following two points. First, the study has found the shift of the RFID application from the technological focus to the topics of system and companies usage. Second, the study finds a new way of literature survey by using the text mining method in order to explore the trend change.

Keywords:

Radio Frequency Identification (RFID), Supply chain management, Text mining, KNIME

86. 綠色國際關係研究的文本挖掘分析(1990-2010)

伍向豪、徐勁飛

澳門科技大學 行政與管理學院

會議/刊物名稱：

2010 中國研究年會，台灣，2010 年 12 月 18 日，會議文章

內容簡介：

本文以文本挖掘法探索 1990 年至 2010 年綠色國際關係的研究趨勢。本研究發現綠色國際關係研究趨勢從環境議題轉變為公平與變革的議題焦點。本文也提供以文本挖掘探索趨勢轉變的新研究方法。

關鍵詞：

文本挖掘、綠色國際關係、趨勢

86.A Study on The Trend of Green International Relations Research (1990-2010): A Text Mining Analysis

Wu, SH (Wu Shiang-Hau); Xu, JF (Xu Jin-Fei)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Proceedings of 2010 Annual Conference of China Study, Taiwan, 18 Dec 2010, conference paper

Abstract:

In recent years, some researches have been devoted to the theory and application to the green international relations; however, few have deployed the study of the trend of green international relations research. In fact, grasping the trend of the green international relations research is imperative for academic researchers. The study aims at analyzing the trend change of the green international relations from 1990 to 2010. The contribution of the study includes the following two points. First, the study has found the shift of the green international relations research from the environmental focus to the topics of justice and change. Second, the study finds a new way of literature survey by using the text mining method in order to explore the trend change.

Keywords:

Text mining, Green International Relations, Trend

87.美國社區銀行的優勢與績效

趙世勇、香伶

澳門科技大學 行政與管理學院

會議/刊物名稱：

經濟學動態，592 (6): 129-134 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

美國的社區銀行在美國經濟中具有獨特的地位，它在服務包括小企業主、農場主以及中低收入群體的小客戶群上具有競爭優勢，它還是非住宅不動產項目貸款的重要發放者，同時，它在小額儲蓄服務上也起著獨樹一幟的作用。美國的社區銀行是美國金融業不可或缺的一部分，社區銀行同時在世界上的許多國家也展現出其強大的生命力。美國社區銀行的經驗非常值得我們發展中國家借鑒。

關鍵詞：

社區銀行、商業銀行、小額貸款

87.The Competitive Advantage and Market Performance of American Community Banks

Zhao, SY (Zhao Shi-Yong); Xiang, L (Xiang Ling)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Economic Perspectives, 592 (6): 129-134 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

American community banks have a unique position in the American economy, and it has great competitive advantages in serving small businesses, famers, and middle and low-income customers. And they are also important loan granters to non-residential real estate projects. American community banks are an indispensable part of the financial community of the United States. They have great competitiveness in many developing countries. China can learn from the experience from American community banks.

Keywords:

Community Banks, Commercial Banks, Micro Loans

88. “扶持之手”，還是“掠奪之手”？——中國民營企業地區發展 不平衡的一個解釋

趙世勇

澳門科技大學 行政與管理學院

會議/刊物名稱：

山東經濟，26 (3): 26-38 2010

內容簡介：

本文對中國民營企業地區發展不平衡的現象給出了一個解釋。利用全國工商聯連續四年對上規模民營企業的調研資料，作者發現，中國民營企業的發展存在著嚴重的地區不平衡問題，而且這種不平衡非但沒有收斂，而且有擴大的趨勢。本文提出了解釋這個現象的一個假說：中國民營企業地區發展不平衡內生於地方政府的行為。民營企業發達的地區，地方政府更多是「隻“扶持之手”」-- 保護產權、講求誠信、有限與服務；民營企業發展落後的地區，地方政府更多是「隻“掠奪之手”」-- 侵犯產權、機會主義、管制與尋租。我們用簡單的模型論證了假說，並用調研案例進行了輔證。

關鍵詞：

民營企業、扶持之手、掠奪之手、民營企業發展地區差距

88.Helping Hand, or Grabbing Hand? - An Explanation to the Disparity of Chinese Private Enterprises Development across Regions

Zhao, SY (Zhao Shi-Yong)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Shandong Economy, 26 (3): 26-38 2010

Abstract:

This paper gives an explanation to the disparity of Chinese private enterprises development across regions. From the statistical data on Chinese large-sized private enterprises gathered by the All China Federation for Industry and Commerce (ACFIC) for 4 consecutive years, we find that there is sharp disparity of Chinese private enterprises development across regions. And this disparity does not converge, and on the contrary, it expands. This paper offers a hypothesis to this phenomenon, namely, the disparity endogenizes from local government's behavior. In regions with highly developed private enterprises, local governments are generally playing a "helping hand," i.e., protecting private property rights, seeking reputation, limiting their involvement in the economy and providing services to private sector. While in those regions with less developed private enterprises, local governments are generally playing a "grabbing hand," i.e., infringing on private property rights, being opportunistic, exerting more regulation and seeking rent. We used a simple model to prove the hypothesis and side-verified it by cases.

Keywords:

Private Enterprises, Helping Hand, Grabbing Hand, Private Enterprise Development Regional Disparity

89. 中國大型民營企業的績效變化及其決定因素(2003-2006) ——

基於全國工商聯上規模民營企業調研數據的實證研究

趙世勇、劉小玄

澳門科技大學 行政與管理學院

會議/刊物名稱：

新政治經濟學評論，14: 41-60 2010

內容簡介：

政府在經濟發展中的作用一直是理論研究和政策辯論中一個持久的熱門問題，特別是在發展中國家和轉型中國家，這個問題更具爭議性。本文利用全國工商聯連續四年對上規模民營企業的年度調研數據，研究了中國大型民營企業 2003 年以來的績效變化及其決定因素，特別分析了政府政策和企業績效之間的因果關係。研究發現，2003 年以來，中國大型民營企業績效下降的主要原因在於政府實施宏觀調控導致的企業融資困難，以及國有企業對上游產業的壟斷導致的民營企業原材料價格上漲。

關鍵詞：

大型民營企業、宏觀調控、融資困難

89.The performance Change of Chinese Large-sized Private Enterprises and Underlying Determinants During 2003-2006

Zhao, SY (Zhao, Shi-Yong); Liu, XX (Liu, Xiao-Xuan)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Review of New Political Economy, 14: 41-60 2010

Abstract:

The relationship between government policy and economic development has been a long-standing topic in both academic research and policy debate. The government of a transitional economy is playing an even greater role in its economy. In the past three decades, the Chinese economy has been growing very rapidly, due to the rapid development of the private sector. The performance of private enterprises in China, however, is still highly affected government policies. In this paper, we examined the performance change of Chinese large-sized private enterprises during 2003-2006, and tested possible determinants of this change. We conclude that the Chinese government's discriminating policies against private enterprises are the main cause of the private sector's downturn.

Keywords:

Large-sized Private Enterprises, Macro-control, Financing Difficulty

90. 制度環境與民營企業發展地區差異

趙世勇、香伶

澳門科技大學 行政與管理學院

會議/刊物名稱：

福建論壇(人文社會科學版)，11:4-10 NOV 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)年版

內容簡介：

分析全國工商聯連續 8 年對"上規模民營企業 500 家"的調研資料發現:中國民營企業的發展存在著嚴重的地區差異問題，而且這種差異近十年來沒有收斂的趨勢。對於中國大型民營企業地區發展不平衡的現象，提出解析這個現象的一個假說是：中國民營企業地區發展差異內生於地方的制度環境差異，特別是地方政府的行為差異。民營企業發達的地區，地方政府更多是「隻"扶持之手"——保護產權、講求誠信、有限與服務；民營企業發展落後的地區，地方政府更多是「隻"掠奪之手"——侵犯產權、機會主義、管制與尋租。

關鍵詞：

民營企業、地區差異、地方政府、制度環境

90.The Institutional Environment and Difference in Private Enterprise Development in China

Zhao, SY (Zhao Shi-Yong); Xiang, L (Xiang Ling)

Faculty of Management and Administration, Macau University of Science and Technology

Name of Conference/Journal:

Fujian Tribune (The Humanities and Social Sciences Monthly), 11: 4-10 NOV 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

This paper gives an explanation to the disparity of Chinese large-sized private enterprises development across regions. From the statistical data on the Top 500 Chinese large-sized private enterprises gathered by the All China Federation for Industry and Commerce (ACFIC) for eight consecutive years, we find that there is sharp disparity of Chinese private enterprises development across regions. And this disparity has not been converging for nearly 10 years. This paper offers a hypothesis to this phenomenon, namely, the disparity endogenizes from local institutional environment, especially local government's behavior. In regions with highly developed private enterprises, local governments are generally playing a "helping hand," i.e., protecting private property rights, seeking reputation, limiting their involvement in the economy and providing services to private sector. While in those regions with less developed private enterprises, local governments are generally playing a "grabbing hand," i.e., infringing on private property rights, being opportunistic, exerting more regulation and seeking rent. We used a simple model to prove the hypothesis.

Keywords:

Private Enterprises, Regional Difference, Local Government, Institutional Environment

91.關於中國網絡購物中的物流服務質量的實證研究

黃斐、賴嘉偉、王佳
澳門科技大學 行政與管理學院

會議/刊物名稱：

第十屆電子商務國際學術會議，上海，會議文章

內容簡介：

近年來，許多研究都著重在綠色供應鏈管理上，但很少有針對研究趨勢的相關研究出現，因此本研究以文本挖掘法就研究趨勢進行分析，發現綠色供應鏈管理研究在 2000-2010 年間由環境議題轉向為可持續發展和生產過程。

關鍵詞：

網絡、物流服務質量、客戶期望、第三方物流

91. An Empirical Study on The Logistics Service Quality of Online

Huang, F (Huang Fei); Lai, KW (Lai Ka-Wai); Wang, J (Wang Jia)
Faculty of Management and Administration, Macau University of Science and
Technology

Name of Conference/Journal:

Proceedings of the 10th International Conference on Electronic Business, Shanghai, conference paper

Abstract:

In recent years, much research has been devoted to the exploration of the green supply chain management (GSCM); however, few have deployed the study of the trend of green supply chain management research. In fact, grasping the trend of the green supply chain management is imperative for enterprises and researchers. The study aims at analyzing the trend change of the green supply chain management from 2000 to 2010. The contribution of the study includes the following two points. First, the study has found the shift of the green supply chain research from the environmental focus to the topics of sustained development and manufacturing. Second, the study finds a new way of literature survey by using the text mining method in order to explore the trend change.

Keywords:

Online Shopping, logistics Service Quality, Customer Expectation, Third-party logistics

92.刑法主觀主義論要——以〈澳門刑法典〉為分析文本

方泉

澳門科技大學 法學院

會議/刊物名稱：

刑法論叢，23 (3) AUG 2010，CSSCI 來源集刊檢索

內容簡介：

本文從澳門刑法典的犯罪成立的有關規定出發，對澳門刑法典的基本立場作一系統總結評價，即澳門刑法典是一部主觀主義的刑法典。在犯罪成立的各個環節和制度上均有所體現，在分則罪名上也是如此。這一基本立場可能與人權保障形成一定的緊張關係。

關鍵詞：

刑法主觀主義、澳門刑法典、刑法客觀主義

92.On Criminal Subjectivism: Macau Criminal Law as an Analytical Sample

Fang, Q (Fang Quan)

Faculty of Law, Macau University of Science and Technology

Name of Conference/Journal:

Criminal Law Review, 23 (3) AUG 2010, CSSCI indexed

Abstract:

Criminal Subjectivism is one of the two basic stands of criminal legislation that is centered by the concept of criminal personality, with which a distinction is made from criminal objectivism or subjective imputation. The stand in question is subject to ignoring human rights with value of correction though. Macau Criminal Law has a strong inclination towards subjectivism, concluded either from the way of constituting crimes or punishing, either from the macro legislative mode or the micro facts description of a crime. The article gives some advices for law-reform in the coming future.

Keywords:

Subjectivism, Objectivism, Macau Penal Cod

93.澳門污點證人制度研究

趙琳琳

澳門科技大學 法學院

會議/刊物名稱：

刑偵與法制，總第 49 期

內容簡介：

新修訂的澳門《選民登記法》和《立法會選舉法》均引入了污點證人制度，體現了澳門政府打擊賄選的決心。其實，澳門《廉政公署組織法》、《有組織犯罪法》等法規中早已建立了這一制度，遺憾的是，在澳門司法實踐中，這一制度並沒有得到實現。鑑於污點證人制度的獨特功能和價值，我們應當找到澳門污點證人制度運行不暢的原因，進而指出澳門污點證人制度的出路，儘快將這項制度運用於個案的辦理中，以更有效地打擊犯罪，這也關係到澳門法治能否長遠、健康發展。

關鍵詞：

污點證人、證人保護

93. Research on the System of Tainted Witness System

Zhao, LL (Zhao Lin-Lin)

Faculty of Law, Macau University of Science and Technology

Name of Conference/Journal:

Criminal Investigation and Legal Systems, Vol.49

Abstract:

The tainted witness systems have been established in Macau. But it is a pity that this system hasn't been applied in the practice. Due to the function of it, we should find the reasons and then improve the situation.

Keywords:

Tainted witness, Witness protection

94. 論澳門刑事訴訟法修改的難度與對策

趙琳琳

澳門科技大學 法學院

會議/刊物名稱：

行政，23 (1): 19-30 MAR 2010

內容簡介：

澳門司法效率不高的現實一直為人們所關注，就刑事司法領域而言，在不能大幅增加司法官的背景，改革現有制度就成為務實的一種選擇。如今，澳門刑事訴訟法典的修改已經納入計畫，此次修改應當堅持科學的、開放的、發展的態度，從預審制度、簡易程序等入手加以完善，並嘗試建立和解制度和辯訴交易制度等。

關鍵詞：

預審制度、簡易程序

94. The Difficulty and Countermeasures of the Revision to the Criminal Procedural Law of Macau

Zhai, LL (Zhao Lin-Lin)

Faculty of Law, Macau University of Science and Technology

Name of Conference/Journal:

Administration, 23 (1): 19-30 MAR 2010

Abstract:

The people have paid much attention to the reality of the low judicial efficiency in Macau. As far as the criminal justice is concerned, we can choose to reform the present systems under the background that the judicial officials can't be added adequately. Now the revision to the Macau Criminal Procedural Law has been listed in the plan. We should stick to the scientific, open and developing attitude, start from the pretrial systems and summary trial systems, and attempt to set up the reconciliation systems and plea bargaining systems.

Keywords:

Preliminary hearing system, Summary proceedings

95. 建立具有本澳特色的仲裁和調解制度

趙琳琳

澳門科技大學 法學院

會議/刊物名稱：

"一國兩制"與澳門特區法制建設研討會，澳門，2010年6月22日，會議文章

內容簡介：

如今，ADR 在許多國家已成為與訴訟並駕齊驅、功能互補的重要糾紛解決機制。但澳門由於種種原因適用 ADR 解決糾紛的並不多見，這也客觀上加重了法院的辦案負擔。因此，無論是從現實還是從長遠來看，澳門應當儘快轉變觀念，加大 ADR 方式在澳門特區的適用率，以有效解決眼下司法效率不高的難題，也符合世界發展趨勢。

關鍵詞：

仲裁、調解

95. To Establish Macau-styled Arbitration and Mediation Systems

Zhao, LL (Zhao Lin-Lin)

Faculty of Law, Macau University of Science and Technology

Name of Conference/Journal:

"One country, Two Systems" and the Law Construction of Macau, Macau, 22 Jun 2010, conference paper

Abstract:

Now, ADR has become more important in resolving the disputes in many countries. But it is not the case in Macao due to various reasons, and this also objectively aggravates the burden of the courts. Therefore, regardless of from the reality or in the long run, Macao must transform the idea as soon as possible, and enlarge the rate of ADR application.

Keywords:

Arbitration, Mediation

96.精神與制度——論澳門法制建設

黎曉平

澳門科技大學 法學院

會議/刊物名稱：

"一國兩制"研究，ISSN2074-8124 2010，No.3, p.5-8

內容簡介：

本文對法的精神與制度進行了理論的闡釋，指出了澳門法制之精神層面上的缺失。本文對澳門法制建設從精神與制度兩個方面進行了深入的理論探討。

關鍵詞：

澳門、法的精神、法制建設

96. The Sprit and System----Studies on the Construction of Macau legal System

Li, XP (Xi Xiao-Ping)

Faculty of Law, Macau University of Science and Technology

Name of Conference/Journal:

Academic Journal of One Country Two Systems, ISSN2074-8124 2010，No.3, p.5-8

Abstract:

This thesis has exchanged the spirit and system of law. It points out Macau legal system's lack in spiritual level. In this paper, the two aspects of the spirit and system has been explored in depth.

Keywords:

Macau, the sprit of Law, Construction of legal system

97. 一種方便的檢測細胞內 DNA 糖基化酶活性的光譜學方法

李石營、黃啓來、王璐、蘭燕、張鑫、楊丙雅、杜攀、華子春
澳門科技大學 中醫藥學院

會議/刊物名稱：

Acta Biochim Biophys Sin (Shanghai), 42 (6): 381-387

內容簡介：

胞嘧啶甲基化是一種非常重要的生物學過程，但是因為 5'-甲基胞嘧啶自發水解造成的脫氨基化生成胸腺嘧啶，產生 G:T 錯配，是基因組不穩定的來源。胸腺嘧啶 DNA 糖基化酶和甲基-CpG 結合蛋白 4 是錯配修復過程中主要的糖基化酶，多種研究中都對他們的活性進行了測定。在本研究中，我們發展了一種方便的光譜學分析系統，來特異性的定量檢測細胞內 DNA 糖基化酶的活性。我們以 pGL3-control 為基礎，在螢光素酶編碼序列上游引入一個 G:T 錯配，只有當 G:T 錯配被正確修復為 G:C 之後，螢光素酶才能正確表達。通過檢測螢光素酶活性就可以簡單方便的測定細胞內 DNA 糖基化酶的活性。

關鍵詞：

DNA 糖基化酶活性、細胞內、螢光素酶、胸腺嘧啶 DNA 糖基化酶

97.A convenient spectrometric assay system for intracellular quantitative measurement of DNA glycosylase activity

**Li, SY (Li Shi-Ying); Huang, QL (Huang Qi-Lai); Wang, L (Wang Lu);
Lan, Y (Lan Yan); Zhang, X (Zhang Xin); Yang, BY (Yang Bing-Ya);
Du, P (Du Pan); Hua, ZC (Hua Zhi-Chun)**

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Acta Biochim Biophys Sin (Shanghai), 42 (6): 381-387

Abstract:

Cytosine methylation is a vital biology event. However, it is also the source of genomic instability due to deamination of 5'-methylcytosine by spontaneous hydrolysis, which produces thymine and results in G:T mismatches. Thymine DNA glycosylase and methyl-CpG-binding protein 4 are major DNA glycosylases involved in the mismatch repair progress, and their activities have been measured in many related researches. In this study, we developed a convenient spectrometric assay system for specific and quantitative measurement of intracellular DNA glycosylase activity. A G:T mismatch was introduced into the upstream region of firefly luciferase-coding sequence in the pGL3-control plasmid. Only if the G:T mismatches were repaired to G:C, will luciferase be expressed in transfected cells. By measuring luciferase activity, which is simple and convenient, the intracellular DNA glycosylase activity can be determined.

Keywords:

DNA glycosylase activity, Intracellular, Luciferase, Thymine DNA glycosylase

98.冬凌草甲素：一種有希望的來源於中藥的誘導細胞死亡的抗 癌藥物

張文靜、黃啓來、華子春
澳門科技大學 中醫藥學院

會議/刊物名稱：

南京大學學報 (自然科學), 46: 62-64 MAY 2010, 中文核心期刊要目總覽(2008)

內容簡介：

冬凌草甲素是一種從冬凌草中分離出來的雙萜類化合物，研究證實它具有很強的抗腫瘤活性。本文重點綜述化合物結構及修飾與抗腫瘤活性之間的關係，並討論其抗腫瘤活性的分子機制。

關鍵詞：

冬凌草加速、腫瘤細胞死亡、抗癌

98.Oridonin: A promising cell death-inducing anticancer drug from China

Zhang, WJ (Zhang Wen-Jing); Huang, QL (Huang Qi-Lai);
Hua, ZC (Hua Zhi-Chun)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Nanjing University (Natural Science), 46: 62-64 MAY 2010, A Guide to the Core Journals of China(PKU)

Abstract:

Oridonin, a diterpenoid isolated from *Rabdosia rubescens* (Hemsl.) Hara, has been proved to possess remarkable anticancer potential. The current review focuses on relationship between the chemical structure/modification and antitumor activity of oridonin, and discusses the molecular mechanisms underlying its antitumor activity.

Keywords:

Oridonin, Tumor cell death, Anticancer

99. 一種來源於中國的有前景的抗癌藥物：冬凌草甲素

張文靜、黃啓來、華子春
澳門科技大學 中醫藥學院

會議/刊物名稱：

Frontiers in Biology, 5 (6): 540-545

內容簡介：

冬凌草甲素是一種從冬凌草中分離出來的雙萜類化合物，研究證實它除了具有抗炎癥和抗菌作用還有很強的抗腫瘤活性。本文重點綜述化合物結構及修飾與抗腫瘤活性之間的關係，並討論其抗腫瘤活性的分子機制，比如抑制腫瘤增殖，誘導腫瘤細胞凋亡已經 i 信號傳導。

關鍵詞：

冬凌草甲素、化學結構、抗腫瘤、信號轉導

99. Oridonin: A promising anticancer drug from China

Zhang, WJ (Zhang Wen-Jing); Huang, QL (Huang Qi-Lai);
Hua, ZC (Hua Zi-Chun)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Frontiers in Biology, 5 (6): 540-545

Abstract:

Oridonin, a diterpenoid isolated from *Rabdosia rubescens* (Hemsl.) Hara, has been proved to possess remarkable anticancer activity, in addition to its potential in antiinflammation and antibacteria. The purpose of this article is to review current progress in oridonin concerned about a relationship between the chemical structure/modifications and its anticancer activity and to discuss the molecular mechanisms underlying its anticancer activity, such as suppression of tumor proliferation and induction of tumor cell death, and the cell signal transduction in anticancer activity of oridonin.

Keywords:

Oridonin, Chemical structure, Antitumor, Signal transduction

100.冬凌草甲素抗腫瘤作用的研究進展

張文靜、黃啓來、華子春
澳門科技大學 中醫藥學院

會議/刊物名稱：

生命科學，22 (5): 416-420 MAY 2010，中文核心期刊要目總覽(2008)

內容簡介：

冬凌草甲素是從唇形科香茶菜屬植物中分離出的對映貝殼杉烯二萜類有機化合物，具有廣泛的抗腫瘤活性。該文將就冬凌草甲素抗腫瘤活性的化學構效關係及其抗腫瘤機製做綜述。

關鍵詞：

冬凌草甲素、化學結構、抗腫瘤

100. Research progress in oridonin for antitumor activity

Zhang, WJ (Zhang Wen-Jing); Huang, QL (Huang Qi-Lai);
Hua, ZC (Hua Zhi-Chun)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Chinese Bulletin of Life Sciences, 22 (5): 416-420 MAY 2010, A Guide to the Core Journals of China(PKU)

Abstract:

Oridonin, a diterpenoid isolated from *Rabdosia rubescens* (Hemsl.) Hara, has been proved to possess remarkable anticancer potential. The current review focuses on relationship between the chemical structure, modification and antitumor activity of oridonin, and discusses the molecular mechanisms underlying its antitumor activity.

Keywords:

Oridonin, Chemical structure, Antitumor

101.肺癌中西醫結合治療研究進展

李煥儀、吳其標

澳門科技大學 中醫藥學院

會議/刊物名稱：

世界中醫藥，5 (2): 149-150

內容簡介：

肺癌為當前世界各地最常見的惡性腫瘤之一，臨床上，大部分肺癌患者就診時已失去了手術根治的機會，單純放、化療的效果也不理想。中西醫結合治療肺癌有鮮明的特色和優勢，並且取得了較好的臨床療效。中醫藥療法是我國肺癌治療的特色，實踐已證明應用中西醫結合治療肺癌，在減毒增效、提高生活品質及延長生存期等方面顯示了明顯優勢。文章就近幾年來肺癌的中西醫結合治療進展作一綜述，旨在為肺癌的中西醫結合治療及深入研究提供思路和途徑。

關鍵詞：

肺癌、中西醫結合、治療、綜述

101. Research Progresses in Treatment of Lung Cancer with Integrated Traditional and Western Medicine

Li, HY (Li Huan-Yi); Wu, QB (Wu Qi-Biao)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

World Chinese Medicine, 5 (2): 149-150

Abstract:

Lung cancer is one of the most common malignant tumors, most of the patients with lung cancer have lost the opportunity of operation, and radiotherapy or chemotherapy fail to achieve satisfying results. The Integrated Traditional and Western Medicine (ITWM) is distinctive, good at treating lung cancer, and showed good efficacy. Traditional Chinese Medicine treatment is the character of lung cancer therapy in China, clinical practice has showed the superiority of ITWM therapy, it can be adopted as an effective therapeutic program with low-toxicity, better efficacy, life quality improvement, prolonged survival, etc. In this paper, recent research progresses in the treatment of lung cancer with ITWM were reviewed, aiming to provide enlightenment and approach to the treatment and further research of lung cancer.

Keywords:

Lung cancer, Integrated Traditional and Western Medicine (ITWM), Treatment, Research progress, Review

102.慢性阻塞性肺疾病中西醫診治概述

吳其標、曹世宏

澳門科技大學 中醫藥學院

會議/刊物名稱：

澳門中醫藥雜誌，創刊號

內容簡介：

慢性阻塞性肺疾病（簡稱慢阻肺）是一種全球性高患病率的疾病，也是病死率較高的重要疾病，其病情呈緩慢進行發展，嚴重影響患者的勞動能力和生活品質。其發病情況已在全球引起重視，在歐美和日本，慢阻肺均居呼吸病發病率的首位。文章就近幾年來慢阻肺的中西醫結合治療進展作一綜述，旨在為慢阻肺的中西醫結合治療及深入研究提供思路和途徑。

關鍵詞：

慢阻肺、中西醫結合、治療、綜述

102.Review of Diagnosis and Treatment of COPD with Chinese and Western medicine

Wu, QB (Wu Qi-Biao); Cao, SH (Cao Shi-Hong)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Macau Journal of Chinese medicine, first issue

Abstract:

COPD is a common,intractable disease of respiratory system. In this paper,recent research progresses of diagnosis and treatment of COPD with TCM and western medicine were reviewed,aiming to provide enlightenment and approach to treatment and further research of COPD.

Keywords:

COPD, Integrated Chinese and Western medicine, Treatment, Review

103.秋季養生，重在養肺

吳其標

澳門科技大學 中醫藥學院

會議/刊物名稱：

澳門中醫藥雜誌，創刊號

內容簡介：

秋季養生應遵循中醫養生中提出的“秋冬養陰”的原則，注意護陰潤燥，以養肺為先。中醫認為，“秋氣通於肺”，即肺與秋氣相應，秋季肺氣旺，秋季既是傷肺之際，又是養肺之時，關鍵在於如何調理。

關鍵詞：

秋季、養生、肺、綜述

103.Nourishing Lung is the key to health promotion in autumn

Wu, QB (Wu Qi-Biao)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Macau Journal of Chinese medicine, first issue

Abstract:

Health promotion in autumn should follow the principle “nourishing Yin in the autumn and winter” according to TCM theory, attention should be paid to retain Yin, moisten dryness, the most important is to nourish lung Yin. "autumn air goes through the lung", the autumn air is related to the lung, the autumn is not only the time the lung is predisposed to injury, but also the perfect time the lung should be nourished, the key is how to nurse the lung.

Keywords:

Autumn, Nourishing Lung, Health promotion, Review

104.人工麝香預處理血清對大鼠離體心臟缺血-再灌注損傷的保護作用

朱雪晶、李海濤、吳其標
澳門科技大學 中醫藥學院

會議/刊物名稱：

現代中藥研究與實踐，24 (3): 38-39 MAR 2010

內容簡介：

研究人工麝香預處理血清對大鼠離體心臟缺血一再灌注損傷的保護作用及其機制。方法 建立 Langendorff 大鼠離體心臟模型。張力換能器監測離體心臟張力的變化。觀察心肌勻漿中肌酸激酶 (CK)、乳酸脫氫酶 (LDH)、丙二醛 (MDA)、超氧化物歧化酶 (SOD)、Na⁺-ATPase、Ca²⁺-ATPase 等的變化。結果 含人工麝香高濃度血清與模型組相較，張力無明顯變化，降低缺血再灌注時引起的 CK、LDH 的升高 (p<0.05)；組織中 SOD 含量升高 (p<0.05)；降低 Ca²⁺-ATPase 含量 (p<0.05)。結論 人工麝香預處理血清對大鼠離體心臟缺血一再灌注損傷有保護作用，可能與抑制心肌酶活性、減少自由基過氧化、抑制 Na⁺-Ca²⁺交換有關。

關鍵詞：

人工麝香、缺血一再灌注損傷、心肌酶、Na⁺-Ca²⁺交換

104. Protective Effect of Artificial Musk Preconditioning on Rat Myocardial Ischemic and Reperfusion Injury

Zhu, XJ (Zhu Xue-Jing); Li, HT (Li Hai-Tao); Wu, QB (Wu Qi-Biao)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Research and Practice on Chinese Medicines, 24 (3): 38-39 MAR 2010

Abstract:

To study the protective effect of artificial musk preconditioning on myocardial ischemia and reperfusion injury and its mechanism in rat. Methods The isolated perfused rat heart set up by Langendorff system. The tension transducer to monitor the changes in tension of isolated heart. The creatine phosphokinase (CK), lactate dehydrogenase (LDH), the activities of superoxide dismutase (SOD), the maleic dialdehyde (MDA), the Na⁺-ATPase and the Ca²⁺-ATPase activities in myocardium were measured. Results The artificial musk high dose markedly inhibited the reductions of CK and LDH (p<0.05), increase of SOD content (p<0.05), inhibited the Ca²⁺-ATPase activities (p<0.05) in myocardium. Conclusion The artificial musk markedly protective effect on ischemia and reperfusion injury in isolated rat heart by inhibited enzymatic activity, attenuating oxygen free radicals and inhibited Na⁺-Ca²⁺ exchange.

Keywords:

The artificial musk, Ischemia-reperfusion, Enzymatic activity, Na⁺-Ca²⁺ exchange

105.人工麝香口崩片製劑處方優化的研究

李海濤、吳其標、徐斌
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會議/刊物名稱：

現代中藥研究與實踐，24 (2): 45-46 FEB 2010

內容簡介：

研究人工麝香口崩片製備工藝及優化處方，製備人工麝香口崩片制劑。方法以片劑的崩解時間為指標，採用正交實驗評價篩選人工麝香口崩片的處方組成，並優化製備工藝。結果選用粉末直接壓片法製備，優化所得處方為微晶纖維素 50%，低取代羥丙基纖維素 13%，交聯羧甲纖維素鈉 10%，乳糖 20%。以此處方製備的人工麝香口崩片崩解時間不超過 1 min，硬度為 4~7 kg。結論篩選所得的處方合理穩定，崩解快，為快速起效的口腔崩解片。

關鍵詞：

人工麝香口崩片、製備工藝、正交實驗

105.Study on Pharmaceutical Technology of the Orally Disintegrating Tablets of Artificial-musk

Li, HT (Li Hai-Tao); Wu, QB (Wu Qi-Biao); Xu, B (Xu Bin)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Research and Practice on Chinese Medicines, 24 (2): 45-46 FEB 2010

Abstract:

To optimize the prescription and study pharmaceutical technology of the orally disintegrating tablets of artificial-musk. Methods Disintegration time as an index, the optimization prescription design and technique were obtained by orthogonal design. Results The technique of direct powder compression was used, the optimized formulation contained 50% microcrystalline cellulose, 13%L-hydroxypropyl cellulose, 10%sodium carboxymethyl starch and 20% lactose. Conclusions It is successful to prepare the orally disintegrating tablets of artificial-musk with immediate release tablet.

Keywords:

The orally disintegrating tablets of artificial-musk, Preparation process, Orthogonal design

106.人工麝香對大鼠高脂血癥影響的實驗研究

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澳門科技大學 中醫藥學院

會議/刊物名稱：

中國臨床藥理學與治療學，15 (9): 1008-1011

內容簡介：

觀察人工麝香對大鼠高脂血癥的影響。

方法：SD 大鼠，隨機分為 6 組，每組 10 只。空白組正常飼養，其餘 5 組高脂乳劑灌胃同時給藥，連續 4 周。末次給藥後 1 h，取血離心制備血清，檢測 TC、TG、高密度脂蛋白(HDL-C)、低密度脂蛋白(LDL-C)含量，用雙抗體夾心 ELISA 法測定血清 C 反應蛋白(CRP)、內皮素-1(ET-1)、腫瘤壞死因子 α (TNF- α) 的變化。

結果：與模型組比較，人工麝香低、中、高劑量(3、6、12 mg/kg)能明顯降低 TC、TG 的升高($P < 0.05$)，對 LDL-C 的升高有一定的降低作用；人工麝香高劑量能明顯降低大鼠血清 CRP、ET-1、TNF- α ($P < 0.05$)。

結論：人工麝香對大鼠高脂血癥具有明顯的調節作用。

關鍵詞：

人工麝香、高脂血癥、血脂

106.Effects of artificial musk on hyperlipemia in rats

Li, HT (Li Hai-Tao); Zhu, XJ (Zhu Xue-Jing); Wu, QB (Wu Qi-Biao)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Chinese Journal of Clinical Pharmacology and Therapeutics, 15 (9): 1008-1011

Abstract:

Objective: To investigate the effect of artificial musk on hyperlipemia in rats.

Methods: SD rats were randomly divided into six groups: control group, model group, simvastatin group, artificial musk low, middle and high groups. The fatty emulsion were given to model group and treated groups, but none to control group. The levels of total cholesterol (TC), triglyceride (TG), low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol(HDL-C) were measured. The levels of serum CRP, ET-1 and TNF- α were determined by double antibody sandwich ELISA.

Results: The function in reducing the content of serum TC, TG were different between artificial groups and model group ($P < 0.05$). Artificial musk high dose group decreased the serum levels of CRP, ET-1 and TNF- α ($P < 0.05$).

Conclusion: Artificial musk can improve hyperlipemia in rats.

Keywords:

Artificial musk, Hyperlipemia, Lipid

107. 中醫學與全民保健養生的公共教育

項平

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會議/刊物名稱：

澳門醫療與健康，10 (1): 4-6

內容簡介：

在全民保健養生的公共教育中，中醫學重視以下幾方面：(1) 中醫學對健康、長壽及衰老的認識；(2) 必須重視對亞健康狀態的干預；(3) 中醫養生學的特色和優勢；(4) 中醫養生學在全民保健養生中的運用。

關鍵詞：

亞健康、保健養生、教育

107. Chinese Medicine and The Commonality Education of whole people's health

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Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Macao Medicine and Health, 10 (1): 4-6

Abstract:

Objective: To observe the effects of YiNianJiangYa (YNJY) decoction contained serum on cell proliferation of primary cultured endothelial cells of spontaneous hypertensive rats (SHR) and the peroxisome proliferator activated receptor- γ (PPAR γ) mRNA expression in the cells.

Keywords:

Sub-health, Keep fit, Education

108.2373 例出租車駕駛員亞健康狀態主要表現及體質類型調查

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會議/刊物名稱：

北京中醫藥，29 (3): 166-168

內容簡介：

本文對 2373 例出租車駕駛員進行亞健康狀態流行病學調查研究，經問卷統計分析，揭示了此類人群亞健康狀態的主要表現、體質類型以及職業、性別、年齡因素的表現。

關鍵詞：

亞健康表現、體質類型、年齡性別

108.The Investigation and Analysis on 2373 Taxi Drivers' Sub-healthy Manifestations and the Types of Their Physical Constitution

Zhu, CG (Zhu Chang-Gang), Xiang, P (Xiang Ping), Yin, L (Yin Ling)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Beijing Journal of Traditional Chinese Medicine, 29 (3): 166-168

Abstract:

This paper provided the epidemiological investigations on the sub-healthy manifestations of 2373 taxi drivers. It revealed the sub-healthy group's characters from the aspects of main manifestation, types of physical constitution, professions and age, based on the questionnaire and the statistic analysis.

Keywords:

Sub-healthy manifestations, Types of physical constitution, Age and sex

109.2373 例出租車駕駛員亞健康狀態影響因素調查分析

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會議/刊物名稱：

世界中西醫結合雜誌，5 (4): 321- 323

內容簡介：

目的：調查影響出租車駕駛員亞健康狀態發生的主要因素。方法：採用流行病學調查問卷方法，發放問卷 3042 份，回收率 100%，經專家評判符合亞健康狀態 標準者 2373 例。結論：過度疲勞、飲食不節、情緒不遂、風寒濕熱侵襲以及環境污染 5 種因素，是導致出租車駕駛員亞健康狀態的主要影響因素。

關鍵詞：

亞健康、影響因子、出租車駕駛員

109. Investigation and Analysis on Sub-Health State in 2373 Taxi Drivers

Zhu,CG (Zhu, Chang-Gang); Xiang, P(Xiang Ping); Yin, L(Yin Ling)

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Name of Conference/Journal:

World Journal of Integrated Traditional and Western Medicine, 5 (4): 321- 323

Abstract:

Objective: To investigate the essential factors to the sub-health state of taxi drivers. Methods: Using the epidemiological investigation questionnaire. 3042 copies of questionnaires were delivered, and the recovery rate was 100%. By the evaluation of experts, 2373 cases complied with the criteria of sub-health state. Conclusion: It is believed that there are five factors, named over-fatigue, irregular food intake, poor emotions, invasion of wind, cold, damp and heat, as well as environmental pollution resulting essentially in the sub-health state of taxi drivers.

Keywords:

Sub-health, Factor, Taxi drivers

110.阻斷 PKC-beta 保護糖基化蛋白終末產物誘導的 HUVEC 炎症損傷析

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會議/刊物名稱：

國際免疫藥理學，10 (12): 1552-1559，SCI-E 檢索

內容簡介：

糖基化蛋白終末產物 (Advanced glycation end products, AGEs) 已被證明為糖尿病和各種年齡相關性血管疾病重要的誘導因子。內皮功能障礙和炎症細胞的粘附在糖尿病患者血管障礙發生發展中是重要且早期的因子。基於 PKC-beta 在 AGEs 誘導的血管功能障礙中關鍵的作用，我們研究了以 LY333531 阻斷 PKC-beta 對巨噬細胞粘附 HUVEC 以及相關機制。我們建立了 Transwell HUVEC-巨噬細胞共培養系統以評價巨噬細胞遷移和粘附能力。以免疫細胞化學檢測 TGF-beta1、ICAM-1 和 RAGE 蛋白的表達；採取實時定量 RT-PCR 方法檢測 TGF-beta1、ICAM-1 和 RAGE mRNA 的表達。檢測了培養上清中 SOD 和 MDA 的含量。我們發現：LY333531 顯著降低了 AGEs 誘導的巨噬細胞粘附 HUVEC。阻斷 PKC-beta 在蛋白和 mRNA 水平顯著降低了 HUVEC 中 TGF-beta1 和 ICAM-1 的水平，同時 RAGE 蛋白表達亦顯著下調。並且，在應用 LY333531 後，抗氧化指標 (SOD/MDA) 顯著增加。因此我們得出結論：LY333531 可降低 AGEs 誘導的巨噬細胞粘附於內皮細胞並減輕局部炎症反應；其降低炎症因子的表達共增加細胞抗氧化能力發揮了重要的作用。

關鍵詞：

內皮細胞、ICAM-1、巨噬細胞遷移、氧化應激、TGF-beta1、PKC-beta

110. Blockade of PKC-beta protects HUVEC from advanced glycation end products induced inflammation

Xu, YH (Xu You-Hua); Wang, SS (Wang Shan-Shan); Feng, L (Feng Liang); Zhu, Q (Zhu Quan); Xiang, P (Xiang Ping); He, B (He Bao)

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Name of Conference/Journal:

International Immunopharmacol, 10 (12): 1552-1559 DEC 2010, SCI-E indexed

Abstract:

Advanced glycation end products (AGEs) have been recognized as a pivotal inducer in diabetes and kinds of aging-related vasculopathy. Endothelial dysfunction and inflammatory cells adhesion to endothelium have been regarded as important and early factors in the pathogenesis of vascular complications in diabetic patients. Owing to the key role of PKC-beta in AGEs-induced vascular dysfunction, we investigated effects of blocking PKC-beta by LY333531 on macrophage adhesion to HUVEC and the related mechanism. Transwell HUVEC-macrophage co-culture system was established to evaluate macrophage migration and adhesion ability. Immunocytochemistry was applied to examine TGF-beta1, ICAM-1 and RAGE protein expressions by SABC or SABC-AP method; mRNA expression of TGF-beta1, ICAM-1 and RAGE was determined by real-time RT-PCR. SOD and MDA levels in culture supernatant were detected. We found that LY333531 significantly reduced AGEs-induced macrophage adhesion to HUVEC. Blockade of PKC-beta strikingly decreased HUVEC TGF-beta1 and ICAM-1 expression in both protein and mRNA levels, RAGE protein level was also down-regulated. Furthermore, the anti-oxidative stress index, SOD/MDA was dramatically elevated on LY333531 application. Therefore we conclude that LY333531 can reduce AGEs-induced macrophage adhesion to endothelial cells and relieve the local inflammation, this was realized by its effect on decreasing inflammatory cytokines' expression and increasing cell anti-oxidative ability.

Keywords:

Endothelial cell, ICAM-1, Macrophage migration, Oxidative stress, TGF-beta1, PKC-beta

111. 頤年降壓飲含藥血清對自發性高血壓大鼠內皮細胞增殖及 PPAR- γ mRNA 表達的影響

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會議/刊物名稱：

中國中西醫結合雜誌，30 (1): 68-71 JAN 2010，中文核心期刊要目總覽(2008)

內容簡介：

目的：觀察頤年降壓飲含藥血清對體外原代培養的自發性高血壓大鼠（SHR）內皮細胞增殖及 PPAR γ mRNA 表達的影響。

方法：取 SHR 主動脈內皮細胞進行原代培養，取三代後內皮細胞用於實驗，SD 大鼠 40 只隨機分為正常血清對照組和頤年降壓飲高、中、低劑量組，給與高脂飲食飼養，分別灌服生理鹽水和高、中、低劑量頤年降壓飲（分別含生藥 1.3 g/mL、2.6 g/mL、5.2 g/mL），給藥 20 天麻醉後開始收集血清，經滅活後作用各組內皮細胞。MTT 法檢測不同濃度血清作用各組 2、4、8、16、24、48 h 細胞活性；RT-PCR 法檢測作用 4、8、16、24 h 內皮細胞 PPAR γ mRNA 表達情況。結果 MTT 檢測 OD 值發現，4-8h 頤年降壓飲高、中、低劑量組 OD 值均高於正常血清對照組，具有顯著性差異（ $P < 0.05$ ），而頤年降壓飲三劑量組間無差異（ $P > 0.05$ ）；16 h 頤年降壓飲中劑量組 OD 值上升低於其他組，有顯著差異（ $P < 0.05$ ）；24 h 各組 OD 值均下降，但頤年降壓飲高、中劑量組下降比低劑量、正常血清對照組明顯，具有顯著差異（ $P < 0.05$ ）；48 h 各組 OD 值繼續下降，頤年降壓飲高劑量組比正常血清對照組下降更明顯（ $P < 0.05$ ）。RT-PCR 檢測不同血清作用內皮細胞 4 h 時，各組 PPAR γ mRNA 表達無明顯差異（ $P > 0.05$ ）；8 h 時頤年降壓飲高劑量組 PPAR γ mRNA 表達明顯低於其他各組（ $P < 0.05$ ）；16 h 頤年降壓飲各劑量組 PPAR γ mRNA 表達比正常血清對照組高（ $P < 0.05$ ），其中頤年降壓飲高劑量組 PPAR γ mRNA 表達最高，與其他組比較具有非常顯著的差異（ $P < 0.01$ ）；24 h 各組 PPAR γ mRNA 表達有所下降，但頤年降壓飲低劑量組 PPAR γ mRNA 表達仍高於正常血清對照組（ $P < 0.05$ ）。

結論：頤年降壓飲對內皮細胞增殖呈雙向調節作用，或許與調節 PPAR γ mRNA 表達有關。頤年降壓飲所具有的上調及維持 PPAR γ mRNA 表達作用，可能是該方藥具有保護血管內皮功能，降低血壓的機制之一。

關鍵詞：

頤年降壓飲、自發性高血壓、內皮細胞增殖、過氧化物酶體增殖物啟動受體 γ

111.Effects of YiNian JiangYa Decoction Contained Serum on Endothelial Cell Proliferation and PPAR γ mRNA Expression in Spontaneous Hypertensive Rat

Zhao, YH (Zhao Yong-Hua); Liu, YD (Liu Yu-De); Liu, NW (Liu, Nai-Wei); Li, HY(Li Huan-Yi); Xiang, P(Xiang Ping)

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Chinese Journal of Integrated Traditional and Western Medicine, 30 (1): 68-71 JAN 2010, A Guide to the Core Journals of China(PKU)

Abstract:

Objective: To observe the effects of YiNianJiangYa (YNJY) decoction contained serum on cell proliferation of primary cultured endothelial cells of spontaneous hypertensive rats (SHR) and the peroxisome proliferator activated receptor- γ (PPAR γ) mRNA expression in the cells.

Methods: SD rats were fed with high-lipid diet and different doses (high, medium and low) of YNJY respectively and the serum contained different doses of YNJY (S-YNJY) was prepared by collecting the rats' serum after 20 days feeding. The serum obtained from SD rats fed with normal diet, i.e. drug free serum (S-free) was taken for control. Primary cultured endothelial cells were treated respectively with S-YNJY in different doses (treated groups) and S-free (control group), the cell activity and the mRNA expression of PPAR γ in cells of all groups were detected by MTT and RT-PCR respectively at different time points: 2, 4, 8, 16 and 24 hours after treatment.

Results MTT test showed that at time points of 4h and 8h, the OD value raised in the treated groups with insignificant difference between them ($P>0.05$), but was higher than that in the control group ($P<0.05$); at 16h, it increased but showed a smaller increment in the medium-dose treated group ($P<0.05$); at 24 h, it decreased in all groups, but the decrement in the high and medium-dose treated groups was more remarkable ($P<0.05$); at 48h, it decreased continuously, with the decrement more significant in the high-dose group than in the control group ($P<0.05$). RT-PCR detection showed that at 4h, the expression of PPAR γ mRNA was not changed significantly in all groups ($P>0.05$); at 8h, it was remarkably lower in high-dose group than in others ($P<0.05$); at 16h, it was higher in the three treated groups than in the control group ($P<0.05$), with a highest level shown in the high-dose treated group ($P<0.01$); at 24h, the expression decreased in all groups, but the level in the low-dose treated group was still higher than that in the control group ($P<0.05$).

Conclusion: YNJY decoction shows a two-way regulation on endothelial cells proliferation, and which is negatively dose-dependent in the late stage. The regulation is perhaps relevant to the regulating of the PPAR γ mRNA expressions. The PPAR γ mRNA expression up-regulating and maintaining effects of YNJY decoction may be one of the mechanisms for its vascular endothelial cell protection and blood pressure suppressing.

Keywords:

Yinian Jiangya Decoction, Spontaneous hypertension, Endothelial cells proliferation, Peroxisome proliferator activated receptor- γ

112.適應性支持通氣救治高齡急性冠脈綜合征心力衰竭並呼吸 衰竭 1 例

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會議/刊物名稱：

中國危重病急救醫學，22 (3): 188 MAR 2010，中文核心期刊要目總覽(2008)

內容簡介：

急性冠脈綜合征繼發的呼吸衰竭傳統上是呼吸機應用的相對禁忌證，而老年高齡患者發生急性冠脈綜合征並心衰時可迅速出現呼吸衰竭，並且藥物敏感性差，我們在觀察此病例時發現患者發病後在應用中西藥物搶救效果不明顯的情況下，經 ASV 模式機械通氣 30min 後糾正呼吸衰竭狀態。ASV 通氣模式代表了呼吸機自動化的趨勢，操作簡化，治療更符合生理要求，不失為一種迅速有效的搶救手段。

關鍵詞：

機械通氣、急性冠脈綜合征、心力衰竭、呼吸衰竭、高齡

112. One case of the model of adaptive support ventilation treating old age patient with acute coronary syndrome heart and respiratory failure

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Liao, HL (Liao Hui-Li)**

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Name of Conference/Journal:

Chinese Critical Care Medicine, 22 (3): 188 MAR 2010, A Guide to the Core Journals of China(PKU)

Abstract:

Acute coronary syndrome secondary to respiratory failure is traditionally considered relative contraindications of the ventilator. old age patients with acute coronary syndrome and heart failure can rapidly occur respiratory failure, and drug sensitivity is poor. we observed the effect was not obvious after the case was treated with Chinese and Western medicines. the ASV mode of ventilation ameliorated respiratory failure state after used 30min. ASV ventilation represents the trend of automation, operational streamlining, is more consistent with the physiological requirements, after all, a quick and effective rescue means.

Keywords:

Mechanical ventilation, Acute coronary syndrome, Heart failure, Respiratory failure, Old age

113. 頤年降壓飲含藥血清對自發性高血壓大鼠血管內皮細胞相關活性因子的影響

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會議/刊物名稱：

中國結合醫學雜誌，16 (4): 344-347 AUG 2010，SCI-E 檢索

內容簡介：

目的：觀察頤年降壓飲含藥血清對自發性高血壓大鼠（SHR）血管內皮細胞相關活性因子的影響。

方法：選取 SHR 主動脈進行原代內皮細胞培養。雄性 SD 大鼠隨機分為四組，並分別給予生理鹽水和高、中、低劑量頤年降壓飲；第 21 天取血並分離各組血清，將內皮細胞與不同組血清共培養；採用 ABC-ELISA 法檢測每組培養上清液中 ET-1、NO、t-PA、PAI-1 的濃度。

結果：內皮細胞 ET-1、NO、t-PA、PAI-1 的水準呈時間依賴性增加；頤年降壓飲可顯著增加內皮細胞 NO 和 t-PA 表達，同時顯著降低內皮細胞 ET-1 和 PAI-1 表達，該作用呈濃度依賴性。

結論：頤年降壓飲治療高血壓歸因於其調節血管擴張和血液凝固性作用，而其中頤年降壓飲調節 ET-1/NO 和 PAI-1/t-PA 表達發揮了關鍵性的作用。

關鍵詞：

頤年降壓飲、內皮細胞、活性因子

113.Effects of Yinian JiangYa Decoction (頤年降壓飲) Containing Seromon Cytokines Secretion of Vascular Endothelium of Spontaneously Hypertensive Rats

**Zhao, YH (Zhao Yong-Hua); Xu, YH (Xu, You-Hua); Guan, Y (Guan, Ying);
Xiang, P (Xiang Ping)**

Faculty of Chinese Medicine, Macau University of Science and Technology

Name of Conference/Journal:

Chinese Journal of Integrative Medicine, 16 (4): 344-347 AUG 2010, SCI-E indexed

Abstract:

Objective: To observe the effects of Yinian Jiangya Decotion (頤年降壓飲, YNJYD) on cytokines secretion in spontaneously hypertensive rats (SHRs) vascular endothelium. Methods: Aortic endothelial cells (ECs) were primary cultured from SHRs; male SD rats were treated with different doses (high, medium, and low doses) of YNJYD the blood was collected on the 21st day, and then, the serum was separated. ECs were cocultured with the serum for different timecourse, and the culture supernatant concentrations of ET-1, NO, t-PA and PAI-1 were determined by ABC-ELISA method.

Results: ET-1, NO, t-PA and PAI-1 levels in endothelial cells culture supernatant were increased in a time-dependent manner; YNJYD could significantly elevate NO and t-PA expression in ECs, while ET-1 and PAI-1 expression were dramatically decreased, these effects of YNJYD were in a concentration-dependent manner.

Conclusions: The therapeutic effect of YNJYD on hypertension is attributed to its effect on regulate vessel dilation and blood coagulation, in which ET-1/NO and PAI-1/t-PA are two pairs of pivotal mediators.

Keywords:

Yinian JiangYa Decoction, Endothelial cell, Cytokine

114. 頤年降壓飲治療早期原發性高血壓患者 40 例臨床觀察

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澳門科技大學 中醫藥學院

會議/刊物名稱：

中醫雜誌 (英文版), 30 (3): 171-175 SEP 2010, SCI-E 檢索

內容簡介：

目的：觀察頤年降壓飲治療早期高血壓病患者臨床療效及對血清 NO、ET 的影響，探討該方藥在血管內皮細胞功能方面的作用機制。

方法：選取早期原發性高血壓中醫證屬痰瘀阻絡、肝陽偏亢型患者 79 例，隨機分為治療組 40 例與對照組 39 例，分別給予頤年降壓飲和天麻鉤藤飲進行治療，療程結束後比較兩組中醫證候積分和血壓療效的變化，測定兩組患者血清 ET、NO 的含量。

結果：治療組中醫證候積分、降壓療效與對照組相比具有顯著性差異 ($P<0.05$)，治療後兩組 ET、NO 比較有顯著性差異 ($P<0.05$)。

結論：頤年降壓飲所具有的改善患者證候、降低血壓等療效可能與其調節 ET、NO 失衡，進而恢復血管內皮依賴性舒張功能有關。

關鍵詞：

頤年降壓飲、原發性高血壓、內皮功能、痰瘀阻絡、肝陽偏亢

114.Effect of Yinian Jiangya Yin on Primary Hypertension in Early Stage - A Clinical Observations on 40 Patients

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Liu, NW (Liu Nai-wei)**

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Name of Conference/Journal:

Journal of Chinese Traditional Medicine, 30 (3): 171-175 SEP 2010, SCI-E indexed

Abstract:

Objective: To observe the effect of Yinian Jiangya Yin (Decoction for lowering blood pressure to prolong life) on patients with early hypertension and its mechanism on the function of vascular endotheliocytes.

Methods: The 79 patients with early primary hypertension belonging to the TCM syndrome of stagnation of phlegm and blood stasis in meridians and hyperactivity of the liver-yang were randomly divided into a treatment group of 40 patients treated with Yinian Jiangya Yin and a control group of 39 patients treated with Tianma Gouteng Yin (Decoction of Gastrodia and Uncaria). The changes in score of TCM syndrome and in blood pressure before and after treatment were observed in the two groups. The contents of nitrogen monoxide (NO) and endothelin (ET) in serum after treatment were determined.

Results: There was a statistical difference ($P<0.05$) in score of TCM syndrome, effect of lowering blood pressure, and the contents of ET and NO in serum after treatment between the two groups.

Conclusion: The effect of Yinian Jiangya Yin on improving TCM syndrome of patients with primary hypertension in early stage and on lowering blood pressure may be related to its regulating the imbalanced condition between ET and NO for restoring the function of endothelium-dependent vasodilation.

Keywords:

Yinian Jiangya Yin, Primary Hypertension, Endothelial function, Phlegm and blood stasis in meridians, Hyperactivity of the liver-yang

115. 資訊通訊科技對澳門旅遊機構重要嗎？

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澳門科技大學 國際旅遊學院

會議/刊物名稱：

The First International Conference on Tourism between China and Spain，西班牙，2010 年 3 月 28-31 日，會議文章

內容簡介：

本文主要討論澳門旅遊機構如何在其業務上運用資訊通訊科技及探索資訊通訊科技對澳門旅遊機構影響之深遠程度。鑒於學術界同時針對資訊通訊科技及澳門旅遊機構的有關研究未屬廣泛，作者望能藉此研究以補充有關方面的學術討論。

關鍵詞：

資訊通訊科技、澳門、旅遊機構

115.Does Information Communication Technologies Matter to the Macao Tourism Organisations?

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Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

The First International Conference on Tourism between China and Spain, 28-31 Mar 2010, Spain, conference paper

Abstract:

The paper focuses on the Macao tourism organisations, the use and adoption of information communication technologies (ICT). Little research has been conducted into the use of ICT applications in the Macao tourism organisations, and this research will attempt to supplement existing work.

Keywords:

ICT, Macao, Tourism organisations

116.城市商務旅遊競爭力:評價體系及方法的創新研究

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會議/刊物名稱：

旅遊學刊，2010 年 04 期，中文核心期刊要目總覽(2008)

內容簡介：

目前，商務旅遊競爭力的研究相對較少，而已有的旅遊競爭力評價體系研究方法又存在亟須改進之處。為此，本文創新性地通過專家訪談及商務遊客調查確定城市商務旅遊特徵，並以商務遊客認知趨勢這一客觀資訊為基礎，借助因數分析法構建了城市商務旅遊競爭力評價的量化模型。隨後，以香港、澳門、上海、廣州 4 個城市的商務旅遊競爭力為例，對該模型的普適性及準確性進行了檢驗。通過檢驗得知，該評價體系的構建過程體現了一定的客觀性，在具體使用方面擁有較高的準確性及可行性，具有較好的應用價值。由於本研究的抽樣調查僅在澳門進行，如能在更廣泛的區域內對商務旅客取樣，則所構建的評價指標體系會更為完善。

關鍵詞：

商務旅遊競爭力、評價體系、深度訪談、因數分析

116.Competitiveness of Urban Business Tourism:An Innovative Study of Evaluation System and Approach

Li, X (Li Xi)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Tourism Tribune, 4: 27-31 APR 2010, A Guide to the Core Journals of China(PKU)

Abstract:

According to the database, there were few people concerning the business tourism competitiveness, while the methods that were used in the competitiveness related research had some defects. The paper took the form of in-depth interview and survey to collect the factors that have effect on the business tourism. Based on the objective information about the requirement and trends of the business tourism market, which was collected from the survey on business travelers, a business tourism competitiveness evaluation model was creatively built. The applicability and accuracy of the competitiveness evaluation model was finally tested on four cities including Hong Kong, Shanghai, Guangzhou and Macau. Through the test, it can be proved that the objective competitiveness evaluation system is of high accuracy and feasibility. Since the survey in this research was carried out only in Macau, it will be more scientific and typical if the survey can be performed in a more extensive range of cities.

Keywords:

Competitiveness of business tourism, Evaluation system, In-depth interview, Factor analysis

117.基於旅遊觀點的文化遺產旅遊與城市互動發展

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會議/刊物名稱：

亞洲商業和資訊管理期刊 (IJABIM), 1 (4): 1-19 Oct-Dec 2010

內容簡介：

本文系統地研究了澳門的文化遺產資源與城市發展之間的關係。調查涵蓋了澳門的旅遊業和文化遺產的發展現狀及未來發展的機遇與挑戰。在其他國家文化遺產旅遊發展經驗的基礎上，作者將設立既定的發展戰略目標，提供全面的道路和發展戰略，並以旅遊理論和實踐知識為基礎，建立了科學的文化遺產旅遊的發展框架。文化遺產旅遊培養和提高是旅遊目的地城市提升競爭力的關鍵。本文從遊客及相關利益群體的角度，對遊客行爲、認識和文化遺產部分景點評價等進行了分析，並提出了未來澳門文化遺產旅遊發展的優化路徑。

關鍵詞：

文化遺產、遊客行爲、旅遊景點、互動戰略、城市發展

117. Interactive Strategies for Cultural Heritage Tourism and Macau City Development: from the Tourists' Perspectives

Leong, AMW (Leong Aliana M. W.); Li, X (Li Xi)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

International Journal of Asian Business and Information Management (IJABIM), 1 (4): 1-19
Oct-Dec 2010

Abstract:

This paper systematically examines the cultural heritage resources of Macau in tandem with the city's development. The investigation encompasses the actual condition of Macau's cultural heritage tourism and the challenges and opportunities for its future development. Based on cultural heritage tourism development experiences of other countries, the authors will set strategic goals, provide an overall path and developmental strategies and create a scientific cultural heritage tourism development structure with a framework built upon theory and practice. The necessity and viability of cultural heritage tourism in cultivating and enhancing the city's competitiveness as a tourism destination will also be argued. The conference paper will concentrate on issues from the tourists' perspectives while the entire research outcome including local community perspectives and experts and scholars' perspectives will be published in a monograph when completed. Based on a survey of visitors to Macau, the researchers hope to gain an understanding of the tourists' behavior, awareness and evaluation of scenic spots that are part of the cultural heritage tour.

Keywords:

Cultural heritage, Tourist behavior, Tourist attractions, Interactive strategies, City development

118.簡評關於旅遊研究方法的兩種教材

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會議/刊物名稱：

旅遊科學，24 (3): 96-98，CSSCI 檢索

內容簡介：

本文基於中國高等旅遊專業的本科和研究生課程中設置的研究方法課程的教學實踐和國外的文獻，全面回顧和評價了國外出版的兩種旅遊研究方法教材，即 A·J·維爾 (A. J. Veal) 編寫的《休閒與旅遊研究方法》(第三版) 和蓋爾·詹寧斯 (Gayle Jennings) 編寫的《旅遊研究方法》(第二版)。對旅遊高等教育中旅遊研究方法課程的英漢雙語教學提出了教材選擇的適用性和實用性建議。

關鍵詞：

旅遊研究方法、教材

118.A Brief Review on Two Books on Tourism Research Methodology

Li, X (Li XIN)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Tourism Science, 24 (3): 96-98，CSSCI indexed

Abstract:

Based on the instructional practice in the course of Tourism Research at undergraduate and post-graduate levels in Chinese universities and the international literatures in this field, this paper made an overall review and comments on two textbooks published overseas. They are Research Methods for Leisure and Tourism: A Practical Guide (3rd Ed.) by A. J. Veal and Tourism Research (2nd Ed.) by Gayle Jennings. Suggestions are put forward on the applicability and practicality of textbooks for the English-Chinese bilingual course of Tourism Research in universities.

Keywords:

Tourism Methodology, Textbook

119. 推行終身學習理念、積極服務本澳門社會—澳門科技大學持續教育學院發展紀要

梁文慧

澳門科技大學 國際旅遊學院

會議/刊物名稱：

澳門科技大學學報，4 (1): 66-74 JUN 2010

內容簡介：

從 20 世紀 70 年代開始，在世界範圍內全民學習和終身學習已成為一個重要的潮流。雖然回歸後澳門教育已經有了很大的發展，澳門人口的平均學歷水平仍然相對較低，在資訊化社會和知識經濟時代下，澳門現今的學歷水平結構對於未來的持續發展具有深遠影響。因此，推進終身學習的理念及鼓勵居民積極參與終身學習成為澳門未來持續發展的重要保障。本文從終身學習的理念演變及其對高等教育機構的影響出發，探討了澳門社會在推進終身學習理念和事業方面的障礙和成果，並總結了澳門科技大學持續教育學院在推動終身學習和服務本澳社會時的相關策略手段，希望以此作為學院發展的階段性總結，並對今後的持續發展進行展望。

關鍵詞：

終身學習、變革、障礙、策略、澳門科技大學持續教育學院

119.Promoting Lifelong Learning for the Benefit of Macau - A Review of the Development of the School of Continuing Studies, Macau University of Science

Leong, MW (Leong Man-Wai)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (1): 66-74 JUN 2010

Abstract:

Community learning and lifelong learning have become a significant global trend since the 1970s. Even though the educational system of Macau has greatly developed after the handover to China, statistical reports show that the average education level of the population is still relatively low. In this current information and knowledge age, the present educational structure is extremely significant to the future sustainable development of Macau. Thus, promoting lifelong learning and encouraging residents to take part in it is an important measure to secure Macau's future development. This paper explores the obstacles met and summarizes the accomplishments in the promotion of lifelong learning in Macau. It describes the strategies and methods on lifelong learning as applied by the School of Continuing Studies (SCS)-Macau University of Science and Technology (MUST), and concludes with a look into the future of its sustainable development.

Keywords:

Lifelong learning, Reforms, Obstacles, Strategies, School of Continuing Studies, Macao University of Science and Technology

120. 旅遊高等教育機構快速成長的要素與機制研究——以澳門科技大學國際旅遊學院為例

梁文慧

澳門科技大學 國際旅遊學院

會議/刊物名稱：

澳門科技大學學報，4 (1): 59-65 JUN 2010

內容簡介：

旅遊教育是旅遊業關注的重點內容之一，本文從中國國內旅遊教育發展的現狀著手，對中國旅遊教育發展的特征進行了歸納和總結。通過相關文獻的分析，可以發現，目前中國國內的旅遊教育機構數量的總體增長十分迅速，然而，部分個體院校旅遊專業的地位發展有所波動。旅遊教育發展的目標和定位較為趨同。教學資源較為注重穩定性和延續性，機制創新有待增強。此外，目前國內旅遊教育的模式仍然主要延續課堂教學的形式，教學的實踐環節有待增強。

與中國內地旅遊專業在院校中地位的起伏波動不同，成立於2003年的澳門科技大學旅遊管理系經過6年的發展已經快速成長成為澳門以及亞太地區具有一定影響力的旅遊學院。短短幾年中，國際旅遊學院無論是在教學還是在科研和對外交流等領域都有了長足的發展，並顯示出更為強勁的增長勢頭。

通過回顧近年來澳門科技大學國際旅遊學院走過的道路，她的成功可以總結為以下四大要素共同作用的結果：第一，領導層的遠見卓識為國際旅遊學院的發展提供了戰略保證。第二，教學理念及模式的創新是國際旅遊學院發展的堅實基礎。第三，教學方面大量資源的投入是國際旅遊學院不斷向前的推動力。第四，積極倡導科研是國際旅遊學院品牌影響力持續提升的重要手段。

未來，學院將進一步加強教師的專業培訓，提升師資的教學能力和水平。加大對於教學和實踐設施的投入力度，創造良好的實踐學習環境。鼓勵學院師生的學術研究，以研究促進教學的發展。

關鍵詞：

旅遊教育、發展要素、澳門科技大學國際旅遊學院

120.The Mechanism and Elements of Rapid Growth of Tourism Higher Education Institutions - The Case of the Faculty of International Tourism, MUST

Leong, MW (Leong Man-Wai)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (1): 59-65 JUN 2010

Abstract:

Tourism education is one of the significant elements of the tourism industry. This paper starts with the status of the development of domestic tourism education in China and further summarizes and concludes with the characteristics of the development of tourism education in the country. Through the analysis of relevant literature, it is obvious that there is a rapid overall increase in the number domestic tourism educational institutions in China. However, there are some fluctuations on the status of the tourism specializations, departments, and faculties in individual institutions as the higher education institutions develop over time. Tourism education development objectives and positioning tend to be convergent as more stability and continuity are placed on the emphasis of teaching resources while innovation of mechanism is to be enhanced. Furthermore, the current model of domestic tourism education is still through the continuation of classroom teaching while the practical aspects of teaching need to be strengthened.

Different from the fluctuations of status in tourism specializations in China, the Department of International Tourism established in 2003 has rapidly transformed to be an influential Faculty of International Tourism (FT) in the Asia Pacific region in a short period of six years. The FT demonstrates strong growth in a number of aspects, whether in teaching, research or foreign exchange.

Through a review of experiences of the FT-MUST in recent years, success can be summarized into the result of the following four elements: first, leadership's vision for the development of FT as a strategic guarantee; second, teaching philosophy and mode of innovation laid a foundation for FT; third, continuing resources investment on teaching and learning is the constant impetus for FT; and fourth, actively promoting research is an important means to the influence of a sustained lift in the brand of FT.

In the future, the FT will further strengthen professional training of teachers, enhance the teachers' teaching abilities and level, increase the input on teaching and practice facilities and create a sound practicing and learning environment. The faculty will also encourage academic research among faculty members and students in order to promote teaching development with research.

Keywords: Tourism education, development factors, Faculty of International Tourism, Macao University of Science and Technology

121. 中國成人網路自我調控學習素養的影響研究

梁文慧、高岩

澳門科技大學 國際旅遊學院

會議/刊物名稱：

The International Journal of Learning, 17 (9): 311-330

內容簡介：

本文源自澳門基金會資助的名為“兩岸四地成人網路自我調控學習素養比較研究”專案，該專案主要從中國的視角進行分析研究。本文通過將相關理論和網路自我調控實證研究進行分析及整合，從而為進一步的研究厘清並奠定理論基礎。該專案通過深入訪談獲得資訊及資料，旨在確定和理解中國網路自我調控對成人素養的影響，並根據分析結果提供相關建議以進一步促進和加強網路自我調控對成人素養的成效。

關鍵詞：

自我調控、成人學習素養、網路學習、中國

121.A study of online self-regulated learning and its effect on adult literacy in the PRC

Leong, MW (Leong Man-Wai); Gao, Y(Gao Yan)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

The International Journal of Learning, 17 (9): 311-330

Abstract:

This paper is derived from the results of the Macau Foundation-funded research titled, “A Comparative Study of Online Self-regulated Learning and Its Effect on Adult Literacy in the Cross-Strait Regions” focusing on the perspectives of the PRC. This section analyzes theories and consolidates empirical studies of online self-regulated learning to ascertain a theoretical base to further the study. Through information gathering and data analyses using in-depth interviews, this project seeks to identify and comprehend the effects of online self-regulated learning on adult literacy in China and to provide suggestions based on analyzed results. These suggestions are designed to promote and enhance the effectiveness of online self-regulated learning on adult literacy.

Keywords:

Self-regulated Learning, Adult Literacy, Online learning, PRC

122.從“龍與獨角獸”看旅遊文學之符號系統

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澳門科技大學 國際旅遊學院

會議/刊物名稱：

天津大學學報 (社會科學版), 12 (4) JUL 2010: 371-374, CSSCI 檢索

內容簡介：

作為緣起於旅遊活動、反映旅遊者遊歷見聞和思想情誌的旅遊文學，不僅僅是旅遊文化的一個重要研究領域，同時也是文學領域的一個特殊分支，有著區別於其他體裁的獨特文本邏輯，即指稱功能、詩性功能以及帶有多重文化理念於一體的綜合性符號系統。文章將“垮掉派”作品融入旅遊文學研究領域，以“垮掉派之父”肯尼斯·雷克思羅斯的代表詩歌“龍與獨角獸”為切入點，從語境、信息出發，分析了其語言符號的具體內容，並進一步分析了作品中異質文化交融的特色。結果表明，異質文化不僅是旅遊活動的原始動園，也構成了旅遊文學之符號系統的高層次表徵。

關鍵詞：

“垮掉派”、旅遊文學、肯尼斯·雷克思羅斯、符號系統

122.Semiotic System in Travel Literature-With Reference to The Dragon and the Unicorn

Chi, X (Chi Xin); Tang, J (Tang Juan)

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Name of Conference/Journal:

Journal of Tianjin University (Social Sciences), 12 (4) JUL 2010: 371-374, CSSCI indexed

Abstract:

Travel literature, burgeoning from travel activities and reflecting the travellers' journeys and thoughts, is not only a significant research field of travel cultures, but also the evolution of a particular literary genre which is quite different from other text types. It is a comprehensive semiotic system containing referential, poetic as well as multi-cultural concepts. The essay analyzes contexts and messages in *The Dragon and the Unicorn* written by Kenneth Rexroth, father of Beat Generation, so as to further explore the features of heterogeneous cultures in this masterpiece. Thus, it can be proved that heterogeneous cultures not only are the sources of travel activities, but also indicate the semiotic system of travel literature.

Keywords:

Beat Generation, Travel literature, Kenneth Rexroth, Semiotic system

123. 旅遊地顧客信任及其對顧客忠誠的影響

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澳門科技大學 國際旅遊學院

會議/刊物名稱：

澳門科技大學學報，4 (2): 12-19 DEC 2010

內容簡介：

消費者對於企業的信任是競爭優勢的源泉。本文構建了旅遊背景下顧客信任的形成因素及其對顧客忠誠間關係的結構方程模型，並以來自湖南省鳳凰的資料進行了實證分析。結果顯示：顧客感知品質、顧客感知價值、顧客滿意、旅遊地形象對旅遊地顧客信任的形成有正向影響效應，感知風險有負面影響。旅遊地顧客信任對顧客忠誠呈正面影響，信任水準越高，顧客重游及傳播有利資訊的意願更強。

關鍵詞：

顧客信任、顧客忠誠、旅遊地

123. Customer trust and its impact on customer loyalty in a tourism destination

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Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 12-19 DEC 2010

Abstract:

Customer's trust of a company is the source of competitive advantage. This study investigates the mechanism of trust-building and its linkage with customer loyalty in a tourism destination. With the data of Fenghuang in Hunan Province, this paper concludes that: perceived quality, perceived value, customer satisfaction, destination image, which have positive impacts on customer trust, and perceived risk whose impact is negative are the key influence factors. The effect of trust on loyalty is also positive for people having high trust level have strong willing to revisit and communicated by mouth.

Keywords:

Consumer trust, Consumer loyalty, Tourism destination

124. “遊戲規則” 語義產生的歷史文化基因分析

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會議/刊物名稱：

《人文論叢》，2009 年卷，2010 年出版

內容簡介：

“遊戲規則” 語。在當今媒體及人際活動俗語中頻繁出現。此語的詞面及義項，可解為遊戲的規則、規則的遊戲。兩者看似倒置，前者為關於遊戲的規則，具有情境延伸、相當廣度的任意性。後者為關於規則的遊戲，是在“社會制度”總前提下的游移，具有時空坐標軸上相當程度的邊緣性。按當今人們不時“冒出”這句短語的常見案例中的語義看來。以上兩個看似倒置的義項，都具有“浮游”或“潛泳”於法律邊緣的特征。主要顯示着在不違背想法及系列法律規則的基礎上，人們製定的各民族間性“約定”特徵。所謂一個願打，一個願挨，兩廂情願也，在利益獲得上具有不對稱性，是情境滿意的平衡。“遊戲規則”這一情境語義的產生，有著豐富的歷史文化背景於基礎，本文將從歷史文獻中，搜索並解析其產生的文化基因，並試圖解釋其當代意義。

關鍵詞：

俗語、遊戲規則、基因分析

124.Analyzing the Historical and Cultural Elements for Semantics of 'Game Rules'

Wang, ZC (Wang Zi-Chao); Wang, KL (Wang Ke-Lin)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Humane Culture Research, Volume 2009, Published on 2010

Abstract:

The phrase Gaming Rules appears frequently in the casino gambling and human communication. There are two meanings about this phrase. The first one is about the rules of game, with the characteristics of scene's extending. The other one is about the regulated games, having the marginality in the time and space axes at the background of regime. According to the semantics of usage of this phrase, these two meaning which seem opposite both have the feature of "swimming"and "hiding" on the edges of laws. They represent the features of all kinds of fold engagements legally. The deep semantics of Gaming Rules has abundant historical and cultural elements. This paper will make research about the cultural elements contributing for its creation, and try to explain its contemporary significance.

Keywords:

Vulgarism, Game Rules, Study of elements

125.澳門娛樂場服務的中國文化解讀

王子超、王克陵、馬強
澳門科技大學 國際旅遊學院

會議/刊物名稱：

首屆亞太地區現代服務業發展高峰論壇，澳門，2010 年 11 月，會議文章

內容簡介：

澳門的娛樂場有來自美國、澳大利亞、香港和澳門本土等國家與地區的不同投資集團背景。在澳門娛樂場的建築設計、娛樂表演、服務接待上，體現了濃厚的中國文化特色。本文將從遊客感知角度，對娛樂場的建築風水設計、表演特色進行深度解讀。

關鍵詞：

娛樂場、服務、中國文化

125.The Cultural Study about the Casino's Service of Macau

Wang, ZC (Wang Zi-Chao); Wang, KL (Wang Ke-Lin); Ma, Q (Ma Qiang)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

The 1st Forum of Development of Modern Service Trade in Asia-Pacific Area, Macao, Nov 2010, conference paper

Abstract:

The casinos of Macau have different investment backgrounds from America, Australia, Hongkong and Macau. In the architecture's design and entertainment performance of casinos, there is a significant feature of China culture. This paper will make research of the China traditional Fengshui design and performance of casinos in Macau from the view of visitors.

Keywords:

Casino, Service, China Culture

126.基於參與式發展理論的安新白洋澱濕地生態旅遊研究

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會議/刊物名稱：

商業研究，2010 (2): 142-145，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

作為對濕地資源科學、合理的開發模式，濕地生態旅遊有利於實現人與自然的和諧共生以及人與人之間的社會公平，因此具有廣闊的推廣、實施前景。主要利益相關群體積極發揮作用並產生良性互動，特別是當地社區居民的廣泛參與，是實現濕地生態旅遊可持續發展的根本前提和有力保障。本文在分析白洋澱旅遊主要利益相關群體的參與現狀及互動關係的基礎上，嘗試將參與式發展理論應用到白洋澱生態旅遊的開發過程中，探討並提出了在該理論指導下完善濕地生態旅遊開發中社區參與的對策。

關鍵詞：

參與式發展、濕地生態旅遊、利益相關群體、社區參與、白洋澱

126. Research on Wetland Ecotourism in Baiyangdian Based on Participatory Development Theory

Zhang, M (Zhang Meng); Yang, CY (Yang Chieh-Yun); Zhang, N (Zhang Ning)
Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Commercial Research, 2010 (2): 142-145, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

As a scientific and wise use pattern for wetland resources, wetland ecotourism will benefit the co-existence between human and nature and promote social equity between people, so it enjoys broad promise for popularization and implementation. The proactive cooperation and sound interaction between main stakeholders, and the wide participation of the community residents, will guarantee the sustainable development of ecotourism in wetland. Based on the analysis of current status of participation and interactive relations of the main stakeholders in Baiyangdian tourism, this article attempts to apply the theory of participatory development to the ecotourism initiatives of Baiyangdian wetland, discusses and brings forward the countermeasures to improve community participation in wetland ecotourism under the guidance of the theory.

Keywords:

Participatory development, Ecotourism in wetland, Stakeholder, Community participation, Baiyangdian

127. 奧運設施可持續利用模式研究——以北京為例

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會議/刊物名稱：

中國地理科學（英文版），20 (5): 414-422 OCT 2010，SCI-E 檢索

內容簡介：

中國盛事活動數量與質量的提升，帶動了相關領域的研究。作為全球性的盛大節事，奧運會以其巨大的規模、普遍的吸引力與重要的政治意義，越發受到學者的關注。2008 奧運會對作為主辦城市的北京影響深遠，有學者開始思考賽後奧運場館與設施的利用問題。本文採用遊客問卷調查、政府人員深度訪談以及文獻搜集與分析三種方法進行研究，梳理了其他城市後奧運時期的奧林匹克公園利用情況，並分析了其中的政府、企業、遊客等利益主體以及“準備利用”“如何利用”“如何管理”等問題。本文建議北京奧林匹克公園可按照具體的設施與功能，通過點、線、面三個層次進行空間規劃，這一地區可發展成為以承辦大型節事活動與體育賽事為主要用途的多功能城市中心。

關鍵詞：

永續利用、奧林匹克公園、北京

127.Utilization Pattern of Olympic Parks and Its Application in Beijing

He, Y (He Yan); Chen, T (Chen Tian); Zhang, M (Zhang Meng)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Chinese Geographical Science, 20 (5): 414-422 OCT 2010, SCI-E indexed

Abstract:

With great promotion of mega-events in both quantities and qualities in China, the research of Mega-events has been increased. As a global hallmark event, the Olympics, with their enormous scale, universal attraction for the media and tremendous political significance, have increasingly drawn attention from the researchers. It is obvious that Beijing has been greatly impacted by the 2008 Olympic Games as the host. The event aroused close attention of researchers, especially the problem how the Olympic stadiums and facilities can be utilized after Olympic Games. The paper employed three methods to conduct a survey, that is, sending questionnaires to tourists, interviewing with government officers, and collecting information about former Olympic Parks from Internet and literatures. The utilization of former Olympic Parks after Games was summarized and some experiences were refined. Besides, three main bodies including government, business operators and visitors which formed basic driving forces to influence the park's use were analyzed. At the same time, the paper believes that three topics affect the park's utilization involving "prepare to use", "how to use it" and "how to manage it", and Beijing Olympic Park can also follow that thinking and reference in the further practices. Based on it, suggestions are given that Beijing Olympic Park can be planned spatially from three layers, the point, line and area, based on their function and infrastructure in the Games, and the area would be shaped as a new urban center with multi-functions while Mega-events and sport events are still the main content of the park.

Keywords:

Sustainable utilization, Olympic Park (Olympic Green), Beijing Olympic Park, Beijing

128. 旅遊公共服務：國際經驗與啓示

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澳門科技大學 國際旅遊學院

會議/刊物名稱：

商業研究，2010 (3): 120-124，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

提供旅遊公共服務，既是政府發揮其促進與保障本國旅遊業健康、持續發展之功能的體現，也是其使旅遊業順應“以人爲本”發展趨勢的途徑之一。旅遊業較發達的國家和地區，大多非常重視旅遊公共服務的建設，並採取一系列措施，從法律、政策、財力投入等方面予以保證，不斷提高旅遊公共服務的水平 and 質量。本文匯總了部分國家和地區在這領域的具體措施，並借鑒其成功經驗，提出我國建設旅遊公共服務的對策。

關鍵詞：

旅遊公共服務、政府、旅遊者

128. Public Tourist Service: International Experience and Implications for China

Zhang, M (Zhang Meng); Zhang, N (Zhang Ning); Zhu, XX (Zhu Xiu-Xiu);
Chen, W (Chen Wei)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Commercial Research, 2010 (3): 120-124, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

Providing public tourist service not only reflects the function of governments to boost and guarantee the healthy continuous growth of tourism industry, but also serves as an approach to direct tourism towards an emerging trend which highlights people-oriented development. Countries and regions whose tourism is relatively advanced, generally attach great importance to the provision of public tourist service, and take a series of measures in terms of legislation, policy and investment etc to stabilize and upgrade the quality of service. Based on the collation of specific measures adopted by countries and regions in this field, this article brought forward the recommendations for China with reference to their successful experiences.

Keywords:

Public tourist service, Government, Tourist

129.生態旅遊視野下的澳門文化遺產旅遊可持續發展研究

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澳門科技大學 國際旅遊學院

會議/刊物名稱：

深圳大學學報 (人文社會科學版)，27 (4): 99-104 JUL 2010，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

2005 年澳門歷史城區被聯合國教科文組織評定為世界文化遺產，此後澳門政府準備以此為契機發展澳門文化遺產旅遊，以使其旅遊形象不再局限於賭城形象。面臨新的機遇與挑戰，如何處理好文化遺產保護與旅遊開發的關係，實現遺產旅遊的可持續發展，是一個有待研究的課題。對照生態旅遊的發展理念和發展經驗，目前澳門歷史城區遺產旅遊發展在利益相關者利益協調、旅遊環境容量控制、旅遊服務設施規劃和遺產旅遊管理等方面還存在諸多不完善的地方，需要建立權威、高效率的澳門文化遺產委員會，有針對性地採取行之有效的措施，以促進澳門遺產旅遊的可持續發展。

關鍵詞：

澳門文化遺產、生態旅遊、可持續發展

129. On Sustainable Development of Cultural Heritage Tourism in Macau from the Perspective of Ecotourism

Yuan, J (Yuan Jun); Zhang, M (Zhang Meng)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Shenzhen University (Humanities & Social Sciences), 27 (4): 99-104 JUL 2010, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

Since the Historic Center of Macau was listed as one of the World Cultural Heritages in 2005 by UNESCO, Macau Government has strengthened the efforts to develop cultural heritage tourism, in an attempt to diversify the image of Macau beyond that of a gambling city. In face of the new opportunities and challenges, how to strike a balance between heritage conservation and tourism development and to actualize the sustainability of cultural heritage tourism in Macau will be an issue demanding prompt solution. Based on the principles and experiences of ecotourism, this paper examined the current status of heritage tourism in the Historic Center of Macau, identified the major problems in this development process, and proposed specific recommendations accordingly for sustainability of cultural heritage tourism in Macau.

Keywords:

Macau, Cultural heritage, Ecotourism, Sustainable development

130. 澳門城市生態旅遊開發淺議

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會議/刊物名稱：

生態經濟，2010 (7): 107-111，中文核心期刊要目總覽(2008)

內容簡介：

城市旅遊與生態旅遊同為 20 世紀 90 年代以來中國旅遊研究的熱點領域，而作為兩者結合而成的新形式，城市生態旅遊既可以滿足城市居民和外來遊客旅遊的需要，同時又能夠維護城市生態環境的平衡，促進城市經濟、社會和文化的協調發展與城市綜合競爭力的提升，因而具有廣闊的開發前景。本文在相關理論梳理的基礎之上，評價、分析了澳門的城市生態旅遊資源，並對其城市生態旅遊開發提出了探索性的建議。

關鍵詞：

澳門、城市生態旅遊、可持續發展

130. Preliminary Discussion on Initiative for Urban Ecotourism in Macau

Zhang, M (Zhang Meng); Chen, W (Chen Wei)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Ecological Economy, 2010 (7): 107-111, A Guide to the Core Journals of China(PKU)

Abstract:

Since the 1990's, both urban tourism and ecotourism have been the focus of attention for tourism research in China. As combination of them, urban ecotourism also enjoys broad space for popularization, as it can meet the demands of both the citizens and travelers, maintain the balance of the urban environment, coordinate the economic, social and cultural development and enhance the overall competitiveness of the city. Based on literature review, this article performed an analysis on the urban ecotourism resources of Macau, and probed into the development schemes for the urban ecotourism initiative in Macau.

Keywords:

Macau, Urban ecotourism, Sustainable development

131. 美食節感知質量及提升策略研究

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澳門科技大學 國際旅遊學院

會議/刊物名稱：

旅遊學刊，25 (12): 58-62，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

文章分析美食節感知質量的評價指標，探討美食節質量屬性的重要性和績效，並提出針對性的質量提升策略。借助文獻分析、消費者訪談和小樣本檢驗得到具有 21 項指標的感知質量測度量表。實施攔截式調查得到 307 個有效樣本，實施配對樣本 t 檢驗和重要性—績效分析之後，發現美食節感知質量主要體現為核心產品和服務、配套設施和服務、增值服務三個方面，其中前兩方面遊客賦予高重要性。核心產品和服務應持續投入資源保證質量，而配套設施和服務應重點投入資源提升質量。

關鍵詞：

美食旅遊、美食節、感知質量、提升策略

131.Study on the Perceived Quality of Gourmet Festival and Its Strategy for Improvement

Zhang, T (Zhang Tao)

Faculty of International Tourism, Macau University of Science and Technology

Name of Conference/Journal:

Tourism Tribune, 25 (12): 58-62, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

The paper tries to analyze the evaluation indicators of perceived quality of gourmet festival, discuss the importance and performance of its quality attributes and bring forward the strategy for quality improvement. The perceived quality measuring table with 21articles is obtained with the help of literature analysis, interviews with consumers and sample tests. 307 valid samples are obtained after random investigations and after the analysis of paired tests of samples and importance-performance, we find that the perceived quality of gourmet festival is mainly embodied in its key products and services, supporting facilities and services as well as value-added service. The visitors attach great importance to the former two services. Continues input of key products and service will guarantee its quality and various resources should be focused on supporting facilities and services to upgrade its quality.

Keywords:

Gourmet Travel, Gourmet Festival, Perceived Quality, Strategy for Improvement

132. 澳門居民對大賽車影響的感知研究

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會議/刊物名稱：

Journal of Convention & Event Tourism , 11 (2): 138-153 APR 2010

內容簡介：

本文研究了本澳居民對澳門大賽車及其影響的感知，通過對 598 份問卷調查，研究鑿別了一個由 5 項因素（分別是, social-psychological impacts, society benefits, society costs, social life costs, and physical impact) 包含 20 個影響條目的影響量錶。研究證實居民對大賽車基本持肯定和歡迎的態度。

基於對大賽車影響的不同感知，居民區分為兩個不同組別：embracers and tolerator 三個最受影響的因素分別是受訪者的年齡組別，對政府行政的態度及對更多旅遊者訪澳的喜好。

關鍵詞：

體育盛事、影響、感知、澳門

132. Resident Perceptions Toward the Impacts of the Macao Grand Prix

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Name of Conference/Journal:

Journal of Convention & Event Tourism, 11 (2): 138-153 APR 2010

Abstract:

This article examines host residents' perceptions toward a major sporting event, the Macao Formula-3 car racing Grand Prix. It is an empirical study that involved 598 surveys with local Macao residents. An impact scale comprising 20 impact items with factors, namely, social-psychological impacts, society benefits, society costs, social life costs, and physical impacts, was established to assess resident perceptions toward the impacts of the event. The study confirmed that most respondents perceived the impacts of the Macao Grand Prix positively. Based on their different perceptions of the Grand Prix impacts, residents were classified into two groups: embracers and tolerators. The three most significant factors that influenced resident perceptions toward the impacts of the Grand Prix are their age group, their attitude about government performance in the organization of the Grand Prix, and their preferences regarding having more tourists visit Macao.

Keywords:

Sporting event, Impacts, Perceptions, Macao

133. $Z[\omega]$ 中丟番圖逼近的度量性質

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會議/刊物名稱：

澳門科技大學學報，4 (2): 111-115 DEC 2010

內容簡介：

Eisenstein 整數定義為 $Z[\omega] = \{p_1 + p_2\omega : p_1, p_2 \in \mathbb{Z}\}$ ，其中 $\omega = \frac{1}{2}(-1 + \sqrt{3}i)$ ，這些整數構成一個環。我們稱 $Q[\omega] = \{a/b + c/d\omega : a/b, c/d \in \mathbb{Q}\}$ 為 Eisenstein 有理數，這裏我們研究複數的 Eisenstein 有理丟番圖逼近的度量性質。

關鍵詞：

度量性質、Eisenstein 整數、Eisenstein 有理數、丟番圖逼近

133. Metric Properties of Diophantine Approximation in $Z[\omega]$

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Department of General Education, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 111-115 DEC 2010

Abstract:

Suppose the Eisenstein integers are defined as the set $Z[\omega] = \{p_1 + p_2\omega : p_1, p_2 \in \mathbb{Z}\}$, where $\omega = \frac{1}{2}(-1 + \sqrt{3}i)$. These forms a ring (in fact a unique factorisation domain). The Eisenstein rationals are defined as the set $Q[\omega] = \{a/b + c/d\omega : a/b, c/d \in \mathbb{Q}\}$. In this paper, we study metric properties of Diophantine approximation by ratios of Eisenstein integers.

Keywords:

Metric properties, Eisenstein integers, Eisenstein rationals, Diophantine approximation

134. “矛盾”的多重定義與“真矛盾論”的理論困境

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會議/刊物名稱：

江海學刊，2010 (3): 37-42，CSSCI 檢索，中文核心期刊要目總覽(2008)

內容簡介：

“真矛盾論”是澳大利亞著名邏輯學家和哲學家普利斯特等學者為當代亞相容邏輯的理論建構提供的哲學根據。他們認為，存在“事實上為真”的矛盾。要論證這一觀點，就需要首先說明什麼是矛盾之“真”，這就要求回到“矛盾”概念的定義。本文表明，在“矛盾”的多重定義下，“真矛盾論”無法為自身找到合適的根據：“矛盾”的純粹語形定義是不恰當的；在語義型定義下，矛盾是無法為“真”的，如果強行賦予其“真”值，則意味著已經改變了論題；在語用型定義下，矛盾之“真”可獲得相對的說明，但矛盾的“可接受性”被弱化了，同時會導致與亞相容理念相背的結果；在本體論型定義下，矛盾之“真”需要語義封閉系統的可靠性作為基礎，而其可靠性並不能在語義封閉的情況下得到證明。

關鍵詞：

“真矛盾論”、矛盾、真值、邏輯悖論

134.Multi-Definitions of “Contradiction” and the Theoretical Dilemma of Dialetheism

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Name of Conference/Journal:

Jianghai Academic Journal, 2010 (3): 37-42, CSSCI indexed, A Guide to the Core Journals of China(PKU)

Abstract:

Dialetheism is a philosophical fundamental for modern paraconsistent logic theory, provided by Priest, a famous Australian logician and philosopher, and some other paraconsists. According to them, some contradictions are “in fact true”. To argue it, it is necessary to explain what the “truth” of a contradiction is, that is, go back to the definition of “contradiction”. However, according to this paper, dialetheism fails to find a proper explanation for itself under multi-definitions on “contradiction”: it is not correct to define “contradiction” in a pure syntactic way; no contradiction can be true in semantic way, and once a contradiction is composed the value “true”, the object has been changed; although a contradiction can be “true” relatively in the pragmatic way, the acceptability of the contradiction is weakened, and some bad consequence against to paraconsistency will be brought; in the ontological way, the soundness of a semantic closed system is needed to explain the “truth” of a contradiction, but its soundness can not be proved when it is semantic closed.

Keywords:

Dialetheism, Contradiction, Truth value, Logical paradox

135.精化算法求解非線性特徵值問題

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會議/刊物名稱：

澳門科技大學學報，4 (2): 106-110 DEC 2010

內容簡介：

基於 LOBPCG (局部優化塊預條件共軛梯度法) 的思路，本文提出一種新的子空間迭代法，精化算法。精化算法可以使得迭代中特徵值快速收斂，同時其殘量範數也能嚴格單調下降。通過將精化算法應用於自治場迭代法(SCF)中，提出一種新的數值計算非線性特徵值問題的方法。數值試驗表明，比較傳統的自治場迭代法而言，新方法能夠用較少的時間實現同樣精度的特徵值計算。

關鍵詞：

對稱正定特徵值問題、LOBPCG、自治場迭代、精化算法

135.Refined Method for Non-linear Eigenvalue Problem

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Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 106-110 DEC 2010

Abstract:

Based on LOBPCG (Locally Optimal Block Preconditioned Conjugate Gradient) method, a refined method is presented which preserves the advantages of LOBPCG and is able to make the residual monotonically decreasing as eigenvalues converge. The SCF (Self Consistent Field) iteration method is mainly used for solving the nonlinear eigenvalue problem and often requires more accurate approximate eigenvectors. The characteristic of the refined method could make the SCF iteration more efficient. And some experiments numerically confirm that.

Keywords:

Symmetric eigenvalue problem, LOBPCG, SCF, Refined Method

136.250 份澳門市售中成藥標籤和說明書的調查與分析

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會議/刊物名稱：

澳門科技大學學報，4 (2): 111-115 DEC 2010

內容簡介：

摘要：本研究對 250 份澳門市售中成藥的標籤和說明書所寫內容進行了系統地調查和分析。根據澳門衛生局於 2005 年 7 月執行的技術性指示第 4/2005 號“中成藥及傳統藥物包裝的標籤規定”，對標籤和說明書上藥品名稱、劑型、藥品配方及成份的百分比、製造商、貨物製造批號、有效期限、特別貯存條件及注意事項等相關內容進行了分析和統計。其中 88 份沒有提供成份百分比，佔 35.2%。51 份沒有注明儲存條件或相關信息，佔 20.4%。69 份沒有標示注意事項或相關資訊，佔 27.6%。而且該批中成藥標籤和說明書中全都沒有標示不良反應或與其相關的注意事項。結果顯示，澳門市售中成藥的標籤和說明書在內容上存在一些問題，不適當和錯誤的標籤和說明書會誤導消費者，從而導致不當地使用藥物，可能對消費者造成潛在的危險。希望製藥企業嚴格按照相關規定，不斷完善中成藥標籤和說明書的各項內容，把藥品安全放在首位。澳門相關部門亦應加強對上市藥品的監督管理。完備上市後藥品安全性、有效性監測的回饋系統，不斷補充和完善政府對“中成藥及傳統藥物包裝的標籤規定”相關規定。

關鍵詞：

中成藥、標籤、說明書

136.Survey and Analysis of the Labeling and User Instructions of 250 Proprietary Chinese Medicines in The Macau Market

Sa, F (Sa Fei); Vong, WT (Vong Wai-Ting); Lam, WK (Lam Wai-Kei)
MIAR, Macau University of Science and Technology

Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 111-115 DEC 2010

Abstract:

proprietary Chinese medicines that were sold in local Macau market. Following the Macau Special Administrative Region Health Bureau Technical Instruction 04/2005 for Labeling of Proprietary Chinese Medicines, we examined the medicines on their product name, dosage form, names and quantities of ingredients, manufacturer, batch number, expired date and storage condition in their labels and user instructions. Eighty eight samples (35.2%) lacked the names and quantities of ingredients. Fifty one samples(20.4%) did not mention storage condition. Sixty nine samples (27.6%) lacked precautions and matters needing attention. None of them mentioned the adverse effects and contraindications. These findings showed inappropriate labeling and lack of some critical information on proprietary Chinese medicines in the Macau market. Inappropriate and inadequate labeling cause confusion to the consumers and may lead to misuse of medication causing harm to the patient. Therefore, manufacturers should sternly follow the regulation of labeling of proprietary Chinese medicines for continual improvement on drug labeling and user instructions. It is suggested the Macau Health Bureau should establish an effective surveillance and feedback system to monitor proprietary Chinese medicines available in the Macau market in order to promote strict quality control in appropriate labeling on proprietary Chinese medicines.

Keywords:

Proprietary Chinese Medicines, Labeling, User Instructions

137. 電感耦合等離子體質譜法測定中成藥中的重金屬

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會議/刊物名稱：

Clinica Chim Acta, (2010) 411: 909

內容簡介：

簡介：作為保護大眾消費者的健康和安全的 一個重要監管措施，衛生當局立法規管了中成藥中的重金屬含量。為了解措施的成效，採用電感耦合等離子體質譜法（ICP - MS），對澳門市場上中成藥的質量進行橫斷面研究，共對 262 個樣本中的砷（As），鎘（Cd），銅（Cu），鉛（Pb）和汞（Hg）進行了分析。

方法：根據 2005 年版中國藥典，樣本用濃硝酸進行微波消解，並以電感耦合等離子體質譜儀（ICP-MS，型號 7500a，安捷倫）對樣本進行分析。

結果：以每天最高攝入量計算，其中 3 個樣本發現有鉛污染，濃度由 283-795 微克/天不等，而有 1 個樣本發現含有 2219 微克/天的砷。這些樣本的濃度分別超過了澳門衛生局的允許範圍（179 微克鉛/天和 1500 微克砷/天）。另外有 4 個樣本雖然檢出含有較高濃度的砷和汞，但由於成份中是含有一些相關傳統礦物藥成份（砷和汞的硫化物），這些礦物藥以中華傳統文化的形式使用了幾個世紀，因而未被認為不合格。此外，有 1 個樣本檢出 210 毫克/公斤的銅，然而在澳門未有對銅的含量上限定出標準。

結論：關於澳門市場中的中成藥質量，我們的研究結果絕不是想引起了公眾的恐慌。然而，這些結果應該引起消費者對潛在危害健康的污染物，特別是有毒重金屬的警惕。藥品生產企業應在標籤和產品的說明書上，聲明服用礦物藥如汞和砷的硫化物的潛在危險。而澳門衛生局應及早制定和限制中成藥中銅的含量。

關鍵詞：

中成藥、重金屬、電感耦合等離子體質譜

137.Determination of heavy metals in proprietary Chinese medicines by inductively coupled plasma–mass spectrometry

**Sa, F (Sa Fei); Vong, WT (Vong Wai-Ting); Chan, TM (Chan, T. M.);
Lam, WK (Lam Wai-Kei)**

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Name of Conference/Journal:

Clinica Chim Acta, (2010) 411: 909

Abstract:

Introduction: Legislation on limits of heavy metals in proprietary Chinese medicines is an important regulatory measure for protecting the health and safety of the consuming public. We conducted a cross-sectional study of the quality of proprietary Chinese medicines in the Macau market. Two hundred and sixty two samples were analysed for arsenic (As), cadmium (Cd), copper (Cu), lead (Pb) and mercury (Hg) using inductively coupled plasma–mass spectrometry (ICP–MS).

Methods: Following the method of the Pharmacopoeia of People's Republic of China 2005, samples were microwave digested with concentrated nitric acid before analysis by ICP–MS (Model 7500a, Agilent).

Results: Three samples were contaminated with Pb at 283–795 µg/day, while 1 sample was contaminated with As at 2219 µg/day, both exceeding the allowable limits of 179 µg/day and 1500 µg/day respectively (Macau Health Bureau). Another 4 samples were found to be contaminated both with As and Hg but the contaminants were claimed to be arsenic sulfide and mercury sulfide that had been used as mineral drugs in traditional Chinese culture for centuries. Cu was detected in 1 sample at 210 mg/kg but the safety limit of this metal remained undetermined in Macau.

Conclusions: Our findings were by no means alarming with regard to the quality of proprietary Chinese medicines in the Macau market. However, they should alert consumers of the potential health hazards of contamination by toxic heavy metals. It is suggested that pharmaceutical manufacturers should state in the labeling and product inserts the potential hazard of taking mineral drugs like mercury and arsenic sulfides. The Macau Health Bureau should establish and enforce an allowable limit for Cu in proprietary Chinese medicines.

Keywords:

Proprietary Chinese medicine, Heavy metal, ICP-MS

138. 氣相色譜電子捕獲法及質譜法系統評價中成藥中有機氯 農藥的殘留量

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會議/刊物名稱：

Clin Chim Acta, (2010) 411: 909

內容簡介：

簡介：作為一種重要的管理措施，現時香港已對中成藥中有機氯農藥殘留量作出限制和規定，但是在澳門及中國內地仍未有相關的規定。為此對澳門市場上中成藥的相關質量現況進行橫斷面研究，利採用氣相色譜電子捕獲檢測器（GC-ECD）方法，對 231 個中藥樣本中的 20 種有機氯農藥殘留進行了分析。

方法：根據 2005 年版的香港中藥材標準，樣本用乙酸乙酯超聲波萃取，凝膠滲透色譜及弗羅裏硅土（Florisil）柱進行淨化，氣相色譜電子捕獲檢測器（GC-ECD）方法進行分析。對檢出農藥殘留樣本用氣相色譜質譜（GC-MS）法進行確認。

結果：二十一個樣本（9.1%）被發現含有一種或多種已知的有機氯農藥殘留。其中，三種有機氯農藥殘留被檢出和確定，包括五氯硝基苯，滴滴涕和六氯苯。其濃度介乎於 0.01-0.2 毫克/公斤。

結論：研究結果表明澳門市場上的一些中成藥被有機氯農藥所污染。因此，為對澳門的中成藥質量促進嚴格監督和控制，更多的監督和定期檢查應及早執行。而中國內地和澳門的衛生部門應建立相關殘留量上限標準，以對中成藥中有機氯農藥殘留進行監管。

關鍵詞：

中成藥、農藥、氣相色譜電子捕獲、氣相色譜質譜

138. Systematic evaluation of organochlorine pesticide residues in proprietary Chinese medicines by GC–ECD/GC–MS

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Name of Conference/Journal:

Clin Chim Acta, (2010) 411: 909

Abstract:

Introduction

Limitation of organochlorine pesticide residues in proprietary Chinese medicines is an important regulatory measure for their export in Hong Kong, but there is no such requirement in Macau and Mainland China. We conducted a cross-sectional study

on the quality of proprietary Chinese medicines in the Macau market. Two hundred and thirty one proprietary Chinese medicines were analyzed for twenty organochlorine pesticide residues using gas chromatography with electron capture detector (GC–ECD).

Methods

Following the method of the Hong Kong Chinese Medicine Standard 2005, samples were extracted with ethyl acetate ultrasonically, cleaned up with gel permeation chromatography, followed by solid phase extraction using a Florisil column, and analyzed by GC–ECD. Presence of pesticides was confirmed by gas chromatography–mass spectrometry (GC–MS).

Results

Twenty one samples (9.1%) were found to contain one or more of the target organochlorine pesticide residues. Three groups of pesticides were identified, including pentachloronitrobenzene, dichlorodiphenyltrichloroethane, and hexachlorobenzene. They were detected at concentrations between 0.01 and 0.2 mg/kg.

Conclusions

Our results show that some proprietary Chinese medicines in the Macau market were contaminated with organochlorine pesticides. Therefore, more supervision and regular inspections should be implemented promptly in order to promote stricter surveillance and quality control of proprietary Chinese medicines in Macau. It is suggested that the People's Republic of China and Macau Health Bureau should establish an allowable limit of organochlorine pesticide residues for regulating proprietary Chinese medicines.

Keywords:

Proprietary Chinese medicine, Pesticide, GC-ECD, GC-MS

139.B 細胞趨化因子 CXCL13 產物提高與系統性紅斑狼瘡病變的 相關性

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會議/刊物名稱：

臨床免疫雜誌，30 (1): 45-52, JAN 2010，SCI-E 檢索

內容簡介：

B 淋巴細胞趨化因子 (BLC/CXCL13) 是一種 CXC 趨化因子。它在狼瘡的發病過程中參與了 B1 和 B2 細胞轉運從而對目標器官中自身反應性 T 輔助 (TH) 細胞和自身抗體的產生進行激活。B 淋巴細胞趨化因子可誘導 CXCR5+ T 細胞亞群轉運形成濾泡輔助性 T 淋巴細胞(TFH)從而明確地參與自身抗體的產生。

材料與方法：我們在本文中分別採用酶聯免疫吸附法和液式細胞計檢查法，對 35 位系統性紅斑狼瘡 (SLE) 患者和 23 個性別和年齡匹配的對照組 (NC) 進行實驗，測量 B 淋巴細胞趨化因子的血漿濃度，TNF 種類 (BAFF) 中的 B 細胞激活因子，濾泡輔助性 T 淋巴細胞細胞相關的細胞因子 IL-21，以及濾泡輔助性 T 淋巴細胞相關受體 CXCR5 和 IL-21R 在 CD4+Th 和 CD19+B 細胞表面的表達。

結果與討論：與對照組作比較，系統性紅斑狼瘡患者中的血漿 B 淋巴細胞趨化因子，TNF 種類，和 IL-21 濃度均明顯較高 (所有 $p < 0.0001$)。增加 B 淋巴細胞趨化因子濃度，跟系統性紅斑狼瘡患者中的 SLEDAI 分數有及其明顯的關聯 ($r=0.399$, $p=0.032$)。對於系統性紅斑狼瘡患者，CXCR5 在 Th 和 B 細胞的表面表達以及 IL-21R 在 B 細胞的表面表達都明顯低於控制組 (兩者 $p < 0.01$)。這可能表明在系統性紅斑狼瘡患者的發病過程中大多數分化的濾泡輔助性 T 淋巴細胞一旦被激活就從血液循環遷移從而進入到淋巴器官中。

結論：上述結果表明，B 淋巴細胞趨化因子，TNF 種類，和 IL-21 的趨化因數與系統性紅斑狼瘡的免疫發病機理相關聯。同時，B 淋巴細胞趨化因子可以作為系統性紅斑狼瘡的潛在病症。

關鍵詞：

B 細胞、TNF 種類中的 B 細胞激活因子、趨化因子、B 淋巴細胞趨化因子、濾泡輔助性 T 淋巴細胞、系統性紅斑狼瘡

139.Elevated Production of B Cell Chemokine CXCL13 is Correlated with Systemic Lupus Erythematosus Disease Activity

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Name of Conference/Journal:

Journal of Clinical Immunology, 30 (1): 45-52 JAN 2010, SCI-E indexed

Abstract:

B lymphocyte chemoattractant (BLC/CXCL13), a CXC chemokine, is involved in B1 and B2 cell trafficking for the activation of autoreactive T helper (Th) cells and autoantibody production in target organs during the development of lupus. CXCL13 can induce the trafficking of CXCR5+ T lymphocyte subset designated as follicular helper T lymphocytes (TFH) which are specifically involved in autoantibody production.

Materials and Methods: We herein measured the plasma concentrations of CXCL13, B-cell-activating factor of the TNF family (BAFF), and TFH-cells-related cytokine IL-21 and cell surface expression of TFH-related receptor CXCR5 and IL-21R on CD4+Th and CD19+B cells in 35 systemic lupus erythematosus (SLE) patients and 23 sex- and age-matched control subjects (NC) using enzyme-linked immunosorbent assay and flow cytometry, respectively.

Results and Discussion: Plasma CXCL13, BAFF, and IL-21 concentrations were significantly higher in SLE patients than NC group (all $p < 0.0001$). Increase in CXCL13 concentration correlated positively and significantly with SLEDAI score in SLE patients ($r = 0.399$, $p = 0.032$). Cell surface expression of CXCR5 on Th and B cells and IL-21R on B cells was however significantly lower in SLE patients than controls (both $p < 0.01$). It may indicate that most differentiated TFH cells migrate out from circulation into lymphoid organ upon activation during the disease development of SLE.

Conclusions: The above results suggest that the elevated production of CXCL13, BAFF, and IL-21 may be associated with the function of TFH for the immunopathogenesis in SLE, and CXCL13 may serve as a potential disease marker of SLE.

Keywords:

B cells, B-cell-activating factor of the TNF family, chemokines, CXCL13, follicular helper T lymphocytes, systemic lupus erythematosus

140. 炎症細胞因子 IL-27 活化類風濕關節炎纖維樣滑膜細胞的 作用機理

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會議/刊物名稱：

關節炎研究與治療 2010, 12 (4): Art. No. R129 2010, SCI-E 檢索

內容簡介：

IL-27 是 IL-12 家族中一種新發現的細胞因子，它主要由抗原呈遞細胞產生。最新的研究發現類風濕關節炎患者的關節滑膜和關節液中 IL-27 的表達會升高。因此我們探討了 IL-27 和另外兩種炎症性細胞因子腫瘤壞死因子- α 和 IL-1 β 對於人成纖維樣滑膜細胞的體外活化效應，同時深入研究了調節其活化效應的細胞內信號傳導途徑。我們發現類風濕關節炎患者血清中 IL-27 的濃度會顯著升高。正常關節來源的成纖維樣滑膜細胞和類風濕關節來源的成纖維樣滑膜細胞都能表達 IL-27 受體 gp130 和 WSX-1。結果顯示 IL-27 能顯著提高類風濕關節來源的成纖維樣滑膜細胞細胞間粘附分子-1 和血管細胞粘附分子-1 的表達，還能誘導類風濕關節來源的成纖維樣滑膜細胞釋放更多的促炎症細胞因子 IL-6, 趨化因子 CCL2, CXCL9, CXCL10 和基質金屬蛋白酶-1。而且 IL-27 能顯著增強腫瘤壞死因子- α 或 IL-1 β 刺激下的類風濕關節來源的成纖維樣滑膜細胞表達更高的細胞間粘附分子-1, 血管細胞粘附分子-1 和釋放更多的 CXCL9 和 CXCL10。進一步的研究發現 IL-27 誘導成纖維滑膜細胞產生趨化因子和粘附分子主要通過激活磷脂酰肌醇-3-OH 激酶(PI3K)-Akt, C-Jun 氨基端激酶和 JAK-STAT-1 這三條細胞內信號通路所調節。研究結果對 IL-27 通過不同的細胞內信號通路介導的活化機製做出了新的解釋。

關鍵詞：

IL-27、類風濕關節炎、滑膜細胞、炎症

140. Effects of inflammatory cytokine IL-27 on the activation of fibroblast-like synoviocytes in rheumatoid arthritis

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Name of Conference/Journal:

Arthritis Research Therapy, 12 (4): Art. No. R129 2010, SCI-E indexed

Abstract:

INTRODUCTION : Interleukin (IL)-27 is a novel member of the IL-6/IL-12 family cytokines that are produced early by antigen-presenting cells in T helper (Th)1-mediated inflammation. Elevated expression of IL-27 has been detected in the synovial membranes and fluid of rheumatoid arthritis (RA). **METHODS :** We investigated the in vitro effects of IL-27, alone or in combination with inflammatory cytokine tumor necrosis factor (TNF)- α or IL-1 β on the pro-inflammatory activation of human primary fibroblast-like synoviocytes (FLS) from RA patients and normal control subjects, and the underlying intracellular signaling molecules were determined by intracellular staining using flow cytometry. **RESULTS :** Significantly higher plasma concentration of IL-27 was found in RA patients (n = 112) than control subjects (n = 46). Both control and RA-FLS constitutively express functional IL-27 receptor heterodimer, gp130 and WSX-1, with more potent IL-27-mediated activation of signal transducers and activators of transcription (STAT)1 in RA-FLS. IL-27 was found to induce significantly higher cell surface expression of intercellular adhesion molecule (ICAM)-1 and vascular cell adhesion molecule (VCAM)-1 and release of inflammatory chemokine IL-6, CCL2, CXCL9, CXCL10 and matrix metalloproteinase-1 of RA-FLS than that of control FLS (all P < 0.05). Moreover, an additive or synergistic effect was observed in the combined treatment of IL-27 and TNF- α or IL-1 β on the surface expression of ICAM-1 and VCAM-1 and the release of CXCL9 and CXCL10 of RA-FLS. Further investigations showed that the expression of ICAM-1, VCAM-1 and chemokines stimulated by IL-27 was differentially regulated by intracellular activation of phosphatidylinositol 3-OH kinase-AKT, c-Jun amino-terminal kinase and Janus kinase pathways. **CONCLUSIONS :** Our results therefore provide a new insight into the IL-27-activated immunopathological mechanisms mediated by distinct intracellular signal transductions in joint inflammation of RA.

Keywords:

IL-27, Rheumatoid arthritis, Synoviocytes, Inflammation

141. 系統性紅斑狼瘡患者的外周血淋巴細胞 Toll 樣受體的激發

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會議/刊物名稱：

臨床和實驗免疫學，159 (1): 11-22 JAN 2010，SCI-E 檢索

內容簡介：

系統性紅斑狼瘡 (SLE) 是一種與 T 和 B 淋巴細胞異常活化有關的自身免疫性疾病，原因是產生炎性細胞因子和自身反應性抗體。動物研究已經表明 Toll 樣受體 (TLR) 在小鼠 SLE 發病機制中的重要性。在本臨床研究中，流式細胞儀檢測發現 SLE 患者和正常人的 TLR 1-9 單核細胞蛋白表達不同，淋巴細胞亞群不同。結果顯示，細胞內 TLR (TLR-3, -8, -9) 和細胞外 TLRs (TLR-1, -2, -4, -5, -6) 的表達在 SLE 患者的單核細胞，包括 CD4 (+) T 淋巴細胞、CD8 (+) T 淋巴細胞和 B 淋巴細胞，較對照組顯著增高 (P 均 < 0.001)。此外，TLR-4 在 CD4 (+) T 淋巴細胞和 CD8 (+) T 淋巴細胞表面的表達，以及 TLR-6 在 B 淋巴細胞表面的表達，都與 SLE 疾病活動指數 (SLEDAI) 呈正相關 (TLR-4 在 CD4 (+) T 淋巴細胞和 CD8 (+) T 淋巴細胞表面：r = 0.536, P = 0.04; r = 0.713, P = 0.003; TLR-6 在 B 淋巴細胞表面：r = 0.572, P = 0.026)。與上述結果一致的是，在 PolyIC (TLR-3 配體)、脂多糖 (TLR-4 配體)、肽聚糖 (TLR-2 配體)、鞭毛蛋白 (TLR-5 配體)、R837 (TLR-7 配體) 和 CpG DNA (TLR-9 配體) 的不同刺激下，SLE 患者的炎性細胞因子白細胞介素 (IL)-1 β 、IL-6、IL-10 和 IL-12，以及來自外周血單核細胞 (PBMC) 的炎症趨化因子 CCL2、CXCL8、CCL5 和 CXCL10 的相對誘導率 (%), 與對照組相比都有增加。這些結果表明，對細胞外病原體和自源性 DNA 的先天免疫反應通過啟動 TLR 在 SLE 中起到免疫病理的作用。

關鍵詞：

細胞因子、系統性紅斑狼瘡、Toll 樣受體

141. Activation profile of Toll-like receptors of peripheral blood lymphocytes in patients with systemic lupus erythematosus

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Name of Conference/Journal:

Clinical and Experimental Immunology, 159 (1): 11-22 JAN 2010, SCI-E indexed

Abstract:

Systemic lupus erythematosus (SLE) is a systemic autoimmune disease associated with aberrant activation of T and B lymphocytes for the production of inflammatory cytokines and autoreactive antibodies. Animal studies of SLE have indicated that Toll-like receptors (TLR) are important in the pathogenesis of murine lupus. In the present clinical study, differential protein expressions of TLR-1–9 of monocytes and different lymphocyte subsets from patients with SLE and normal control subjects were determined by flow cytometry. Results showed that the expression of intracellular TLRs (TLR-3, -8, -9) and extracellular TLRs (TLR-1, -2, -4, -5, -6) were elevated in monocytes, CD4+ T lymphocytes, CD8+ T lymphocytes and B lymphocytes of SLE patients compared to control subjects (all $P < 0.001$). Moreover, cell surface expression of TLR-4 on CD4+ T lymphocytes and CD8+ T lymphocytes, and TLR-6 on B lymphocytes, were correlated positively with SLE disease activity index (SLEDAI) (TLR-4 on CD4+ T lymphocytes and CD8+ T lymphocytes: $r = 0.536$, $P = 0.04$; $r = 0.713$, $P = 0.003$; TLR-6 in B lymphocytes: $r = 0.572$, $P = 0.026$). In concordance with the above results, there is an observable increased relative induction (%) of inflammatory cytokine interleukin (IL)-1 β , IL-6, IL-10 and IL-12, chemokines CCL2, CXCL8, CCL5 and CXCL10 from peripheral blood mononuclear cells (PBMC) upon differential stimulation by PolyIC (TLR-3 ligand), lipopolysaccharide (TLR-4 ligand), peptidoglycan (TLR-2 ligand), flagellin (TLR-5 ligand), R837 (TLR-7 ligand) and CpG DNA (TLR-9 ligand) in SLE patients compared to controls. These results suggest that the innate immune response for extracellular pathogens and self-originated DNA plays immunopathological roles via TLR activation in SLE.

Keywords:

Cytokines, Systemic lupus erythematosus, Toll-like receptors

142. 炎症細胞因子 IL-27 和 TNF- α 對人支氣管上皮細胞的活化

效應：呼吸道炎症的免疫病理生理機制

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會議/刊物名稱：

細胞生理學雜誌 223 (3): 788-797 JUN 2010, SCI-E 檢索

內容簡介：

IL-27 是 IL-6/IL-12 家族的一種細胞因子，它在免疫應答早期由抗原遞呈細胞生成。IL-27 外一種炎症細胞能夠誘導初始型 T 淋巴細胞向輔助性 1 型 T 淋巴細胞表型轉換並且能夠抑制後期的炎症反應。近期的研究證據表明人體支氣管上皮細胞表達 IL-27 的受體複合物。本文中我們探討了 IL-27 和另胞因子 TNF- α 對於支氣管上皮細胞的體外活化效應，同時深入研究了調節其活化效應的細胞內信號傳導途徑。結果顯示 IL-27 可以顯著提高支氣管上皮細胞表面細胞間粘附分子-1 的表達，IL-27 和 TNF- α 的聯合刺激能夠協同誘導細胞間粘附分子-1 的表達。儘管 IL-27 不能誘導支氣管上皮細胞釋放 IL-6，但是它可以顯著增強 TNF- α 刺激下的支氣管上皮細胞釋放更多的 IL-6。IL-27 和 TNF- α 這種協同刺激支氣管上皮細胞生成 IL-6 和細胞間粘附分子-1 的效應可初步由 IL-27 可誘導 TNF- α 受體 p55TNFR 的上調表達所解釋。進一步的研究發現 IL-27 和 TNF- α 誘導支氣管上皮細胞產生 IL-6 和細胞間粘附分子-1 主要通過激活磷脂酰肌醇-3-OH 激酶(PI3K)-Akt, p38 絲裂原活化蛋白激酶和胞核因子- κ B 這三條細胞內信號通路所調節。本項研究對呼吸道炎症發病的分子機製做出了新的解釋。

關鍵詞：

IL-27、TNF-alpha、支氣管上皮細胞、呼吸道炎症

142.Activation of human bronchial epithelial cells by inflammatory cytokines IL-27 and TNF-alpha: implications for immunopathophysiology of airway inflammation

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Name of Conference/Journal:

Journal of Cellular Physiology, 223 (3): 788-797 JUN 2010, SCI-E indexed

Abstract:

Interleukin (IL)-27 is a member of IL-6/IL-12 family cytokines produced by antigen-presenting cells in immune responses. IL-27 can drive the commitment of naive T cells to a T helper type 1 (Th1) phenotype and inhibit inflammation in later phases of infection. Human bronchial epithelial cells have been shown to express IL-27 receptor complex. In this study, we investigated the in vitro effects of IL-27, alone or in combination with inflammatory cytokine tumor necrosis factor (TNF)-alpha on the pro-inflammatory activation of human primary bronchial epithelial cells and the underlying intracellular signaling mechanisms. IL-27 was found to enhance intercellular adhesion molecule 1 (ICAM-1) expression on the surface of human bronchial epithelial cells, and a synergistic effect was observed in the combined treatment of IL-27 and TNF-alpha on the expression of ICAM-1. Although IL-27 did not alter the basal IL-6 secretion from bronchial epithelial cells, it could significantly augment TNF-alpha-induced IL-6 release. These synergistic effects on the up-regulation of ICAM-1 and IL-6 were partially due to the elevated expression of TNF-alpha receptor (p55TNFR) induced by IL-27. Further investigations showed that the elevation of ICAM-1 and IL-6 in human bronchial epithelial cells stimulated by IL-27 and TNF-alpha was differentially regulated by phosphatidylinositol 3-OH kinase (PI3K)-Akt, p38 mitogen-activated protein kinase, and nuclear factor-kappaB pathways. Our results therefore provide a new insight into the molecular mechanisms involved in airway inflammation.

Keywords:

IL-27, TNF-alpha, Bronchial epithelial cells, Airway inflammation

143. 白介素-17A 活化支氣管上皮細胞和嗜鹼性粒細胞：一種新的 炎症機制

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會議/刊物名稱：

歐洲呼吸科雜誌，35 (4): 883-893 APR 2010，SCI-E 檢索

內容簡介：

嗜鹼性粒細胞是輔助性 2 型 T 淋巴細胞免疫應答反應中重要的效應細胞，同時，也是免疫球蛋白 E 介導的慢性過敏性炎症反應中的起始效應細胞。在過敏性哮喘病人的呼吸道炎症組織中，嗜鹼性粒細胞和輔助性 17 型 T 淋巴細胞的數量增多。我們系統分析了細胞因子 IL-17A 活化人支氣管上皮細胞細胞株 (BEAS-2B) 和嗜鹼性粒細胞細胞株 (KU812) 的效應機制。結果發現支氣管上皮細胞和嗜鹼性粒細胞相互作用可以誘導炎性細胞因子 IL-6 和 CCL2 的釋放，後者可以招募嗜鹼性粒細胞，嗜酸性粒細胞和單核細胞的聚集。IL-17A 的刺激可以協同誘導釋放更多的 IL-6 和 CCL2。我們發現支氣管上皮細胞和嗜鹼性粒細胞的直接接觸對於 IL-17A 協同刺激釋放 IL-6 和 CCL2 具有重要意義。同時，支氣管上皮細胞和嗜鹼性粒細胞的共同培養可以誘導支氣管上皮細胞表面的細胞間粘附分子-1 的上調表達。進一步的研究表明細胞外信號調解激酶，C-Jun 氨基端激酶，p38 絲裂原活化蛋白激酶和胞核因子-kappaB 這些細胞內信號通路調節著 IL-17A 刺激下的支氣管上皮細胞和嗜鹼性粒細胞的活化效應。我們的研究結果因此闡明了輔助性 17 型 T 淋巴細胞和嗜鹼性粒細胞在過敏性哮喘發病中一種新穎的免疫病理機制，即支氣管上皮細胞和嗜鹼性粒細胞的直接接觸可以誘發呼吸道炎症反應。

關鍵詞：

IL-17A、支氣管上皮細胞細胞、嗜鹼性粒細胞、炎症反應

143. Interleukin-17A activation on bronchial epithelium and basophils: a novel inflammatory mechanism

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Name of Conference/Journal:

European Respiratory Journal, 35 (4): 883-893 APR 2010, SCI-E indexed

Abstract:

Basophils are the accessory cell type for T-helper (Th)2 induction and initiators in immunoglobulin E-mediated chronic allergic inflammation. Basophils and Th17 cells accumulate at the inflammatory sites, such as the airways of allergic asthmatic patients. We investigated the activation of interleukin (IL)-17A on the primary human basophils/KU812 basophilic cells and primary human bronchial epithelial cells/BEAS-2B bronchial epithelial cells. Cytokines, chemokines, adhesion molecules and intracellular signalling molecules were assayed by ELISA or flow cytometry. Co-culture of bronchial epithelial cells and basophils could significantly induce the release of IL-6, an epithelial inflammatory cytokine, and CCL2, a chemokine for basophils, eosinophils and monocytes. Such induction was synergistically enhanced by IL-17A, and direct interaction between these two cells was necessary for IL-17A-induced IL-6 and CCL2 release. Surface expression of intercellular adhesion molecule-1 on bronchial epithelial cells was also upregulated upon their interaction. The interaction of basophils and bronchial epithelial cells under IL-17A stimulation was differentially regulated by extracellular signal-regulated kinase, c-Jun N-terminal protein kinase, p38 mitogen-activated protein kinase and nuclear factor-kappaB pathways. These findings suggest a novel immunopathological role of Th17 cells and basophils in allergic asthma through the activation of granulocyte-mediated inflammation initiated by the direct interaction between basophils and bronchial epithelial cells.

Keywords:

IL-17A, bronchial epithelium, basophils, inflammation

144. 通過新型輔助性 T 細胞亞群 Th2 細胞因子白細胞介素 IL-33

的細胞內信號傳導機制對人嗜酸性粒細胞激活的調節：

過敏性炎癥影響

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會議/刊物名稱：

細胞分子免疫學，7 (1): 26-34 JAN 2010，SCI-E 檢索

內容簡介：

新型白細胞介素家族 IL-1 細胞因子 IL-33 已被證實能激活輔助性 T 淋巴細胞亞群 Th2、肥大細胞和嗜鹼性粒細胞來產生一系列炎症細胞因子，並且能調節小鼠血液中嗜酸性粒細胞，血清免疫球蛋白 IgE 的分泌和氣管上皮細胞肥大症。在本研究中，我們表徵了 IL-33 對人嗜酸性粒細胞的激活作用，並研究了潛在的細胞內信號傳導機制。IL-33 明顯增強了嗜酸性粒細胞的存活率並上調了胞內細胞粘附因子 ICAM-1 在嗜酸性粒細胞表面的表達量，但是它抑制了 ICAM-3 和 L 選擇素的表達。另外，IL-33 介導了促炎症細胞因子 IL-6 和白細胞介素趨化因子 CXCL8 和早孕期人蛻膜基質細胞趨化因子 CCL2 的大量釋放。我們發現 IL-33 介導的粘附分子存活和誘導的增強以及細胞因子和趨化因子的釋放都不同程度的被 κ 基因結合因子 NF- κ B，p38 分裂原激活蛋白因子 MAPK 和細胞外信號調節激酶 ERK 通路所調節。另外，我們比較了上述 IL-33 與兩種相關的不同結構和功能細胞因子白細胞介素 IL-1 β 和 IL-18 的活性。結果發現 IL-1 β ，而不是 IL-18 顯著上調了細胞表面 ICAM-1 的表達。IL-1 β 和 IL-18 也明顯增加了嗜酸性粒細胞的存活率，並且通過 NF- κ B，p38 MAPK 和 ERK 通路誘導了 IL-6 和趨化因子 CXCL8 和 CCL2 的釋放，另外與 IL-1 β ，IL-18 和 IL-33 的聯合治療中也觀察到對 IL-6 釋放的協同效應。總而言之，我們的實驗結果為免疫學過敏性炎症中通過不同細胞內信號級聯的 IL-33 介導嗜酸性粒細胞活化過程的深層次研究奠定了基礎。

關鍵詞：

過敏反應、細胞因子、嗜酸性粒細胞、細胞內信號傳導

144. Intracellular signaling mechanisms regulating the activation of human eosinophils by the novel Th2 cytokine IL-33: implications for allergic inflammation

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Name of Conference/Journal:

Cellular & Molecular Immunology, 7 (1): 26-34 JAN 2010, SCI-E indexed

Abstract:

Name of Conference / Journal: The novel interleukin (IL)-1 family cytokine IL-33 has been shown to activate T helper 2 (Th2) lymphocytes, mast cells and basophils to produce an array of proinflammatory cytokines, as well as to mediate blood eosinophilia, IgE secretion and hypertrophy of airway epithelium in mice. In the present study, we characterized the activation of human eosinophils by IL-33, and investigated the underlying intracellular signaling mechanisms. IL-33 markedly enhanced eosinophil survival and upregulated cell surface expression of the adhesion molecule intercellular adhesion molecule (ICAM)-1 on eosinophils, but it suppressed that of ICAM-3 and L-selectin. In addition, IL-33 mediates significant release of the proinflammatory cytokine IL-6 and the chemokines CXCL8 and CCL2. We found that IL-33-mediated enhancement of survival, induction of adhesion molecules, and release of cytokines and chemokines were differentially regulated by activation of the nuclear factor (NF)-kappaB, p38 mitogen-activated protein kinase (MAPK) and extracellular signal-regulated kinase (ERK) pathways. Furthermore, we compared the above IL-33 activities with two structurally and functionally related cytokines, IL-1beta and IL-18. IL-1beta, but not IL-18, markedly upregulated cell surface expression of ICAM-1. IL-1beta and IL-18 also significantly enhanced eosinophil survival, and induced the release of IL-6 and chemokines CXCL8 and CCL2 via the activation of the NF-kappaB, p38 MAPK and ERK pathways. Synergistic effects on the release of IL-6 were also observed in combined treatment with IL-1beta, IL-18 and IL-33. Taken together, our findings provide insight into IL-33-mediated activation of eosinophils via differential intracellular signaling cascades in the immunopathogenesis of allergic inflammation.

Keywords:

Allergic inflammation, Cytokines, Eosinophils, Intracellular signaling

145. 成人過敏性鼻炎早期生長反應-1 的高水平表達和多態性與

總 IgE 和過敏的關聯

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Abdullah VJ、黃振國、林偉基

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會議/刊物名稱：

臨床化學學報，411 (1-2): 67-71 2010，SCI-E 檢索

內容簡介：

背景：早期生長反應-1 (Egr-1) 在人類呼吸道表達，哮喘患者中它的多態性與總 IgE 和過敏有關。我們研究了過敏性鼻炎 (AR) Egr-1 的單核苷酸多態性 (SNP) 和它的 mRNA 表達的影響。方法：利用實時 PCR 檢測 214 名 AR 成人和 259 名對照組外周血的 SNP -4071A->G 的基因型和 mRNA 的表達。結果：病例組 Egr-1 的 mRNA 表達明顯高於對照組 (GAPDH 表達的中位數：0.23 vs 0.15 倍; $P < 0.001$)。其表達與-4071 多態性不相關。然而，發現病例組-4071A->G 與升高的血漿總 IgE (p 值=0.028) 和過敏性 ($P=0.030$) 顯著性相關。性別與年齡校正後的 Logistic 回歸分析證實了這一相關性 ($P=0.034$)。患者為 A 等位基因純合子時血漿總 IgE 和過敏的風險分別是有 G 等位基因攜帶者的 2.3 倍和 1.9 倍。結論：我們發現了 AR 患者 Egr-1 的 mRNA 的高水平，說明了血漿總 IgE 和過敏與多態性顯著的相關性。它可能是有益的探索 Egr-1 抑制劑的遺傳藥理學研究。

關鍵詞：

過敏性鼻炎、Egr-1、基因多態性、免疫球蛋白 E、mRNA 表達

145.High-level expression of early growth response-1 and association of polymorphism with total IgE and atopy in allergic rhinitis adults

Chan, IHS (Chan, Iris H. S.); Lee, DLY (Lee, Dennis L. Y.); Ho, OYM (Ho, Osan Y. M.); Wong, EWY (Wong, Eddy W. Y.); Lam, YYO(Lam Yvonne Y.O.); Nelson, LST (Nelson L. S. Tang); Chan,MHM (Chan Micheal H.M.); Victor J. Abdullah; Wong, C K (Wong Chun K.); Lam, CWK (Lam Christopher W.K.)

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Name of Conference/Journal:

Clinica Chim Acta, 411 (1-2): 67-71 2010, SCI-E indexed

Abstract:

BACKGROUND: Early growth response-1 (Egr-1) is expressed in human airways and its polymorphisms have been associated with total IgE and atopy in asthmatic patients. We investigated the effects of Chinese-tagging single nucleotide polymorphism (SNP) of Egr-1 and its mRNA expression on allergic rhinitis (AR) traits.

METHODS: Among 214 Chinese AR adults and 259 controls, tag SNP -4071 A-->G was genotyped and mRNA expression in peripheral blood was quantified by real-time PCR.

RESULTS: Egr-1 mRNA expression was significantly higher in patients than controls (median of 0.23 vs 0.15 fold GAPDH expression; $p<0.001$). Its expression was not associated with -4071 polymorphism. However, significant correlations were found between -4071 A-->G with increased plasma total IgE ($p=0.028$) and atopy ($p=0.030$) in patients. Logistic regression confirmed the association ($p=0.034$) with age and gender adjusted. Patients homozygous for the A allele had a 2.3-fold and 1.9-fold risks, respectively of having increased plasma total IgE and atopy than those G allele carriers.

CONCLUSIONS: We showed high levels of Egr-1 mRNA expression and demonstrated a significant association of polymorphism with increased plasma total IgE and atopy in AR patients. It may be useful to explore the pharmacogenetics of Egr-1 inhibitors.

Keywords:

Allergic rhinitis, Egr-1, Genetic polymorphism, IgE, mRNA expression

146. 中國哮喘患兒血漿可溶性 CTLA-4 與肺功能和基因多態性的研究

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會議/刊物名稱：

國際過敏學及免疫學雜誌，152 (2): 113-121 2010，SCI-E 檢索

內容簡介：

背景：CTLA-4 下調的 T (H) 2 免疫反應是眾所周知的。最近的研究表明 CTLA-4 基因多態性與過敏性疾病相關聯。我們研究了哮喘病人 CTLA-4 單核苷酸多態性的影響和 298 例中國哮喘患兒和 175 例對照組的血漿 CTLA-4。方法：酶免疫測定血漿 sCTLA-4，總 IgE 和抗原特異性 IgE 的濃度。限制性片段長度多態性確定 CTLA-4 的六個單核苷酸多態性，即 -1147CT，+49AG，CT60，JO31，JO30 和 JO27_1 的基因型。結果：在我們的哮喘患者血漿 sCTLA-4 與 FEV(1)/FCV ($r = -0.146$ ， p 值 = 0.036) 呈負相關。位點基因的廣義多因素相互作用的降維分析表明，-1147CT 是血漿 sCTLA-4 的最佳模式，擁有 100% 的交叉驗證一致性和 40.9% 誤差預測 ($p < 0.001$)。性別和年齡校正後的多元回歸分析證實了 6 種單核苷酸多態性與血漿 sCTLA-4 濃度的相關性 (p 值 = 0.002)。T 等位基因攜帶者血漿 sCTLA-4 濃度顯著低於為 C 等位基因純合子患者 (p 值 = 0.001)。哮喘患者最常見的單體型與低 sCTLA-4 也顯著性相關。經 Bonferroni 校正後，我們沒有發現血漿總 IgE，過敏和肺功能與 6 個 SNP 顯著的相關性。結論：中國哮喘患兒血漿 sCTLA-4 與肺功能和 -1147CT 多態性相關。這可能有助於識別 sCTLA-4 作為一個潛在的治療哮喘的目標信號。

關鍵詞：

空氣過敏原、哮喘、CTLA-4、基因多態性、免疫球蛋白 E

146. Association of plasma soluble CTLA-4 with lung function and gene polymorphism in Chinese asthmatic children

Chan, IHS (Chan, Iris H. S.); Tang, NLS (Tang, Nelson L. S.); Leung, TF (Leung, Ting F.); Lam, YYO (Lam, Yvonne Y. O.); Wong, GWK (Wong, Gary W. K.); Wong, CK (Wong, Chun K.); Lam, CWK (Lam, Christopher W. K.)

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Name of Conference/Journal:

International Archives of Allergy and Immunology, 152 (2): 113 - 121 2010, SCI-E indexed

Abstract:

BACKGROUND: Cytotoxic T lymphocyte antigen 4 (CTLA-4) is known to downregulate the T(H)2 immune response. Recent studies have suggested an association of CTLA-4 polymorphisms with allergic diseases. We investigated the effects of single nucleotide polymorphisms (SNPs) of CTLA-4 on asthma traits and plasma sCTLA-4 in 298 Chinese asthmatic children and 175 controls.

METHODS: Plasma sCTLA-4, total and allergen-specific IgE concentrations were measured by enzyme immunoassay. Six SNPs, namely -1147CT, +49AG, CT60, JO31, JO30 and JO27_1, in CTLA-4 were genotyped by restriction fragment length polymorphism.

RESULTS: Plasma sCTLA-4 was negatively associated with FEV(1)/FVC ($r = -0.146$, $p = 0.036$) among our asthmatic patients. Analysis of locus-locus interaction by generalized multifactor dimensionality reduction showed that -1147CT was the best model for plasma sCTLA-4 with a cross-validation consistency of 10 out of 10 and a prediction error of 40.9% ($p < 0.001$). Multivariate regression analysis confirmed the association between plasma sCTLA-4 concentration with -1147CT among the 6 SNPs tested ($p = 0.002$) after adjustment for gender and age. The plasma sCTLA-4 concentration was significantly lower in patients homozygous for the C allele than in T allele carriers ($p = 0.001$). There was also a significant association between the most common haplotypes with low sCTLA-4 in asthmatics. We could not find any significant association between plasma total IgE, atopy and lung function with the 6 SNPs after Bonferroni correction.

CONCLUSIONS: Plasma sCTLA-4 is associated with lung function and -1147CT polymorphism in Chinese asthmatic children. This may help to identify CTLA-4 signaling as a potential therapeutic target in asthma.

Keywords:

Aeroallergens, Asthma, CTLA-4, Genetic polymorphism, IgE

147. 終末期腎病患者血漿中髓過氧化物酶的預後價值

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會議/刊物名稱：

美國腎病學雜誌，56 (5): 937-946 NOV 2010，SCI-E 檢索

內容簡介：

背景：髓過氧化物酶（MPO）由於強大的氧化能力而具有致動脈粥樣硬化的作用。我們假設，MPO 水平可預測長期接受腹膜透析（PD）治療的終末期腎病患者的臨床結果。研究設計：前瞻性隊列研究。地點及對象：從香港單一地區透析單位從 1999 年 4 月至 2001 年 2 月招募 236 例長期接受 PD 的病人。預估：夾心酶聯免疫吸附法檢測血漿 MPO 水平。觀察和測量：3 年期間的死亡率和致命或非致命性心血管事件。結果：MPO 水平分佈的中位數為 31.8 ug/L（25% - 75%，24.4-42.7）。其中有 69 例死亡，81 例心血管事件。校正傳統和非傳統的危險因素，C -反應蛋白，心肌肌鈣蛋白 T 和 N -末端腦利鈉肽水平後，血漿中 MPO 水平翻倍分別與 46% 死亡率風險（95%CI，1.02-2.08; P=0.04）和 60% 心血管事件風險（95% CI，1.17-2.18，P=0.003）獨立相關。當 Cox 回歸模型組成包括臨床，人口，透析，超聲心動圖，生化參數，以及 C -反應蛋白，心肌肌鈣蛋白 T 和 N -末端腦利鈉肽水平時，Log（2）MPO 對死亡率（P = 0.04）和心血管事件（p= 0.005）具有更強的顯著性的預測價值。限制：MPO 的是在一個單一的時間來衡量，也不能反映隨時間變化。結論：這些數據表明血漿 MPO 水平有顯著性的獨立的和額外的預後價值，而與標準的臨床，生化和超聲心動圖參數無關，而且對長期腹膜透析患者分層有用。MPO 可能是終末期腎臟病心血管併發症重要的中間介質，值得進一步研究。

關鍵詞：

髓過氧化物、末期腎病、死亡率、心血管事件、腹膜透析

147. Prognostic value of plasma myeloperoxidase in ESRD patients

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Name of Conference/Journal:

American Journal of Kidney Diseases, 56 (5): 937-946 NOV 2010, SCI-E indexed

Abstract:

BACKGROUND: Myeloperoxidase (MPO) has been suggested to have a role in atherosclerosis through its strong oxidative capacity. We hypothesized that MPO level may predict clinical outcomes in patients with end-stage renal disease receiving long-term peritoneal dialysis (PD) therapy.

STUDY DESIGN: Prospective cohort study. **SETTING & PARTICIPANTS:** 236 long-term PD patients were recruited from a single regional dialysis unit in Hong Kong between April 1999 and February 2001. **PREDICTOR:** Level of plasma MPO, analyzed using a sandwich enzyme-linked immunosorbent assay. **OUTCOME & MEASUREMENT:** Mortality and fatal or nonfatal cardiovascular events at 3 years.

RESULTS: The distribution of MPO levels was skewed with a median of 31.8 µg/L (25th-75th percentiles, 24.4-42.7). There were 69 deaths and 81 cardiovascular events. Adjusting for traditional and nontraditional risk factors and C-reactive protein, cardiac troponin T, and N-terminal pro-brain natriuretic peptide levels, a doubling in plasma MPO level was associated independently with a 46% (95% CI, 1.02-2.08; P = 0.04) and 60% (95% CI, 1.17-2.18; P = 0.003) increase in risks of mortality and cardiovascular events, respectively. Log(2)MPO showed significant additional predictive value for mortality (P = 0.04) and cardiovascular events (P = 0.005) when included in Cox regression models consisting of clinical, demographic, dialysis, echocardiographic, and biochemical parameters, as well as C-reactive protein, cardiac troponin T, and N-terminal pro-brain natriuretic peptide levels.

CONCLUSIONS: These data suggest that plasma MPO level has significant independent and additional prognostic value beyond the standard clinical, biochemical, and echocardiographic parameters and is useful for outcome stratification in long-term PD patients. MPO may be an important mediator of increased cardiovascular risk in patients with end-stage renal disease and warrants further investigation.

Keywords:

Myeloperoxidase, End-stage renal disease, Mortality rate, Cardiovascular events, Peritoneal dialysis

148. 握力，而不是其他營養參數，可以預測在腹膜透析患者循環系統的阻塞情況

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會議/刊物名稱：

腎臟病與透析腎移植雜誌，25 (10): 3372-3379 OCT 2010，SCI-E 檢索

內容簡介：

背景：握力（HGS）是一種肌肉質量指標。本研究旨在檢驗這一假設，低 HGS 是否反映了心臟病變狀況，並預測慢性腹膜透析（PD）患者循環阻塞的未來風險。方法：從香港單一地區透析單位招募 218 例慢性 PD 患者進行前瞻性研究。HGS，血清白蛋白，瘦體重（LBM）的肌酐動力學（CK）和主觀全面評估（SGA）在研究開始進行評估，並且在後續四年觀察發展循環阻塞的風險。結果：年齡，性別和身高校正後，HGS 與瘦體重（LBM）的肌酐動力學（CK），SGA，血清白蛋白，動脈粥樣硬化血管疾病，左心室質量指標和早期二尖瓣二尖瓣環速度峰值速度（E/Em）顯著性相關。在多變量 Cox 回歸分析，HGS（ $P=0.004$ ）和射血分數（ $p=0.004$ ）均僅次於左室重量指數作為最顯著的因素（ $P<0.001$ ），預測在 4 年循環的擠塞情況。血清白蛋白，瘦體重（LBM）的肌酐動力學（CK）和 SGA 方法不能獨立的預測循環阻塞。收縮功能障礙和 HGS 的 <性別的中位數的患者發展循環阻塞的危險比為 2.77 [95% 可信區間（CI），1.46-5.28； $P=0.002$]。結論：PD 患者低 HGS 反映了心臟的病變狀況，預測循環阻塞，而不依賴於營養，超聲心動圖和臨床參數。尿毒病人的骨骼肌肉病變和心肌病的重要聯繫值得作進一步研究。

關鍵詞：

循環阻塞、心電圖、握力、營養、腹膜透析

148. Handgrip strength, but not other nutrition parameters, predicts circulatory congestion in peritoneal dialysis patients

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Name of Conference/Journal:

Nephrol Dial Transplant, 25 (10): 3372-3379 OCT 2010, SCI -indexed

Abstract:

BACKGROUND: Handgrip strength (HGS) is a marker of lean muscle mass. This study aims to test the hypothesis that a low HGS reflects a diseased cardiac status and predicts future risk of circulatory congestion in chronic peritoneal dialysis (PD) patients.

METHODS: Two hundred and eighteen chronic PD patients were prospectively recruited from a single regional dialysis unit in Hong Kong. HGS, serum albumin, lean body mass (LBM) by creatinine kinetics (CK) and subjective global assessment (SGA) were assessed at study entry and examined in relation to the risk of developing circulatory congestion over a 4-year follow-up.

RESULTS: Adjusting for age, gender and height, HGS showed significant correlations with LBM by CK, SGA, serum albumin, atherosclerotic vascular disease, left ventricular (LV) mass index and early mitral inflow velocity to peak mitral annulus velocity (E/Em ratio). In the multivariable Cox regression analysis, HGS ($P = 0.004$) and ejection fraction ($P = 0.004$) were both second to LV mass index ($P < 0.001$) as the most significant factors in predicting circulatory congestion at 4 years. Serum albumin, LBM by CK and SGA were not independently predictive of circulatory congestion. Patients with systolic dysfunction and $HGS < \text{gender-specific median}$ had an adjusted hazard ratio of 2.77 [95% confidence interval (CI), 1.46-5.28; $P = 0.002$] in developing circulatory congestion than those with normal systolic function and $HGS \geq \text{gender-specific median}$.

CONCLUSIONS: A low HGS reflects a diseased cardiac status and predicts future risk of circulatory congestion independent of other nutritional, echocardiographic and clinical parameters in PD patients. The important link between skeletal myopathy and myocardial disease in uraemic patients warrants further investigation.

Keywords:

Circulatory failure, ECG, Hand-grip strength, Nutrition, Peritoneal dialysis

149.胸腺基質淋巴細胞生成素對嗜酸性粒細胞的趨化和促存活

作用 :過敏炎症的機制啓示

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會議/刊物名稱：

美國呼吸系統細胞和分子生物學雜誌，43 (3): 305-315 SEP 2010，SCI-E 檢索

內容簡介：

胸腺基質淋巴細胞生成素 (TSLP) 能在過敏性疾病中的呼吸道上皮細胞和皮膚表皮角化細胞中高度表達。TSLP 能夠激活樹突狀細胞和肥大細胞並啓動 Th2 反應從而在過敏炎症反應中起著重要開關的作用。爲了進一步闡明呼吸道上皮細胞、皮膚表皮角化細胞與嗜酸性粒細胞之間相互作用介導的過敏反應，我們研究了 TSLP 對人嗜酸性粒細胞的調節作用。我們發現嗜酸性粒細胞表達 TSLP 受體復合物，由 TSLP 結合亞單位 TSLPR 和 IL-7R α 鏈組成。TSLP 可以顯著地減少嗜酸性粒細胞的凋亡，上調粘附分子白細胞分化抗原 18 和細胞間粘附分子-1，下調 L-選擇素，增強其粘附與纖維連接蛋白，並誘導炎症因子 IL-6 和趨化因子 CXCL8、CXCL1、CCL2 的釋放。所有這些反應都是濃度梯度依賴並是 TSLP 特異性介導的。TSLP 激活嗜酸性粒細胞胞外調節激酶，p38 絲裂原活化蛋白激酶和胞核因子-kappaB，而非其他細胞中 TSLP 激活的細胞轉導與轉錄激活因子 (STAT) -3 和 STAT-5。總之，以上結果表明 TSLP 可以通過不同的信號途徑激活嗜酸性粒細胞。

關鍵詞：

胸腺基質淋巴細胞生成素、嗜酸性粒細胞、過敏炎症

149. Thymic stromal lymphopoietin induces chemotactic and pro-survival effects in eosinophils: implications in allergic inflammation

Wong, CK (Wong, Chun K.); Hu, SQ (Hu, Shuiqing); Cheung, PFY (Cheung, Phyllis F. Y.); Lam, CWK (Lam, Christopher W. K.)
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Name of Conference/Journal:

American Journal of Respiratory Cell and Molecular Biology, 43 (3): 305-315 SEP 2010, SCI-indexed

Abstract:

Thymic stromal lymphopoietin (TSLP) is highly expressed by bronchial epithelial cells and skin keratinocytes in allergic diseases. TSLP acts as a master switch for allergic inflammation through the activation of dendritic cells and mast cells for initiating inflammatory type 2 T-helper lymphocyte responses. To elucidate the immunological cascades of epithelium / keratinocyte-eosinophil-mediated allergic inflammation, we examined the modulating effects of TSLP on human eosinophils. Expression of TSLP receptor complex was detected by RT-PCR, flow cytometry, and Western blot. Adhesion molecules, cytokine, and chemokines were quantitated by flow cytometry or ELISA. Intracellular signal transduction molecules were measured by Western blot and flow cytometry. We observed that human eosinophils constitutively expressed functional heterodimeric TSLP receptor complex comprising TSLP-binding chain TSLPR and IL-7R α chain. TSLP could significantly delay eosinophil apoptosis, up-regulate cell surface expression of adhesion molecule CD18 and intercellular adhesion molecule-1, but down-regulate L-selectin, enhance eosinophil adhesion onto fibronectin, and induce the release of inflammatory cytokine IL-6 and chemokines CXCL8, CXCL1, and CCL2 (all $P < 0.05$). All these effects were concentration dependent and TSLP specific. TSLP regulated the above effects through the activation of extracellular signal-regulated protein kinase, p38 mitogen-activated protein kinase, and NF- κ B signaling pathway, but not signal transducer and activator of transcription 5 and 3, which were usually activated in other effector cells upon TSLP stimulation. Collectively, the above findings elucidate the proallergic mechanisms of TSLP via the activation of distinct intracellular signaling pathways in eosinophils.

Keywords:

Thymic stromal lymphopoietin, Eosinophils, Allergic inflammation

150. 中成藥六味地黃系列產品質量的色譜指紋圖譜再評價

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會議/刊物名稱：

澳門科技大學學報，4 (2): 1-5 DEC 2010

內容簡介：

目的：六味地黃丸是家喻戶曉的中藥經典方劑，國內有 700 餘家生產廠家生產丸劑、膠囊、濃縮丸等劑型，影響極廣，各類研究也非常廣泛。關於該系列產品的品質，由於目前藥材市場藥材品質比較混亂，以及生產工藝的不盡相同，不同廠家生產的六味地黃丸品質優劣並存。本文報導了從色譜指紋圖譜整體比較分析不同生產廠家、不同劑型產品的品質的再評價的研究。

方法：高效液相色譜法；色譜儀 Agilent1200series 超高壓高效液相色譜儀（RRLC），DAD 檢測器；色譜柱 ZORBAX SB C18 (4.6×50mm, 1.8μm)；流速：0.8ml/min；檢測波長：210nm；進樣量 2μL；柱溫 0~10min 35℃,10.01~40min 40℃；流動相 A（0.1% 磷酸溶液）-B（乙腈）梯度洗脫。

結果：用經優化的色譜指紋圖譜分析評價結果揭示了不同劑型樣品品質以及同一劑型不同廠家產品的整體品質情況。

結論：同一劑型，不同廠家的產品的品質各異；以收集到的市場商品各類六味地黃製劑而言，傳統丸劑有效物質總量優於其他劑型，濃縮丸所含有效物質較少，但批間品質穩定。不少廠家為了產品能通過中國藥典標準的關口，人為添加丹皮酚的現象較為普遍，膠囊劑尤為明顯。

關鍵詞：

六味地黃系列；高效液相色譜指紋圖譜；不同劑型品質整體評價

150. Quality Re-assessment of Proprietary Series Products of “Liuwei Dihuang” by Chromatographic Fingerprint

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Name of Conference/Journal:

Journal of Macau University of Science and Technology, 4 (2): 1-5 DEC 2010

Abstract:

Aim : “Liuwei Dihuang Wan” (LWDHW) is a well known and widely used traditional Chinese medicine proprietary product that is manufactured by more than 700 domestic Chinese medicine companies ranging from the honey pills to concentrated pills, capsules to oral liquids, and a lot of research work on various products has been ubiquitously reported. Referring to quality control, it is noticed that good and bad commercial products are intermingled in the markets due to the crude drugs materials supplied in the markets are now almost uncontrollable. Meanwhile, the different manufacture procedures have also created some quality inconsistency among the dosage forms. In spite of the conventional standard in Chinese Pharmacopoeia, a comprehensive approach by means of chromatographic fingerprint analysis would be effective tool for re-assessing the intact qualities of LWDH series products which were reported in this paper.

Method: HPLC was carried out under the following conditions: equipment – Agilent 1200 series HPLC with Diode-array-detector and Agilent RRLC/DAD; column: ZORBAX SB C18 (4.6×50mm × 1.8μm) ; flow rate : 0.8ml/min ; detection wavelength : 210nm ; injection: 2μL ; column temperature: 0 – 10min 35oC, 10.01 – 40min 40oC ; mobile phase: (A) 0.1% phosphoric acid aqueous solution; (B) acetonitrile; linear gradient elution.

Results and Discussion : It was demonstrated that there was obvious discrepancy on bioactive ingredients distribution and the total integrated contents among the various products.

Discussion: As far as the collected commercial samples, there is a trend that the better inherent quality was disclosed unexpectedly in traditional honey pills than those of modern processed dosage forms. The concentrated pills from one manufacturer showed lot-to-lot quality consistent, but the total chemical content was rather lower. Not a few of the products were adulterated with paeonol material for the sake of meeting the requirement of ‘content of paeonol’ stipulated in Chinese Pharmacopoeia, especially the capsules.

Keywords:

Liuwei Dihuang series products, HPLC fingerprint, Intact quality re-assessment of various dosage forms

151. 中草藥鼻腔噴霧劑治療過敏性鼻炎後患者生存質量評估之 貫時性研究

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會議/刊物名稱：

植物治療研究雜誌(英國) (2010), 24 (4): 609-613 APR 2010, SCI-E indexed

內容簡介：

過敏性鼻炎(鼻敏感)損害生活質素。是次研究採用雙盲及安慰劑對照研究方法, 35 名患者隨機分為兩組, 服用“鼻敏皇”或安慰劑超過 7 星期, 以評估長期過敏性鼻炎患者服用過敏性鼻炎鼻腔噴霧劑(鼻敏皇)治療後, 其生活質素之改善情況。A 組(20 人)先使用 2 週“鼻敏皇”治療, 緊接 3 週洗脫期, 及後再使用 2 週安慰劑; B 組(15 人)則先使用安慰劑 2 週, 並在 3 週洗脫期後使用“鼻敏皇”。其間臨床症狀評分(CSS)及生活質量問卷均被記錄以分析患者生活質素之變化。結果顯示, 在使用“鼻敏皇”治療後, 兩組的 CSS 均有下降, 而使用安慰劑後評分並沒有明顯改變。在生活質量方面, A 組使用“鼻敏皇”治療後面色及睡眠質素均有顯著改善(兩者的 P 值 <0.05), B 組則不論在食慾及消化功能($P=0.01$)及快樂程度($P<0.05$)均有明顯改善, 但使用安慰劑後, 兩組患者在生活質量不同的領域及層面均無顯著差異。研究結果顯示“鼻敏皇”可能是以通過緩解症狀及改善生活質量而發揮療效。

關鍵詞：

鼻炎、中藥、滴鼻劑

151.A panel study to evaluate quality of life assessments in patients suffering from allergic rhinitis after treatment with a Chinese herbal nasal drop

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Name of Conference/Journal:

Phytotherapy Research, 24 (4): 609-613 APR 2010, SCI-E indexed

Abstract:

Allergic rhinitis impairs quality of life (QOL). To assess the changes in QOL of patients with perennial allergic rhinitis (PAR) after treatment with Allergic Rhinitis Nose Drops (ARND), 35 patients were divided into 2 groups in a randomized, double-blinded and placebo-controlled study, with a cross-over arrangement over 7 weeks, applying ARND or placebo. Group A (n = 20) started with ARND first for 2 weeks followed by a 3-week washout before placebo for the last 2 weeks, while Group B (n = 15) started with placebo first and finished with ARND after washout. The changes in Clinical Symptoms Score (CSS) and QOL were observed. A decrease in CSS was observed in patients of both groups after treatment with ARND, but no change was observed with the placebo. Group A patients also showed significant improvements in complexion and sleep ($P < 0.05$ for both) after treatment with ARND, but no change with the placebo. Group B patients showed significant improvements in appetite and digestion ($P < 0.01$) as well as joy ($P < 0.05$) after cross-over treatment with ARND, but no change with the placebo. ARND may have a therapeutic effect by relieving clinical symptoms and improving the QOL in patients with PAR.

Keywords:

Rhinitis, Chinese medicine, Nasal drop

152. 色譜指紋圖譜化學模式輔助簡化淫羊藿屬植物複雜的 形態分類

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會議/刊物名稱：

藥物與生物藥品分析期刊，52 (4): 452-460 AUG 1 2010，SCI-E 檢索

內容簡介：

中藥材淫羊藿是小檗科淫羊藿屬幾個品種供藥用的植物，中國藥典收載的藥材淫羊藿包括 5 個品種：淫羊藿、心葉淫羊藿、箭葉淫羊藿、柔毛淫羊藿、巫山淫羊藿。此外市場還是那個上有非法定品種混用，如粗毛淫羊藿、天平山淫羊藿、黔嶺淫羊藿。在商場上靠形態鑒別分類非常困難，研究者常常被多品種難分辨而困惑。其實，藥材的混亂的澄清應該以與藥效有關的生物活性成分為主。眾所周知，淫羊藿的主要與療效有關的活性成分是朝藿定 A (epimedin A)，朝藿定 B (epimedin B)，朝藿定 C (epimedin C) 及淫羊藿苷 (icariin) 等 C8-異戊烯基黃酮苷，並均以此四種主要的淫羊藿黃酮苷作為品質控制的指標成分。本文用高效液相-二極體陣列檢測器進行色譜指紋圖譜分析，發現色譜在中間部位上述主要的四種黃酮苷 (ABCI) 集中分佈在中間部位，構成指紋特徵區 – 稱為“ABCI 指紋區”，該指紋區的成分分佈在不同品種中各有不同，但是這種不同具有“收斂”(convergence) 的趨勢，有相似的分佈的品種應該具有相似的療效，因而可以將具有相似的化學分佈色譜指紋區的品種聚類在一起，分別歸類在心葉淫羊藿型、朝鮮淫羊藿型及擴展的巫山淫羊藿型中，從而簡化了“發散”(divergence) 思維的形態分類越分越細的複雜情況，對於同名異物的具有長期藥用歷史的多品種藥材，有相似的化學指紋區的品種收斂在一起，即與療效有關的活性成分組成（指紋區）相似的品種視作可同等藥用。

關鍵詞：

淫羊藿、異戊烯基黃酮苷、生物活性部位輔助分類、液相色譜指紋圖譜

152. Chemical pattern aided classification to simplify the intricacy of morphological taxonomy of *Epimedium* species using chromatographic fingerprinting

Xie, PS (Xie Pei-Shan); Yan, YZ (Yan Yu-Zhen); Guo, BL (Guo Bao-Lin); Lam, CWK (Lam, Christopher W. K.); Chui, SH (Chui Shao-Han); Yu, QX (Yu Qiong-Xi)

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Name of Conference/Journal:

Journal of Pharmaceutical and Biomedical Analysis, 52 (4): 452-460 AUG 1 2010, SCI-E indexed

Abstract:

Epimedium herb (Yinyanghuo), one of the popular Chinese materia medica, is a multiple species colony of Epimedium genus belonging to Berberidaceae. There are five species of Epimedium that have been officially adopted in Chinese Pharmacopoeia under the same crude drug name 'Yinyanghuo' comprising Epimedium brevicornu, E. koreanum, E. sagittatum, E. pubescens, and E. wushanense. In addition, non-official species like E. acuminatum, E. miryanthum and E. leptorrhizum are also mix-used. Frequently, the morphological taxonomical identification is very difficult during on-site inspection for species authentication in the market. Researchers are often bewildered by the multiple species ambiguity when putting this crude drug in use. Referring to the bioactive constituents that are vital for therapeutic efficacy, the key to clarifying the multiple species confusion should rely on analysis of the bioactive composition. It is well known that medicinal Epimedium herbs contain special C-8 prenylated flavonol glycosides which contribute to various bioactivities and the major four, epimedin A (A), epimedin B (B), epimedin C (C) and icariin (I), are unanimously used as bioactive markers for quality control. In this study, HPLC-DAD fingerprinting was performed for investigating the molecular spectrum of various Epimedium species. It was found that the four major flavonoids constitute the middle part of the chromatographic profiles to form a specific region (named as 'ABCI fingerprint region') being dominant in the HPLC profiles of all medicinal Epimedium species, and the five official species express five different 'ABCI' patterns (different peak : peak ratios). Our study found that the convergent tendency of the 'ABCI region' among multiple species of Epimedium could facilitate differentiation of complex commercial samples based on similar bioactive composition should confer similar bioactivities. Merging the different species that possess the same 'ABCI region' pattern into the same group can create a simpler bioactive-fraction-aided classification array by clustering the commercial samples into three bioactive-ingredients-based fingerprint patterns – 'E.b. pattern', 'E.k. pattern' and 'extensive E.w. pattern'. This approach offers the feasibility of characterizing and quality-controlling complex samples in the same genus designated under a single herbal drug entity on the premise of possessing the same bioactive ingredients

pattern and supported by long term traditional usage.

Keywords:

Epimedium herb, Prenylated flavonoids, Bioactive-fraction-aided classification, HPLC fingerprinting

153.自動多步展開高效薄層色譜指紋圖譜分析靈芝類藥材三萜

酸類成分研究

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會議/刊物名稱：

美國公立分析化學師協會國際期刊，93 (5): 1384-1389 SEP-OCT 2010，SCI-E 檢索

內容簡介：

靈芝是中國、日本和韓國著名的補益草藥，中國藥典 2000 年版收載了兩個品種 – 赤芝與紫芝，但市場上還有其他品種的“靈芝”，如所謂的“五色靈芝”，並宣稱是最佳組合，不過為得到科學資料證實。形態鑒別雖然可以比較有效地鑒別品種，但是內在品質卻只能依靠化學分析來說明。靈芝三萜類成分是多種成分中最主要的活性成分。利用自動展開的高效薄層色譜進行分析：預製 HPTLC 矽膠薄層板，展開劑 - 甲苯-乙酸乙酯-甲醇-甲酸 (15+15+1+0.1)，用自動展開儀器三次連續展開，色譜顯示解析度高、彩色的圖像提供過去文獻沒有發表過的高品質彩色圖像。結果證明赤芝（子實體）含豐富的三萜酸穩定的指紋圖譜模式優於靈芝的其他品種。

關鍵詞：

靈芝類藥材、三萜類成分、高效薄層色譜指紋圖譜鑒別

153.Study on Triterpenoic Acids Distribution in Ganoderma Mushrooms by Automatic Multiple Development High Performance Thin Layer Chromatographic Fingerprint Analysis

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Name of Conference/Journal:

Journal of AOAC International, 93 (5): 1384-1389 SEP-OCT 2010, SCI-E indexed

Abstract:

Ganoderma—"Lingzhi" in Chinese — is one of the superior Chinese tonic materia medicas in China, Japan, and Korea. Two species, *Ganoderma lucidum* (Red Lingzhi) and *G. sinense* (Purple Lingzhi), have been included in the Chinese Pharmacopoeia since its 2000 Edition. However, some other species of *Ganoderma* are also available in the market. For example, there are five species divided by color called "Penta-colors Lingzhi" that have been advocated as the superior collections among the Lingzhi species; but there is no scientific evidence for such a claim. Morphological identification can serve as an effective practice for species identification, but the inherent quality has to be delineated by chemical analysis. Among the diverse constituents in Lingzhi, triterpenoids are commonly recognized as the major active ingredients. An automatic triple development HPTLC fingerprint analysis was carried out for detecting the distribution of the triterpenoids in various Lingzhi samples. The chromatographic conditions were optimized as follows: stationary phase, precoated HPTLC silica gel 60 plate; mobile phase, toluene–ethyl acetate–methanol–formic acid (15 + 15 + 1 + 0.1); and triple-development using automatic multiple development (AMD) equipment. The chromatograms showed good resolution, and the color images provided more specific HPTLC fingerprints than those have been published before. It was observed that the abundance of triterpenoic acids and consistent fingerprint pattern of Red Lingzhi (fruiting body of *G. lucidum*) outweighs the other species of Lingzhi.

Keywords:

Ganoderma mushrooms, Triterpenoids, HPTLC fingerprint identification

154.Th2 細胞因子 IL-31 活化人嗜酸性粒細胞和表皮角化細胞： 過敏性皮炎的免疫發病機制

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會議/刊物名稱：

國際免疫學，(2010) 22 (6): 453-467，SCI-E 檢索

內容簡介：

IL-31 是一種新的 Th2 型的細胞因子,能使小鼠發生搔癢和皮炎症狀類似於人的過敏性皮炎。過敏性皮炎的最主要的病理特徵是嗜酸性粒細胞在皮膚損傷處的侵潤。在本次實驗中,我們研究了 IL-31 對人的嗜酸性粒細胞和表皮角化細胞的活化作用。我們發現 IL-31 通過結合細胞表面的 IL-31 受體能顯著誘導嗜酸性粒細胞釋放促炎症細胞因子 IL-1beta, IL-6 和與過敏性皮炎相關的趨化因子 CXCL1, CXCL8, CCL2 和 CCL18。而且嗜酸性粒細胞和表皮角化細胞的共同培養能增強此誘導作用,其中嗜酸性粒細胞是釋放促炎症細胞因子和趨化因子的主要來源細胞。利用半透膜建立上下雙層細胞共培養體系,我們發現嗜酸性粒細胞和表皮角化細胞的直接接觸對於 IL-31 釋放細胞因子和趨化因子具有重要意義。同時,嗜酸性粒細胞和表皮角化細胞的共同培養能誘導嗜酸性粒細胞表面的粘附分子 CD18 和表皮角化細胞表面的細胞間粘附分子-1 的上調表達,IL-31 能增強此上調表達。進一步的研究表明有絲分裂活化蛋白質激酶,胞核因子-kappaB 和磷脂酰肌醇 3 激酶-AKT 這些細胞內信號通路調節著 IL-33 刺激下的嗜酸性粒細胞和表皮角化細胞的活化效應。以上結果表明 IL-31 通過活化嗜酸性粒細胞和表皮角化細胞從而在過敏性皮炎的免疫病理機制中發揮著重要的作用。

關鍵詞：

過敏性皮炎、嗜酸性粒細胞、表皮角化細胞、IL-31

154.Activation of human eosinophils and epidermal keratinocytes by Th2 cytokine IL-31: implication for the immunopathogenesis of atopic dermatitis

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Name of Conference/Journal:

International Immunol, (2010) 22 (6): 453-467, SCI-E indexed

Abstract:

IL-31 is a novel T(h) type 2 cytokine that can induce pruritus and dermatitis in mice resembling human atopic dermatitis (AD). Eosinophil infiltration in skin lesions is a predominant pathological feature of AD. In the present study, we investigated the effects of IL-31 on the activation of human eosinophils and epidermal keratinocytes. Eosinophils and keratinocytes were cultured either together or separately in the presence or absence of IL-31 stimulation. IL-31 could significantly induce the release of pro-inflammatory cytokines IL-1beta, IL-6 and AD-related chemokines CXCL1, CXCL8, CCL2 and CCL18 from eosinophils, via functional cell surface IL-31 receptor. Such induction was further enhanced upon the co-culture of eosinophils and keratinocytes, in which eosinophils were the main source for releasing pro-inflammatory cytokines and chemokines. The presence of transwell inserts in co-culture system demonstrated that the direct interaction between eosinophils and keratinocytes was required for IL-31-induced cytokine and chemokine release. Cell surface expression of adhesion molecule CD18 on eosinophils and intercellular adhesion molecule-1 on keratinocytes was up-regulated in the co-culture, and levels were further enhanced upon IL-31 stimulation. The interaction between eosinophils and keratinocytes under IL-31 stimulation was differentially mediated through intracellular mitogen-activated protein kinases, nuclear factor-kappaB and phosphatidylinositol 3-kinase-Akt pathways. The above findings suggest a crucial immunopathological role of IL-31 in AD through activation of eosinophils-keratinocytes system.

Keywords:

Atopic dermatitis, Eosinophils, Epidermal keratinocytes, IL-31

155. 複雜理論、學校領導與管理：理論與實踐問題

Keith Morrison

澳門科技大學

會議/刊物名稱：

教育管理行政與領導，38 (3): 374-393

內容簡介：

複雜理論(CT)在管理文獻及社會科學中迅速冒起，而該理論在滲入學校領導及管理方面之始，引發出若干問題及疑慮。本文以其中一個觀點作為例證，並指出，儘管其主要元素對學校領導及管理方面貢獻良多，但過於使用複雜理論仍需小心謹慎，因為該理論：(1) 目前還不太清楚其新穎性、性質及狀況；(2) 在合併描繪性與規範性時被視為一種變相的觀念；(3) 把預測混淆成為解釋；(4) 本為一相對論，因此破壞了其本身的狀態；(5) 包含倡導自我組織的問題；(6) 忽視了道德及情感方面的領導及管理；(7) 冒險免除學校領導人及管理者對合理問責制及問責的免責風險。本文推斷複雜理論在理論、本體論、道義及倫理的幾個層面上均存在著疑問，然而仍為學校領導及管理兩方面提供了有幫助的挑戰。

關鍵詞：

Accountability, Complexity theory, Emergence, Leadership, Self-organization

(中文翻譯僅供參考，請以英文版本為準)

155. Complexity theory, school leadership and management: questions for theory and practice

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Abstract:

Complexity theory (CT) has had a meteoric rise in management literature and the social sciences. Its fledgling importation into school leadership and management raises several questions and concerns. This article takes one view of CT and argues that, though its key elements have much to offer school leadership and management, caution has to be exercised in accepting CT too readily, as it: (1) is unclear on its own novelty, nature and status; (2) can be regarded as disguised ideology in conflating description and prescription; (3) confuses explanation with prediction; (4) is relativist, undermining its own status; (5) contains problems in its advocacy of self-organization; (6) neglects the ethical and emotional dimensions of leadership and management; and (7) risks exonerating school leaders and managers from reasonable expectations of accountability and responsibility. The article concludes that there are questions to CT at the levels of theory, ontology, deontology and ethics, but that it offers useful challenges for school leadership and management.

Keywords:

Accountability, Complexity theory, Emergence, Leadership, Self-organization

重要演講與文章

Major Talks and Articles

公開演講

1. 李建慶，題目：光學測量在智能交通系統中的應用及研究進展
演講於「國際計量技術聯合會第 19 屆光電子計量大會」，由中國計量學院主辦
時間和地點：2010 年 9 月 13 日，中國杭州
2. 黃明健，題目：綠色建築在澳門
演講於「綠色澳門建設研討會」，由澳門生態學會主辦
時間和地點：2010 年 6 月 4 日，澳門生態學會總部
3. 黃明健，題目：澳門法制現代化思索
演講於「澳門法律改革學術研討會」，由澳門科技大學法學院主辦
時間和地點：2010 年 3 月 19 日，澳門科技大學
4. 趙琳琳，題目：中國內地與澳門刑事上訴審程序比較
演講於研討會，由中國政法大學、最高人民法院主辦
時間和地點：2010-4-22，北京
5. 趙琳琳，題目：論區際刑事司法中贓款贓物的移交
演講於研討會，由澳門檢察院、澳門大學主辦
時間和地點：2010-12-13，澳門
7. 李昕，題目：旅遊休閒活動中的遊客教育研究
演講於「亞太地區現代服務業發展高峰論壇」，由澳門科技大學國際旅遊學院主辦
時間和地點：2010 年 11 月 10 日，澳門 獲多利中心大廈
8. 梁文慧，題目：港澳觀光餐旅高等教育人之培養
演講於「2010 銘傳觀光研討會-深耕台灣鍛造文化價值邁向精緻化國際化之服務性產業」，
由銘傳大學觀光學院主辦
時間和地點：2010 年 3 月 13 日，銘傳大學台北校區大會議室
9. 梁文慧，題目：澳門多元旅遊文化建立的啓思
演講於「中國古生物化石和地質環境保護前沿論壇」，由民政總署、中國古生物化石保護
基金會主辦
時間和地點：2010 年 4 月 16 日，澳門漁人碼頭會議廳

10. 梁文慧，題目：Enhancing Hospitality and Tourism Education Through Innovation & Technology – The Macau Perspectives
演講於 Forum of International HTM Educators，由 Sejong University, Seoul, Korea 主辦
時間和地點：2010 年 4 月 27-29 日，韓國首爾
11. 梁文慧，題目：澳門終身學習的行動策略
演講於「2010 終身學習行動策略研討會」，由國立臺灣師範大學主辦
時間和地點：2010 年 6 月 3-5 日，中國臺灣
12. 梁文慧，題目：A Comparative Study of Online Self-Regulated Learn Its Effect on Adult Literacy in the Cross-Strait Region
演講於「第十七屆國際學習研討會」，由 Hong Kong Institute of Education, Hong Kong 主辦
時間和地點：2010 年 7 月 6-8 日，中國香港
13. 梁文慧，題目：Is There a Gap in Expectations between Educational Institutions and Industry? What can We Do to Narrow the Gap?
演講於 PATA Travel Mart 2010 Seminar (HR Challenges in Tourism and Hospitality Promoting Industry-Academic Collaboration)，由香港理工大學酒店及旅遊管理學院主辦
時間和地點：2010 年 9 月 14 日，澳門旅遊學院
14. 梁文慧，題目：澳門世界文化遺產吸引力提升策略
演講於「2010 首屆海峽兩岸休閒論壇」，由臺灣暨南大學、中國科學院地理科學與資源研究所、香港理工大學和澳門科技大學主辦
時間和地點：2010 年 9 月 25-27 日，山東青州市
15. 梁文慧，題目：終身學習與澳門高等教育改革研究
演講於「學習型社會與開放遠端教育」國際學術研討會」，由亞洲(澳門)國際公開大學, 葡萄牙國立公開大學主辦
時間和地點：2010 年 10 月 20 日，亞洲(澳門)國際公開大學
16. 梁文慧，題目：澳門旅遊院校畢業前實習滿意度與本專業就業傾向關聯性研究
演講於「首屆聯合國世界旅遊組織(亞太區)年會」，由新西蘭惠靈頓維多利亞大學主辦
時間和地點：2010 年 11 月 18-19 日，新西蘭惠靈頓維多利亞大學
17. 梁文慧 題目：專題講座式授課
演講於「發展中國家旅遊管理高級研修班」，由瓊州學院，海南三亞市主辦
時間和地點：2010 年 11 月 29-30 日，瓊州學院，海南三亞市

18. 梁文慧，題目：A Comparative Study of Online Self-Regulated Learning and its Effect on Adult Literacy in the Cross-Strait Regions
演講於「2010 年第三屆教育技術與培訓國際學術會議」，由湖北工業大學電腦學院，IEEE 主辦 時間和地點：2010 年 11 月 27-28 日，Wuhan, China
19. 梁文慧，題目：港澳觀光餐旅高等教育人之培養
演講於「2010 銘傳觀光研討會-深耕台灣鍛造文化價值邁向精緻化國際化之服務性產業」，由銘傳大學觀光學院主辦
時間和地點：2010 年 3 月 13 日，銘傳大學台北校區大會議室
20. 梁文慧，題目：Enhancing Hospitality and Tourism Education through Innovation & Technology – The Macau Perspectives
演講於 Forum of International HTM Educators，由 Sejong University, Seoul, Korea 主辦 時間和地點：2010 年 4 月 27-29 日，韓國首爾
21. 梁文慧，題目：澳門終身學習的行動策略
演講於「2010 終身學習行動策略研討會」，由國立臺灣師範大學主辦
時間和地點：2010 年 6 月 3-5 日，中國臺灣
22. 梁文慧，題目：Is There a Gap in Expectations between Educational Institutions and Industry? What can We Do to Narrow the Gap?
演講於 PATA Travel Mart 2010 Seminar (HR Challenges in Tourism and Hospitality Promoting Industry-Academic Collaboration)，由香港理工大學酒店及旅遊管理學院主辦
時間和地點：2010 年 9 月 14 日，澳門旅遊學院
23. Keith Morrison，題目：標準化及多樣化可以共存：針對強求一致看法的質量保證
演講於「高等教育質量保障體系建設研究國際學術研討會」，由澳門理工學院主辦
時間和地點：2010 年 11 月 8 - 9 日，澳門
24. Keith Morrison，題目：完美與優質並駕：在一所中式大學由零開始發展質量保證
演講於國際研討會，由亞太地區質量保障網絡組織主辦
時間和地點：2010 年 3 月，泰國曼谷

Major Talks

1. Li Jianqing, Topic: Recent development and applications of optical measurements in intelligent transport systems, 19th IMEKO TC2 symposium on photonics in measurements, China Jiliang University, 13 September 2010, Hangzhou, China
2. Huang Mingjian, Topic: The green building in Macau, Green Macau Construction Symposium, Macau Ecological Society, 04/06/2010, Headquarters in Macau Ecological Society
3. Huang Mingjian, Topic: Deliberation on Legal System Modernization of Macau, Conference of Legal Strategy on the law reform in Macau, Faculty of Law, Macau University of Science and Technology, 19/03/2010, Macau University of Science and Technology
4. Zhao Linlin, Topic: Comparison on the Criminal Appellant Proceedings between the Chinese Mainland and Macau, The China University of Political Science and Law, 22 Apr 2010, Beijing
5. Zhao Linlin, Topic: The Reassignment of the Illegal Proceeds in the Interregional Criminal Justice, The Macau Procuratorate, Macau University, 13 Dec 2010, Macau
6. Li Xin, Topic: Study on the Education of Tourists in the Process of Tourism and Leisure Activities, Forum for Contemporary Service Industry Development in the Asia Pacific Region, Faculty of International Tourism, Macau University of Science and Technology, 10 Nov 2010, Hotline Center, Macau
7. Aliana Leong, Topic: How to cultivate the tourism/hospitality professionals in higher education system - the case from Hong Kong and Macau, 2010 MCU Tourism Conference Intensive Cultivation in Taiwan-Enhancing culture value Trend to the refinement and internationalization of Service Industry, Travel & Tourism Program, International College, Ming Chuan University, Taipei, Taiwan, 13 Mar 2010, Ming Chuan University, Taipei, Taiwan
8. Aliana Leong, Topic: The inspirations of establishing multicultural tourism in Macau, The Forum of Protection of Relics and Environment in China, IACM, Preservation Foundation of Chinese fossils, 16 April 2010, Macau, China
9. Aliana Leong, Topic: Enhancing Hospitality and Tourism Education Through Innovation & Technology – The Macau Perspectives, Forum of International HTM Educators, Sejong University, Seoul, Korea, 27-29 Apr 2010, Sejong University, Seoul, Korea

10. Aliana Leong, Topic: A Study of Lifelong Learning and Higher Education Reform Macau Perspectives, the International Conference on Lifelong Learning Strategies and Action 2010, Taiwan, China, National Taiwan Normal University, 3-5 Jun 2010, Taiwan, China
11. Aliana Leong, Topic: A Comparative Study of Online Self-Regulated Learn Its Effect on Adult Literacy in the Cross-Strait Region, 17th International Conference on Learning, Hong Kong Institute of Education, Hong Kong, 6-8 Jul 2010, Hong Kong, China
12. Aliana Leong, Topic: Is There a Gap in Expectations between Educational Institutions and Industry? What can We Do to Narrow the Gap? PATA Travel Mart 2010 Seminar (HR Challenges in Tourism and Hospitality Promoting Industry-Academic Collaboration), School of Hotel & Tourism Management, The Hong Kong Polytechnic University, 14 Sep 2010, Institute For Tourism Studies(IFT), Macau
13. Aliana Leong, Topic: Attractiveness of Macau World Heritage Promotion Strategy, The first Leisure Summit Forum Among Mainland, Hong Kong, Macau, and Taiwan Across Strait, National Chi-Nan University, Taiwan, Institute of Geographic Sciences and Natural Resources Research, CAS, Hong Kong Polytechnic University, Macau University of Science and Technology, 25-27 Sep 2010, Qingzhou, Shandong
14. Aliana Leong, Topic: A Study of Lifelong Learning and Higher Education Reform, "Learning society and open distance education" International Conference on Science, AIOU, Macau, 10 Oct 2010, AIOU, Macau
15. Aliana Leong, Topic: The Study on the extent of tourism students' Internship satisfaction and their employment propensity in Macao, 1st UNWTO. TedQual Annual Event for Asia & Pacific (Shared Experiences: enhancing tourism education through stakeholder engagement), Victoria University of Wellington, New Zealand, 18-19 Nov 2010, Victoria University of Wellington, New Zealand
16. Aliana Leong, Topic: Seminars and lectures, Tourism Management Senior Seminar in developing countries, Qiong Zhou University, Hainan, 29-30 Nov 2010, Qiong Zhou University, Hainan
17. Aliana Leong, Topic: A Comparative Study of Online Self-Regulated Learning and its Effect on Adult Literacy in the Cross-Strait Regions, 2010 Third International Conference on Education Technology and Training (ETT 2010)" International Conference, Computer Science, Hubei University, IEEE, November 27-28, 2010, Wuhan, China

18. Aliana Leong, Topic: How to cultivate the tourism/hospitality professionals in higher education system-the case from Hong Kong and Macau, 2010 MCU Tourism Conference Intensive Cultivation in Taiwan-Enhancing culture value Trend to the refinement and internationalization of Service Industry, Travel & Tourism Program, International College, Ming Chuan University, Taipei, Taiwan, 13 Mar 2010, Ming Chuan University, Taipei, Taiwan
19. Aliana Leong, Topic: Enhancing Hospitality and Tourism Education Through Innovation & Technology – The Macau Perspectives, Forum of International HTM Educators, Sejong University, Seoul, Korea, 27-29 Apr 2010, Sejong University, Seoul, Korea
20. Aliana Leong, Topic: A Study of Lifelong Learning and Higher Education Reform Macau Perspectives, the International Conference on Lifelong Learning Strategies and Action 2010, Taiwan, China, National Taiwan Normal University, 3-5 Jun 2010, Taiwan, China
21. Aliana Leong, Topic: A Comparative Study of Online Self-Regulated Learn Its Effect on Adult Literacy in the Cross-Strait Region, 17th International Conference on Learning, Hong Kong Institute of Education, Hong Kong, 6-8 Jul 2010, Hong Kong, China
22. Keith Morrison, Topic: Standardization and diversity can co-exist: against a Procrustean view of quality assurance. Paper presented at the international symposium on Higher Education Quality Assurance, International symposium on Higher Education Quality Assurance, Macau Polytechnic Institute, 8-9 Nov 2010, Macau
23. Keith Morrison, Topic: Let Not The Perfect Be The Enemy of the Good’: Developing Quality Assurance From Ground Zero in a Chinese University, International conference of the Asia Pacific Quality Network, Asia Pacific Quality Network, March 2010, Bangkok, Thailand

發表於報刊雜誌的文章

1. 蔡智明，“以“軟關”創新通關推進橫琴開發”，《珠海特區報》，2010 年 11 月 1 日
2. 丁浩，“經濟適用房制度-腐敗、效率與公平”，《經濟學家茶座》，2010 年第 2 輯（總第 46 輯）
3. 丁浩，“美國國債：一個戰略層面的探討”，《鏡海學人》，2010 年第 6 期
4. 趙世勇，“富可敵國的加州與瀕臨“破產”的州政府”，《經濟學家茶座》，Vol. 48
5. 趙世勇，“無處不在的美國法律”，《澳門日報》，2010 年 9 月 8-9 日
6. 林位強，“質疑《澳巴士訴得值案》”，《澳門日報》，2010 年 6 月 9 日
7. 趙琳琳，“推廣仲裁和調解的若干設想”，《澳門日報》，2010-12-08
8. 梁文慧，“後亞運時代廣州酒店業發展路向初探”，《中國飯店雜誌》，2010 年 8 月
9. 梁文慧，“澳門急需建立會展業的經濟影響機制”，《澳門會展經濟報》，2010 年 9 月
10. Keith Morrison，“本末倒置”，《澳門商業》，2010 年 12 月，第 118 頁
11. Keith Morrison，“關於逾期逗留人士的誇大言論”，《澳門每日時報》，2010 年 11 月，第 6 頁
12. Keith Morrison，“努力加上收入與效益不相稱”，《澳門商業》，2010 年 11 月，第 59 頁
13. Keith Morrison，“愛自己”，《澳門商業》，2010 年 10 月，第 50 頁
14. Keith Morrison，“抓緊商機”，《澳門商業》，2010 年 8 月，第 101 頁
15. Keith Morrison，“熱門話題”，《澳門商業》，2010 年 7 月，第 36 頁
16. Keith Morrison，“青蛙經濟”，《澳門商業》，2010 年 6 月，第 32 頁
17. Keith Morrison，“借刀殺人”，《澳門商業》，2010 年 5 月，第 32 頁

- 18.Keith Morrison, “無聲的困擾”,《澳門商業》, 2010 年 4 月, 第 25 頁
- 19.Keith Morrison, “邪惡入侵”,《澳門商業》, 2010 年 3 月, 第 32 頁
- 20.Keith Morrison, “切勿輕信”,《澳門商業》, 2010 年 2 月, 第 65 頁
- 21.Keith Morrison, “對財富的欲望”,《澳門商業》, 2010 年 1 月, 第 35 頁
- 22.鄭應峰, “乾杯”,《青年文學》, 2010 年 10 月, 第 58-59 頁

Newspapers and Magazines Articles

1. Cai Zhiming, “Boosting the HengQin Development by new "Soft-Custom/Immigration", ZhuHai Daily, 1 Nov 2010
2. Ding Hao, “Affordable Housing System: Corruption, Efficiency and Fairness”, Economists Teahouse, Vol 2, 2010 (Total Vol 46)
3. Assistant Professor, “U.S. Treasury Bonds: A Strategic View”, Jing Hai Scholars, Issue 6, 2010
4. Zhao Shiyong, “Ubiquitous American Laws”, Macau Daily News, 8-9 Sep 2010
5. Zhao Shiyong, “Wealthy California and Verging-on Bankruptcy State Government”, Teahouse for Economists, April 2010
6. Weiqiang Lin, “Oppugn to the successful appeal of TCM”, Macau Daily News, 9 Oct 2010
7. Zhao Linlin, “The Suggestions on Promotion of the Arbitration and Mediation”, Macau Daily News, 2010-12-08
8. Liang,WH(Liang Wen-Hui), “The development of hotel industry in Guangzhou post the Asian Games era”, China Hotel Magazine, Aug 2010
9. Liang,WH(Liang Wen-Hui), “Macau urgently needs to establish the economic impact indices for MICE industry”, Macau Post of MICE Economy, Sep 2010
10. Keith Morrison, “There is a difference between the tinsel and the tree”, Macau Business, Dec 2010, p.118
11. Keith Morrison, “Overstatements about overstayers”, Macau Daily Times, 11 Nov 2010, p.6
12. Keith Morrison, “Effort plus income does not equal benefit”, Macau Business, Nov 2010, p.59
13. Keith Morrison, “I love me”, Macau Business, Oct 2010, p.50
14. Keith Morrison, “Of MICE and men”, Macau Business, Aug 2010, p.101

15. Keith Morrison, “Hot off the press”, Macau Business, Jul 2010, p.36
16. Keith Morrison, “The frog economy”, Macau Business, Jun 2010, p.32
17. Keith Morrison, “Contract killings”, Macau Business, May 2010, p.32
18. Keith Morrison, “A silent obsession”, Macau Business, Apr 2010, p. 25
19. Keith Morrison, “Evil incorporated”, Macau Business, Mar 2010, p.32
20. Keith Morrison, “Don't believe a word”, Macau Business, Feb 2010, p.65
21. Keith Morrison, “An appetite for wealth”, Macau Business, Jan 2010, p.35
22. Zheng Yingfeng, “Cheers”, Qin Nian Wen Xue, Oct 2010, p.58-59

博士學位論文精選

Selected Ph.D. Thesis

1.股票期權激勵高級管理人員薪酬與公司績效相關性— 上市公司實證研究

于劍鋒

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畢業年度:

2010

學位類別:

工商管理博士

論文摘要:

中國證券市場實施股權分置改革，極大促進了上市公司的公司治理，為解決上市公司的委托代理問題，完善薪酬與激勵制度提供良好的外部環境。本研究在系統地回顧國內外有關股票期權激勵與薪酬實證研究的基礎上，借鑒國內外有關高級管理人員薪酬與激勵的研究，分析了高級管理人員薪酬與激勵的研究歷史。國內現有文獻有關高級管理人員短期薪酬與長期的股票期權激勵研究多數是在上市公司股票沒有完全流通的背景下進行，高級管理人員激勵股票來源問題沒有得到解決。本研究以股權分置改革後的實施股票期權激勵公司為樣本，運用數量分析技術，對高級管理人員短期薪酬與長期的股票期權激勵影響公司績效進行定性與定量研究。依據中國上市公司實施股票期權激勵的 65 個樣本資料，建立股票期權激勵高級管理人員薪酬與公司績效的回歸模型，並通過研究證實。實證研究結果表明，高級管理人員長期的股票期權激勵、短期的薪酬（年薪）與公司績效正相關。同時，上市公司案例也進一步實證上市公司高級管理人員的薪酬和股票期權激勵與其公司績效的相互關係。這也對上市公司高級管理人員實施股票期權激勵，解決上市公司的委托代理問題，完善高級管理人員薪酬與激勵制度提供了理論支持，對有序推進上市公司治理具有現實意義。同時，研究的結果也為證券監管機構依法監管和證券投資者進行證券投資提供可靠的依據。

關鍵詞:

股票期權激勵、薪酬、公司法

1.The Correlations Between Corporate Performance and Executive Compensation and Stock Options—An Empirical Study on Listed Companies

YU, JIAN FENG

Faculty of Management and Administration, Doctor of Business Administration

Name of the supervisor:

Prof. LIU, TING YANG

Graduated Year:

2010

Type of Degree:

Doctor of Business Administration

Abstract:

Chinese stock market's split-share structure reform has greatly enhanced the corporate governance of public companies, and creates a good external environment for solving the principal-agent problem and improving the compensation incentive mechanism. Based a systematic review of domestic and international empirical studies regarding stock options compensation, this study analyzed the research history of executive compensation with reference to domestic and foreign studies on executive compensation incentives. The existing studies on the short-term compensation and long-term stock options for senior managers are conducted when the shares of listed companies are not full circulation, and the source of senior management stock incentives have not been resolved. This study took a sample of the companies that implementing stock options incentives after the split share structure reform, using quantitative analysis techniques, it did a qualitative and quantitative research on the effect of the short-term compensation and long-term stock options for senior managers on the company's performance. Based on the sample of 65 listed companies implementing the stock options incentive, the study established a regression model for company performance in terms of the short-term compensation and long-term stock options for senior managers, and confirmed the model through research. Empirical results show that the short-term compensation and long-term stock options for senior managers is positively related with company's performance. Meanwhile, the case of listed companies showed further evidence of the relation between corporate performance and senior management's compensation and stock options. This relationship will help to address the principal-agent problems of listed companies, it also provides a theoretical support to enhance the compensation incentive mechanism, and systematically enhance the governance of listed companies. Moreover, the results of the study provide a reliable basis for securities regulatory bodies supervising the stock market and investors making investment decisions.

Keywords:

Stock Options, Compensation, Company law

2. 中電投東北公司效率評價研究

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指導老師姓名:

龐川 副教授

畢業年度:

2010

學位類別:

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論文摘要:

電力是國民經濟的基礎，是經濟又快又好發展和社會持續進步的重要保障。隨著經濟社會改革的不斷發展，電力體制也在不斷地深化改革，新形勢、新體制、新使命也給電力企業帶來了新的機遇，提出了新的挑戰，也賦予了新的使命。在這種形勢下，研究如何建立評價中電投東北公司電力企業效率評價指標體系，運用相應的評價方法深入分析中電投東北公司電力企業效率及其環境影響因素，對中電投東北公司電力企業在改革 階段的過程中的成效作全面系統的分析，為進一步的中電投東北公司電力企業改革提供理論支撐，以期促進在市場化進程中中電投東北公司效率的改進。

論文從效率評價的一般方法出發，針對中電投東北公司的實際情況，運用基於統計、DEA 和 SFA 相結合的方法對中電投東北公司投入產出效率及其外部影響因素進行了評價和分析。論文的工作主要包括以下幾個方面：

首先，在閱讀相關文獻的基礎上，通過對效率、效率評價等相關概念的歸納和描述，對電力企業的效率評價內涵進行了界定，並通過對國內外企業效率評價綜述，分析了不同效率評價方法的特點。最後歸納出適用電力企業特點的定量 DEA 效率評價方法，進而對 DEA 方法在電力企業效率評價領域的應用情況進行了綜述。

其次，介紹了本文實證分析的基本理論—數據包絡分析、統計分析以及隨機前沿方法。詳細介紹了 DEA 模型及 DEA 在企業效率評價中的應用流程及 DEA 分析的優點以及應用限制。分析中電投東北公司的內外部影響因素，根據全要素生產率理論和模型，構建適合中電投東北公司的全要素生產率模型，並通過前沿生產函數分析將全要素生產率分解為技術進步率、技術效率、規模報酬和配置效率。最後用全要素生產率模型及其分解式對中電投東北公司進行實例分析，並對技術效率的各項指標回歸分析。

最後，在分析電力企業投入產出特點的基礎上，構建了中電投東北公司效率評價指標體系，並對其所屬電力企業的資料進行了實證分析。實證研究的內容包括中電投東北公司效率影響因素分析，基於隨機前沿方法的效率測度分析和基於三階段 DEA 方法的實證分析，並對兩種方法的測度結果進行了對比分析。最後，基於實證分析，對中電投東北公司效率評價進行總結，提出效率改進的策略。

關鍵詞： 電力企業、效率、影響因素、隨機前沿分析、數據包絡分析

2.On Efficiency Evaluation of CPI Northeast Power Company Limited

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Associate Professor Pang, Chuan

Graduated Year:

2010

Type of Degree:

Doctor of Business Administration

Abstract:

Electricity is not only the basis of the national economy but also the important safeguards of economic development and social progress. In the past few years, power system reformed continuously with the constant development of economic and social reform. The new situation, system and mission brought new opportunity and challenge for power enterprises. In order to improve the efficiency of CPI Northeast Power Company Limited, we need to put forward the index system for its efficiency evaluation at first, evaluated efficiency and analyzed factors influencing efficiency further more. Then, analyzed the reform effect of CPI Northeast Power Company Limited comprehensively, and provide theoretical support for its further reform. This thesis analyzed the efficiency and factors influencing efficiency combining statistical analysis, data envelopment analysis and stochastic frontier analysis, etc in the basis of field survey of CPI Northeast Power Company Limited.

The main contents are as following:

At first, the author defined the intension of efficiency evaluation of power enterprise on the basis of literature analysis and summarized some concepts such as efficiency, efficiency evaluation, etc. After summarizing the domestic and foreign literature of enterprise efficiency evaluation, the author analyzed the characteristics of different methods of efficiency evaluation. At last, the author identified DEA method for efficiency evaluation of CPI Northeast Power Company Limited, and reviewed related research literature.

Secondly, the author introduced the basic theory such as data envelopment analysis, statistical analysis and stochastic frontier analysis for empirical analysis in this paper. And then, the author introduced DEA models and its flow, advantages and disadvantages in enterprises' efficiency evaluation and analysis. By analyzing the inside and outside effect factors of CPI Northeast Power Company Limited, the author constructed TFP model for CPI Northeast Power Company Limited according to theories and models of total factor productivity. And then, the author decomposed TFP into rate of technological progress, technical efficiency, scale efficiency and allocative efficiency by Frontier Production Function Analysis.

At last, the author carried on empirical analysis on CPI Northeast Power Company Limited by total factor productivity model and its decomposition, and took each index of technical efficiency for regression analysis.

At last, the author constructed efficiency evaluation index system after analysis of input-output characteristics of power enterprises, and carried on efficiency evaluation empirical analysis of each branch companies of CPI Northeast Power Company Limited. Empirical studies include efficiency effect factors analysis, efficiency measure by SFA, and efficiency measure by three-stage DEA , and compared the efficiency measure results by each method. Finally, the author summary the efficiency evaluation results and put forward some countermeasures for efficiency improvement.

Keywords:

Power Enterprise, Efficiency, Effected Factors, SFA, DEA

3. 領導與下屬交換關係對員工任務績效的影響—員工對主管的信任和內在動機的中介作用

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指導老師姓名:

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畢業年度:

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學位類別:

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論文摘要:

在中國，水泥企業面臨著產能過剩、價格與價值背離及低碳經濟等多重壓力和挑戰。透過聯合重組的方式，擴大經營規模、降低成本成爲中國水泥企業的發展趨勢。南方水泥有限公司通過這一方式，走上了迅速擴張的道路。通過兩年多的發展，公司擁有128家不同所有制形式的下屬企業。融合的過程中，出現了許多文化的衝突和關係的調整，引發了本文的思考。經過實地調研和與專家商討，將研究的主題確定爲領導與下屬交換關係對員工任務績效的影響，探尋員工對主管的信任和員工的內在動機在二者之間的中介作用。

本文在回顧了相關的文獻資料之後，提出了五個假設：1. 領導與下屬交換關係對員工任務績效能產生積極的正向影響； 2. 領導與下屬交換關係能促進員工對主管的信任的提升； 3. 領導與下屬交換關係對員工的內在動機能產生積極的正向影響； 4. 員工對主管的信任在領導與下屬交換關係和任務績效之間發揮著中介作用； 5. 員工的內在動機在領導與下屬交換關係和任務績效之間發揮著中介作用。

考慮到研究問題的來源、本身工作的便利性及對未來工作的指導意義，研究在南方水泥有限公司的下屬企業進行。本次的調查問卷分爲員工問卷和主管問卷，採取 1:1 的配對比例。總發放問卷數 584 對，有效回收問卷 530 對，有效回收率達到 90.75%。研究對收集的數據使用 SPSS 統計軟件進行分析，分析的方法主要包括描述性分析、相關性分析和回歸分析。

回歸分析的結果驗證了五個假設的成立，並且得出員工對主管的信任和員工的內在動機在領導與下屬交換關係和員工的任務績效間發揮著完全的中介作用。另外，背景資料中所含變量與研究變量的相關性分析也獲得了不少有用的結果，如男性員工對主管信任的評價高於女性員工；男性員工的內在動機高於女性員工；員工帶領此下屬的時間越長，對主管的信任程度越低等等。這些研究的結果對如何創建新型的南方企業文化、如何提升個體績效等等帶來了不少啓示。本次研究驗證了在中國背景下領導與下屬交換關係對員工任務績效的正向影響；通過員工對主管的信任和內在動機兩個中介變量的加入，豐富了領導與下屬交換關係對員工任務績效影響的作用機制。

關鍵詞： 領導與下屬交換關係、任務績效、員工對主管的信任、內在動機

3.The Effects of Leader-Member Exchange on Employee’s Task Performance : the Mediate Role of Trust in Supervisor and Intrinsic Motivation

YAO, JI XIN

Faculty of Management and Administration, Doctor of Business Administration

Name of the supervisor:

Dr. CHEN, NAI CHI

Graduated Year:

2010

Type of Degree:

Doctor of Business Administration

Abstract:

In China, cement industry faces substantial pressures and challenges of over-production, price and value instability as well as the low-carton economy. As a result, cement companies in China went through restructuring, business size expanding, and cost reduction. The Southern Cement Limited Company (SCLS) has experienced rapidly expanding. Currently, the company owns 128 subordinated firms and manufactures coming from different ownership. Cultural confrontation and relationship adjustments become more significant during this period for SCLS. This initiates research interesting. After experimental survey and discussion with professionals, the main topic of this research is to examine the relationship between leader-member exchange and individual task performance, and the mediated role of trust in supervisor and individual intrinsic motivation.

After reviewing the related literatures, this paper proposes five hypotheses: 1.leader-member exchange will positively affect the individual task performance; 2.leader-member exchange will promote trust in supervisor; 3.leader-member exchange will positively influence the employees’ intrinsic motivation; 4.Trust in supervisor will play a mediated role in the relationship between leader-member exchange and individual task performance; 5.Intrinsic motivation will mediate the relationship between leader-member exchange and individual task performance.

Given the dramatic adjustment among subordinated companies, convenience of the researcher’s administrative role in the company and the potential application for future integration, the researcher decides to conduct investigation in the subordinated companies of the Southern Cement Limited Company as the population. The questionnaire includes employee’s questionnaire and direct supervisor’s questionnaire. We have 1:1 match sample between the staff and direct supervisor. We sent out 584 pairs questionnaires and 530 pairs were returned. The complete rate is 90.75%. The research uses statistical software -- SPSS to analyze the data. Analysis methods include descriptive analysis, reliability test, correlation analysis and regression analysis.

The result confirmed five hypotheses. Further, this project reaffirmed the full mediated role of trust in

supervisor and intrinsic motivation. In addition, this research got some other valuable results. For instance, males give higher scores in trust than females; male's intrinsic motivation is higher than female's; and the longer direct supervisor leads the staff, the lower the staff trust in supervisor, and so on. These findings give many clues and hints that will enhance a new integrated culture in the company and improve individual task performance among employees.

In sum, this research examined the positive effect between leader-member exchange and individual task performance in China. Trust in supervisor and intrinsic motivation is also found to play important mediated role in the relationship between the leader-member exchange and individual task performance.

Keywords:

Leader-member exchange, Individual task performance, Trust in supervisor and intrinsic motivation

4.實證研究社會交換理論視角下澳門社團與政府的互動關係 — 以澳門公共政策問題構建為研究切入點

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指導老師姓名:

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畢業年度:

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學位類別:

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論文摘要:

任何社會都有社會問題，普遍性的社會問題需要通過公共政策解決，研究普遍性社會問題的過程，就是檢討公共政策的過程。由於澳門的特殊性，在澳門的公共政策過程中，兩個政策制定主體的作用尤為顯著：政府（體制內）和社團（體制外）。這是現行的政制設計（行政長官制）和澳門的政治遺產（二元社會結構）綜合作用的結果。

本研究旨在研究上述兩個政策主體之間的互動關係。與已經比較成熟的、以合作主義（法團主義）為基礎進行的類似研究相比，本研究在研究切入點、基礎理論和研究路徑上都做了一些創新的嘗試，希望藉此探索新的研究思路。在研究切入點的選擇上，本研究選擇了公共政策問題構建這一公共政策過程的子過程，也是最能體現社團與政府互動關係的環節作為研究切入點；在理論方面，選擇了由心理學和經濟學發展而來的社會交換理論作為研究的理論依據，嘗試將之用於社團與政府互動關係的研究；在研究路徑方面，則選擇了建立模型、問卷調查這一實證研究和定量分析的研究方法。

本研究的主要目的在於：（1）對澳門社團與政府的關係有清醒的評估；（2）為利益訴求的表達建立起機制，進而促進社會穩定；（3）為解決澳門政策過程中現有問題和未來的治理提供某種思路；（4）明確公立基金組織在政策制定過程中的工作路向。

本研究的研究結果表明：「承諾」、「互相瞭解」、「吸引」是影響社團對政府「依賴」、「信任」的重要因素，而「依賴」、「信任」又是影響社團與政府互動關係滿意度的重要因素（其中信任雖然是影響互動關係滿意度的重要因素，但是在某種程度上乃是透過依賴而影響該互動關係滿意度的）；此外，現有的溝通模式無助於增強社團與政府之間的信任；權力—依賴之間的關係反映了政策問題構建中的“內輸入”模式。

關鍵詞:

公共政策問題構建、社會交換理論、社團、政府互動關係滿意度

4. An Empirical Study on The Interaction between the Associations and the Government of Macao from the Perspective of Social Exchange Theory - Constructing from the Public Policy Questions of Macao

CAO, JIN FENG

Faculty of Management and Administration, Doctor of Business Administration

Name of the supervisor:

Prof. Wu Zhi Liang

Graduated Year:

2010

Type of Degree:

Doctor of Business Administration

Abstract:

Social problems are inevitable in all communities. Common social problems require resolution through public policies. The process to study common social problems is that to review public policies. Because of the uniqueness of the community of Macao, the function of two actors in public policy making process is particularly significant: government and associations. This is the result of the combination of the Chief Executive System and the binary structure of the society.

This study aims to focus on the interactive relations between the two actors. In comparison with the existing studies based on corporatism, this study is innovative in terms of the platform of research, the theoretical foundation and the approach to research, thus attempts to open a new path of thinking. In terms of the choice of platform of research, this study has chosen the public policy problem as a sub-process of policy-making, which best demonstrates the interactive relations between the government and associations as the starting point. The theory of social exchange, which was developed from psychology and economics, was applied as the theoretical foundation of this study. In terms of research approach, a quantitative methodology was used in this study.

The objectives of this study are: to provide an objective assessment of the relations between associations and the government of Macao, to propose a mechanism for interest articulation, to provide some food for thought for the existing policy problems and the future governance of Macao, and the direction of work for funding organizations within the policy process.

The results of this study show that commitment, mutual understanding and attraction are important factors affecting associations to trust and depend on the government. Trust and dependence also serve as the important factors affecting the satisfaction of interaction between associations and the government. Of these factors, although trust is an important factor affecting the satisfaction of the interactive relations, this is still affected through dependence. The existing mode of communication does not improve trust between the two actors, and the relations between power and dependence reflects the mode of “endo-inputting” during the structuring of policy problems.

Keywords: Structuring of public policy problem Social exchange theory Associations Government Satisfaction of interactive relations

碩士學位論文精選

Selected Master Thesis

1. 群決策建模支持系統中的模糊信息處理與模型管理

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畢業年度：

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學位類別：

理學碩士

論文摘要：

決策是一個複雜的過程，決策建模支持系統可以幫助收集意見，綜合評價，更科學地得出決策結果。決策過程中往往有很多不確定性、模糊性的信息，怎樣處理這些不確定信息來幫助決策就顯得相當重要，本文引入有關模糊方法幫助處理帶有不確定性及模糊性的信息。決策支持系統的核心組成部分是決策模型，若決策支持系統能包含模型庫管理系統，對模型進行管理並且能對模型進行評估，就能提高系統的重用性和可用性，使決策者能更好地選擇決策模型進行決策。

本文工作主要分成以下幾個方面：1)引入模糊 AHP 模型，處理多目標單人決策中的模糊信息問題，以輔助單人決策的方案選優；2)引入模糊綫性分配法，處理群體決策中的模糊信息問題以輔助多目標群體決策的方案選優；3)引入混合多屬性 TOPSIS 模型，處理多屬性單人決策中的模糊信息問題，以輔助單人決策的方案選優；4)引入群體數字理想點(TOPSIS)算法，處理多屬性群體決策中的模糊信息問題以輔助多目標群體決策的方案選優；5)引入密度離群點檢測，以檢測個別決策者在評價上的差異；6)引入模型庫管理系統動態增、刪、查、改及評估模型。

關鍵詞：

群決策支持系統、模糊 AHP、TOPSIS、模型管理系統

1.Fuzzy Information Processing and Model Management in Group Decision Modeling Support System

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Graduated Year:

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Type of Degree:

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Abstract:

Decision is a complex process, Decision Modeling Support System can help us to collect idea, colligate evaluation, and obtain the result scientifically. There are much uncertain, fuzzy information in the decision, processing the uncertain and fuzzy information is very important. This paper introduces fuzzy methods to process uncertain, fuzzy data. The kernel of Decision Support System is Decision Model. The reusability and usability of the System will be improved when Model Base Management System is built to manage and evaluate the models. Decision-makers can choose better model to make decision. The paper contains: 1) Introducing fuzzy AHP model to process the fuzzy information and assist selection in multi-objects decision; 2) Introducing fuzzy-linear-assignment method to assist selection in grouped multi-object decision; 3) Introducing hybrid-multiple-attribute TOPSIS method to assist selection in Multi-Attribute single decision; 4) Introducing group-hybrid-multi-attribute TOPSIS method to assist selection in Multi-Attribute group decision; 5) Introducing outlier-detect method based on density to detect difference of the evaluation among decision markers; 6) Introducing Model Management System to manage the models and evaluate models.

Keywords:

Group Decision Support System, Fuzzy AHP, TOPSIS, Model Management System

2.GF 系統及其應用研究

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論文摘要:

隨著數字幾何在工業上的廣泛應用，幾何信號處理算法變得越來越重要。幾何造型技術是計算機輔助幾何設計(CAGD)技術的核心和基礎，主要研究在計算機中如何表達物體模型形狀。研究幾何造型的理論及開發幾何造型系統已經成為當今計算機領域的熱點。

在 CAGD 領域，樣條函數（尤其是 B 樣條函數）方法已經得到了最廣泛的應用，它具有表示自由曲綫曲面的強大功能。但需求是無止境的，對於設計好的曲綫曲面，如何對它們作進一步的分析？比如提取曲綫曲面的內在結構特徵，比較它們之間的相似程度等。實現這些任務，必須要有相應的數學理論與工具的支持。而正交函數系是信號處理中的重要數學工具。因此，將正交函數系引入 CAGD 領域，對曲綫曲面作頻譜分析將是十分自然的想法。

本文以尋找更好的幾何信號處理算法為出發點，以正交函數系為中心。學習、探索、研究了將正交變換引入數字幾何領域的若幹問題：

第一，由於 B 樣條基不是正交基，不適合對幾何造型作頻譜分析。因此，我們構造了一類正交樣條函數系，命名為 k 次 GF 系統（簡稱 GF 系統，下同）。GF 系統是樣條函數空間的一組標準正交基，可以對相當廣泛的一類信號做到有限且精確的表達。本文利用 GF 系統的這一性質，探索的一些它的應用。

第二， k 次 V 系統（簡稱 V 系統，下同）是我們研究小組構造的另類完備正交函數系，而且在很多應用領域已經取得了較為理想的效果，表明了 V 系統的潛力。V 系統通過對生成元的“壓縮、平移”生成，而 GF 系統由一組綫性無關的函數組，經正交化過程得到。本文從正交函數系的構造方式出發，探討并證明瞭 GF 系統與 V 系統的關系。

第三，我們給出了曲綫曲面在 GF 系統下表示的具體算法，并列舉了若幹曲綫曲面在 GF 系統下正交分解的例子，得出了 GF 系統能夠對廣泛存在的一類曲綫曲面進行有限項精確重構的結論。

第四，近年來 MRA（多分辨分析）思想被廣泛應用在計算機圖形學領域，出現多分辨率模型的概念。本文探索了 GF 系統在曲綫曲面的多分辨率編輯中的應用。

第五，本文定義了歸一化的 GF 描述子並應用於物體形狀的識別與分類。

關鍵詞:

CAGD、正交函數系、頻譜分析、多分辨率編輯、GF 描述子、形狀識別

2.GF System and Its Applications

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Abstrac:

As the digital geometry widely used in industry,geometric signal processing algorithms have become increasingly important modeling technology is the core and foundation of the computer aided geometric design (CAGD). Its main task is how to express the shape of the object in computer. Researching the theory of geometric modeling and developing the computer system of geometric modeling has become a hot area.

In the field of CAGD, spline function (in particular B-spline function) method has been the most widely used, it can express the free curves and surfaces powerfully. But the demand is endless, for the curves or surfaces which haved been designed, how to analyze them further? Such as extraction of the internal structure of curves and surfaces, comparing the degree of similarity between them. To achieve these tasks, we must have the corresponding mathematical theory and tools. The orthogonal functions are important mathematical signal processing tools. Therefore, bringing the orthogonal function system into CAGD for spectral analysis of the curves and surfaces would be a very natural idea.

This article take to find a better geometric signal processing algorithms as a starting point and take the orthogonal function system as the center. Learning, Studying and Researching a number of issues when the orthogonal transformation into the field of digital geometry :

First, as the B-spline bases are not orthogonal bases, they are not suitable for spectral analysis of the geometric modeling. Therefore, we construct a class of orthogonal spline function system, named for the GF System of degree k (GF system, the same below) . GF system is a class of standard orthonormal basis in the spline function space, it can express a broad class of signals efficiently and precisely. In this paper, we take advantage of the property of the GF system to explore some of its applications.

Second, V System of degree k (V system, the same hereinafter) is another complete orthogonal function system which is constructed by our research group, and it has been made a more satisfactory results in many applications. GF-System is obtained by the orthogonalization from a set of linearly independent functions, and V -System is generated by the multiscale squeezing, shifting and duplicating operations on the generators. In this paper, we explore and prove the relationship of two kinds of orthogonal function systems about the method of construction.

Third, we give the specific algorithm about the expression of the curves and surfaces under the GF

systems, and lists a number of examples about the orthogonal decomposition of the curves and surfaces under the GF system. We have come to the conclusion that the GF system can reconstruction a widespread class of curves and surfaces precisely with limited items.

Fourth, in recent years, the thought of MRA (multiresolution analysis) has be widely used in computer graphics, and generate the concept of multi-resolution model. This article explored the application in the multi-resolution curve and surface editing with GF system.

Finally, the paper defined the normalized GF descriptors and applied it to the object shape recognition and classification.

Keywords:

CAGD, orthogonal functions, spectrum analysis, multi-resolution editing, GF descriptors, shape recognition

3. 認知無線電頻譜共享技術研究

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論文摘要：

美國聯邦通信委員會調查表明，當前無線網路的頻譜資源利用不平衡。授權頻段利用率不高，而非授權頻段卻業務量擁擠。認知無線電技術允許非授權用戶機會接入空間頻譜而解決當前的頻譜利用不均衡問題。當前研究的熱點是認知用戶如何有效共享頻譜從而提高系統頻譜利用率和減少干擾。

文章首先分析認知無線電的研究背景，簡述其定義及功能。在接下來的第二，第三和第四章詳細論述了文章完成的主要工作：本文就認知無線電的頻譜共享技術進行較深入研究，一是基於圖着色的頻譜共享技術研究，二是基於勢力場博弈模型的動態信道分配技術研究，三是基於子模博弈的功率控制模型和算法研究。

基於認知無線電的頻譜共享可通過圖着色原理來建模，該模型的優化結果可通採用基於標籤機制的頻譜分配算法來求解。文章針對最大化整體系統帶寬標籤無法實現用戶間的公平性，提出基於合作公平的標籤規則，仿真結果表明，該標籤規則能在頻譜共享中實現良好的公平性。

認知用戶在頻譜共享的決策交互可通過博弈論來建模。分布式自適應頻譜分配可建模為勢力場博弈，該模型的博弈目標函數僅考慮認知用戶間的干擾，文章提出的目標函數能在保護授權用戶的前提下實現認知用戶的優化頻譜分配。

認知用戶的功率控制問題可用非合作博弈建模。在速率最大化博弈中，納什均衡無法達到最優，而現行推動納什均衡到達最優的價格函數需要中心節點的大量搜索開銷，無法在分布式環境中實現。文章提出基於分布式價格策略的功率控制方案來提高系統的吞吐量，同時設計基於子模博弈的分布功率價格(DDP) 算法找到博弈系統的最優納什均衡(NE)。DDP 算法通過認知用戶的交互更新來找到其最優的發射功率。仿真表明提出的分布式價格機制大大提高系統的吞吐量。

關鍵詞：

認知無線電，頻譜共享，圖着色，博弈論，納什均衡，價格機制

3. Research on Spectrum Sharing in Cognitive Radio

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Abstract:

A study by Federal Communication Commission shows that most of the licensed spectrum in current wireless networks is unused at most of the time, while unlicensed spectrum is heavily occupied. Recently, Cognitive Radio (CR) has been proposed to solve this spectrum inefficiency problem by allowing users to opportunistically access to unused spectrum. One important topic in CR is how to share the spectrum efficiently among users so that spectrum utilization can be increased and wireless interference reduced.

This thesis analyses research background, explains the definition and the function of cognitive radio briefly at first. In the second, third and fourth chapters discuss in detail the major work completed. Three aspects of spectrum sharing in cognitive radio network are studied. One is the spectrum sharing algorithm based on graph coloring, one is the channel allocation based on potential game and another is about the power control algorithm based on sub-modular game.

Spectrum sharing can be formalized as a graph coloring problem, the solution to the optimization can be found by an approximation methodology through vertex labeling. The cooperative fairness labeling rule is proposed. Simulation results show that the cooperative fairness labeling rule can achieve good performance of fairness.

The power control among cognitive radio networks is modeled as a non-cooperative game. The Nash Equilibrium (NE) in the rate maximization game is far from optimal. Although exist an “optimal” pricing function that allows the NE to converge to the optimum, the search for such a function is hard to be implemented in a distributed manner. We present a novel power control scheme that uses a distributed pricing strategy to improve the network’s performance. In this scheme, a distributed-power-price (DPP) algorithm based on sub-modular game is proposed, which allows users to converge to the optimum Nash equilibrium. This DPP algorithm can be implemented distributively, with CR users repeatedly negotiating their best transmission powers in spectrum. Simulation results show that the social optimality of the NE solution is dramatically improved by the proposed price-based strategy.

Keywords:

Cognitive Radio, Spectrum Sharing, Graph Coloring, Game Theory, Nash Equilibrium, Pricing

4. 車用自組織網絡的隱私保護研究

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論文摘要:

作為一種能夠提高交通系統安全、效率以及方便性的技術，車用自組織網絡（Vehicular ad hoc Network, VANET）在近年來吸引了越來越多研究團體的關注。通過週期性地廣播包含有車輛位置、速度和方向等信息的數據包，車用自組織網絡能夠實現一系列的應用。例如，協作駕車是 VANET 的一種應用，它利用車輛廣播的信息來發出碰撞預警。但是，一些監聽者也能夠利用這些廣播的信息追蹤車輛的行蹤，從而威脅車主的隱私。因此，缺乏隱私保護機制，將極大地阻礙車用自組織網絡在未來的成功部署。

頻繁地更改偽碼被廣泛地認為是一種在車用自組織網絡中提供隱私保護的方法。然而，目前大部分偽碼更改算法的效率比較低，從而造成了偽碼的浪費。本文首先介紹了車用自組織網絡中隱私保護的基本概念和相關的研究工作，然後提出了兩種有效的偽碼更改算法：

1) 同時的偽碼更改算法（synchronous pseudonym change algorithm）。該算法通過插入 wait flag，使得多個車輛在具有相似狀態信息的前提下，同時地進行偽碼的更改。仿真結果表明，同時的偽碼更改算法與傳統的偽碼更改算法相比，在降低偽碼使用量的同時，極大地提高了偽碼更改的成功率。

2) 協作的偽碼更改算法（Cooperative pseudonym change algorithm）。該算法在同時的偽碼更改算法的基礎上，通過插入 ready flag，使某些車輛在不滿足自身更改偽碼的情況下，可以配合鄰居車輛同時地更改偽碼。仿真結果表明，協作的偽碼更改算法與同時的偽碼更改算法相比，提高了偽碼更改的成功率。

關鍵詞:

車用自組織網絡、隱私保護、偽碼更改算法

4. Research on Privacy Protection in Vehicular ad hoc Networks

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Abstract:

As a technology to improve safety, efficiency and convenience in transportation, Vehicular ad hoc Networks (VANETs) attract more and more attentions of researchers. VANETs will achieve a series of applications by periodically broadcasting beacons containing vehicular status information such as position, velocity and direction. For instance, cooperative safety application uses information shared among vehicles to avoid collisions. However, some attackers might also utilize the information to track vehicles' whereabouts to threaten their owners' privacy. Therefore, the lack of privacy protection might impede the further success of VANETs in the future.

Frequently changing pseudonym is commonly accepted as a solution to protect privacy in VANETs, but most pseudonym change algorithms are ineffective. Based on the introduction of the basic background knowledge and related research works on privacy protection technology in VANETs, this thesis proposes two effective pseudonym change algorithms.

(1) Synchronous pseudonym change algorithm. The algorithm inserts a bit called wait flag, which is used to improve the probability of changing pseudonym simultaneously. Simulation results show that, compared with some traditional pseudonym change algorithms, synchronous pseudonym change algorithm not only decreases the total number of used pseudonyms, but also improves the successful rate of changed pseudonyms.

(2) Cooperative pseudonym change algorithm. Based on the synchronous pseudonym change algorithm, this algorithm inserts a bit called read flag. The algorithm enables a vehicle change pseudonyms to help other vehicles to strengthen anonymity even when it does not find a trigger to change pseudonym. Simulation results show that this algorithm has a higher successful rate of changed pseudonym than synchronous pseudonym change algorithm.

Keywords:

VANETs, Privacy Protection, Pseudonym Change Algorithm

5. 層次多結點樣條技術及其在嫦娥一號激光測高數據中的應用

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論文摘要:

大規模散亂數據擬合是指構造光滑曲面逼近或插值大量散亂數據點，這在科學研究及工程方面具有重要的應用價值。關於散亂數據擬合成曲面的問題，雖然已有許多文獻介紹了不同的方法，但從曲面的光順性，計算的穩定性，數據量的大小以及數據分佈規律的複雜性等諸多方面來考慮，已有的研究結果還存在一定的局限。為此本文基於多結點樣條，提出了能在大規模數據下，快速生成光滑曲面的層次多結點樣條算法，並成功的將其應用於圖像重建，三維模型的建立及嫦娥一號激光高度計(LAM)數據的處理，主要工作如下：

1. 比較分析了現有常用的散亂數據逼近方法，總結了它們的優劣性。
2. 比較分析多結點樣條與 B 樣條對曲面數據的重建效果，總結出多結點樣條在複雜曲面重建中的精度要優於 B 樣條的重建精度。
3. 提出並實現了一種基於多結點樣條的散亂數據擬合算法，該演算法利用一系列從粗糙到精細的多結點樣條控制網格來逐步逼近或插值給定的散亂數據。
4. 分析處理了嫦娥一號激光高度計的測高數據，對數據進行濾波處理，並應用層次多結點樣條，生成了空間解析度為 $0.0625\text{o}\times 0.0625\text{o}$ 的全月球數字高程模型，並將該模型分別與 ULCN2005、CLTM-s01 及日本“月女神”模型進行了對比。
5. 基於提出的月面數字高程模型(Digital Elevation Model, DEM)，探討了月面高程分佈規律，並建立了月面高程的分佈特徵模型。結果表明全月球、月球正面高程呈正偏態、高峰態的正態分佈；月球背面高程呈正偏態、低峰態的正態分佈。

論文最後對層次多結點樣條算法做了總結，並給出將來的研究方向。

關鍵詞:

多結點樣條、散亂數據擬合、層次多結點樣條、嫦娥一號、激光高度計數據、數字高程模型、分佈特徵模型

5. Hierarchical Many-knot Spline and Its Applications in Chang'E -1 LAM Data

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Graduated Year:

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Type of Degree:

Master of Science

Abstract:

Scattered data fitting refers to the problem of reconstructing a smooth surface through a set of non-uniformly distributed data points that extends to all positions in a domain. It has many importance practical values in many scientific and engineering fields. The subject of scattered data fitting has been discussed extensively in literatures and many approaches have been proposed, many of which suffer from limitations in smoothness, time complexity, or allowable data distributions. This paper addresses these problems and introduces a very fast algorithm for constructing a fitting function from arbitrary scattered data. And we successfully use it to reconstruct image, create 3D model and process Chang'E-1(CE-1) laser altimeter data. The main contributions in this paper are listed as following:

1. Compare and analyze the advantages and disadvantages of current common-used algorithms of scattered data fitting.
2. Compare the effects of surface reconstructed by B-spline and many-knot spline. It is concluded that many-knot spline reconstructs more accurate surface than B-spline for rough scattered data set.
3. A fast approximation and interpolation algorithm for large-scale scattered multivariate data was proposed. The algorithm is based on many-knot spline approximation and makes use of a hierarchy of control lattices to generate a sequence of functions whose sum approaches the desired approximation function.
4. We have produced lunar DEM from CE-1 LAM data by hierarchical many-knot spline algorithm and compared proposed DEM we have proposed with ULCN2005, CLTM-s01 and lunar DEM from Kaguya LAM data.
5. Based on the proposed lunar DEM, we explored the elevation distribution law and established the elevation distribution model. It is shown that the global lunar and nearside elevation distribution is positively skewed and leptokurtic normal distribution, and the farside elevation distribution is a positively skewed and platykurtic normal distribution.

Finally, a conclusion of hierarchical many-knot spline was given, and also potential research topics in the future have been discussed at the same time.

Keywords:

Many-knot spline, Scattered data fitting, Hierarchical many-knot spline, Chang'E-1, Laser altimeter data, DEM: Digital Elevation Model, Elevation distribution model.

6. 中國零售產業公司價值特徵影響因素之研究——基於零售上市公司的 的實證研究

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畢業年度:

2010

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管理碩士學位課程

論文摘要:

自中國加入世界貿易組織以後，中國零售產業面臨前所未有的開放局面，這對於中國零售商來說既是機遇又是挑戰，機遇是零售商擁有了更廣闊的發展空間，挑戰是外資零售商的進入給中國零售商帶來巨大的競爭壓力。面對壓力，中國零售商必須尋求自己的出路來迎接挑戰。因此，零售產業關注的不僅是公司目前的獲利，更為關注的是公司的長遠利益，也就是公司價值。早在 20 世紀初，Irving Fisher 的資本價值論與 Modigliani 和 Miller 的價值評估理論就開始構建評估價值的計量模型，但關注的只是財務利潤，沒有上升到真正的價值層面。現代公司價值理論認為，公司價值取決於公司未來的獲利能力，它是公司未來收益的資本化。公司未來的盈利能力決定了公司價值，但是影響未來盈利能力的因素還有待研究。

本文回顧了零售理論與公司價值相關理論，在國內外學者研究基礎上，運用相關性分析，多元回歸分析與逐步多元回歸分析等研究方法對零售產業上市公司 2005 年至 2008 年四年財務年報數據進行實證分析，闡述了零售產業公司層面的整體現狀以及從資本結構、股權結構、規模經濟和無形資產四個方面分析影響中國零售產業公司價值的特徵因素，為零售產業進一步研究指明方向。本文探討的重點不是公司價值究竟如何評估，也不是零售產業究竟有何種特徵，而是將兩者相融合，力求去探討一個產業代表性的價值因素，從而使企業能夠更清晰的找准自己的位置和方向，最終實現價值的進一步增長。

關鍵詞:

零售產業 公司價值 影響因素 實證研究 零售理論

6.The Research on the Characteristic Influence Factors of Corporate Value of Retail Industry in China——The Empirical Research Based on Listed Companies in Retail Industry

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Name of the supervisor:

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Graduated Year:

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Type of Degree:

Master of Management Studies Program

Abstract:

Since China joined the World Trade Organization, China's retail industry faces unprecedented open situations, which are both the opportunity and the challenge for the Chinese retailers. The opportunity is to bring a broader development space while the challenge is that there is enormous pressure of competition along with the entering of foreign retailers. Faced with this pressure, the Chinese retailers must find their own way to meet the challenge. Therefore, the retail industry is not only concerned about the company's current earnings, but more concerned about the company's long-term interests, that is, Corporate Value. As early as the 20th century, it began to construct the econometric model of the estimated value in Irving Fisher's Capital Theory of Value and Modigliani and Miller's Valuation Theory, though from a financial point of view, it did not rise to the level of real value but only concerned about profits. Theory of modern corporate value shows corporate value depends on the company's future profitability and that is the capitalization of company's future earnings. The company's future profitability determines the corporate value, but the factors which affect the future profitability have remained to be researched.

The thesis reviews the retail theory and the related theories of the company value, based on studies conducted by academics at home and abroad, using correlation analysis, multiple regression analysis and stepwise multiple regression analysis and other research methods, it analyzed four-year financial report data from 2005 to 2008 on the public companies on the retail industry, described the overall status of the company on the retail industry and analyzed the characteristic factors which are the main impact of corporate value of China's retail industry from the capital structure, equity structure, economies of scale and intangible assets, ultimately, it points out directions for the further research for the China's retails. The focus of the thesis is not exactly how to evaluate the value of the corporate or what is the characteristic of the retail industry, instead, that is the two-phase integration, and strive to find out the representative value factors of the industry, in order to make companies pinpoint their own locations and directions more clearly, and realize the value of further growth eventually.

Keywords: Retail Industry, Corporate Value, Influence Factors, Empirical Analysis Retail Theory

7.對中國內地公共部門容忍腐敗的因素初探

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論文摘要:

公職腐敗行為是國家公職人員中普遍存在的一種現象，對此，人們在公開表達的意見上往往認為應當建立治理公職腐敗的制度，徹底根除腐敗行為。但在私人態度上，人們却基於不同的理由而持有某些容忍的意見。本研究主要考察中國內地公共部門中，影響行政人員對腐敗的容忍程度的各種因素。本文以國內外相關文獻作為理論依據和研究架構，並作出理論假設，通過調查問卷的方式，以專業分析軟件對假設作出回歸分析和相關性分析，從而得出科學的

分析結果。本研究得出結論如下：

- 一、在公共部門中，權力距離越高，對腐敗的容忍程度越高；
- 二、在公共部門中，集體主義程度越高，對腐敗的容忍程度越低；
- 三、在公共部門中，員工個人工作倫理準則越偏向道德化，對腐敗的容忍程度越低。

關鍵詞:

行政倫理、容忍腐敗、權力距離、集體主義、個人信念

7. Research about tolerance of administrative corruption in mainland China

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Master of Public Administration

Abstract:

Corruption is a common phenomenon of such behaviour which violating administrative ethical. To this, people always expressed opinions in public and tend to believe that should establish a system of governance to control and cure corruption, however, people had some tolerance opinions of different reasons in private attitude.

This study mainly examined factors impacting tolerance of corruption levels in the mainland China. Based on amount of relevant literatures and researches as a foundation and the framework of the thesis, we made some theoretical assumptions, though a survey of 200 individuals from administrative units, collecting data and using professional analysis softwares to make regression and correlation analysis, consequently, get a scientific outcome. Finding include:

1. In the public sector, the higher degree of power distance, the higher level of tolerance of corruption;
2. In the public sector, the higher degree of collectivism, the lower level of tolerance of corruption;
3. In the public sector, the higher degree of moral personal beliefs, the lower level of tolerance of corruption.

Keywords:

Administrative ethics, Tolerance of corruption, Power distance, Collectivism, Personal beliefs

8. 港澳政府外判服務研究

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學位類別:

公共行政管理碩士

論文摘要:

澳門特別行政區隨著博彩業市場的開放，由東方的「蒙地卡羅」進一步發展成為博彩經濟收益超越美國拉斯維加斯的亞洲博彩業名城，經濟飛速發展的同時，社會環境也迎來了巨大而急促的變化，市民對政府服務無論在質和量兩方面的要求亦不斷提升。

面對政府服務如住屋、基建、交通、社會保障、公益服務等的需求因經濟發展而不斷增加，澳門政府試圖通過各類行政改革手段提高行政效率，增加服務內容和提升服務水平來回應民意。其中受全球化新公共管理革命所主張的「政府服務外判」就成為現今公共行政改革中最常運用的一種工具，通過引入私人企業，以成本效益更佳的企業運作模式為社會大眾提供更高質、高效的政府服務。

本研究便因應澳門政府實施政府服務外判方興未艾之際，通過文獻資料分析法，從公共選擇理論、新公共管理、新相互主義理論、交易成本理論、委託—代理理論等來立基分析，制定切合的外判機制，再引用績效評估、完全品質管理等的企業化管理策略，建立一個能自我持續不斷優化的制度。在深入分析澳門現行服務外判機制的同時，亦借助了解香港特別行政區政府實施多年並持續優化的政府服務外判管理機制，通過比較研究的方法，分析澳門政府在政府服務外判的政策面向、法制面向及實務操作面向三個層面的改善空間，並因分析所得而對澳門政府就服務外判的機制提出建議，確保日後澳門政府實施服務外判時，能在政策審視、招標甄審及監督管理等三個主要階段上有效落實公共行政管理理論要點，令澳門公共機構能以高效、高質、廉潔方式實行政府服務外判工作，提高負責監督項目的公務人員對外判承辦商善盡監督管理之能力，進一步提升政府服務外判的靈活性、適應性及專業性，加強澳門政府的綜合管治能力。

關鍵詞:

政府服務外判、公共選擇理論、新公共管理、新相互主義、委託—代理人理論、交易成本理論、完全品質管理、績效評估

8.A Study on Government Services Outsourcing in Hong Kong and Macau

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Guest Assistant Professor Wong ChamLi

Graduated Year:

2010

Type of Degree:

Master of Public Administration

Abstract:

With the opening of the gaming industry, Macau Special Administration Region has further developed from the “East Monte Carlo” into a famous Asian gaming city, benefits beyond the Las Vegas. With the rapid growth of economy, social environment has also changed tremendously. The requirements of both quality and quantity in government services are also increasing.

Facing the demand of government services, such as housing, infrastructure, transportation, social security, are increasing accompanied with the economic growth. Macau government tried through various means of administrative reforms to improve administrative efficiency, increase services and improve service levels to respond to the public opinion. The "government services outsourcing", which is advocated by new public management revolution around the world, has become the most common tool used in public administration reform. By introducing the cost-effective mode of operation in the private enterprises, the government can better provide higher quality, efficient government services.

This study will be taken in response to the government services outsourcing of Macau SAR Government. Through the literature analysis on public choice theory, new public management, new mutualism theory, transaction cost theory, principal - agent theory, we can develop a suitable outsourcing mechanism. With the reference to the efficiency evaluation system and the total quality management strategy, we can also establish a continuous optimization system for outsourced government service. By taking an in-depth analysis of current outsourcing mechanism of Macau, we can review the similar mechanism using in Hong Kong SAR Government, which has established for many years and has been optimizing throughout these years. By means of the general comparative method to analyze the Macau government outsourcing in the political, legal and practical level, we can find the room for improvement. Based on these findings, we can offer recommendations to ensure the good implementation of the government service outsourcing mechanism through the three phases: review of business case, tendering and selection and overview of the contract, so as to help the Macau government outsource services in an efficient, high quality, and clean way. At the same time, through the enhancement of public servants' ability so that they can be responsible for monitoring the project and contractors of outsourcing, we can further strengthen the flexibility, adaptability and professionalism of the Macau Government, and its

comprehensive governance ability.

Keywords:

Government services outsourcing, public choice theory, new public management, new mutualism theory, transaction cost theory, principal - agent theory, total quality management, efficiency evaluation