# Kin Hong Ip



Position :	Assistant Professor
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## Teaching and Research Areas:

Heritage Conservation and Restoration, Traditional Building Materials and Techniques, Material Characterization and Compatibility, Innovative restoration material design, Urban Environmental Impacts on Architectural Heritage

# Academic Qualifications

2002 - 2007	PhD in / Conservation of Architectural Heritage / University of Technology,
	Sydney (Australian Postgraduate Award Recipient)
2001 - 2002	Bachelor of Science (First Class Honours) Applied Chemistry / Chemistry and
	Material Science / University of Technology, Sydney (University Medalist)
1997 - 2001	Bachelor of Science in Applied Chemistry / Chemistry and Material Science /
	University of Technology, Sydney

# **Teaching Experience**

2020 - Present	Assistant Professor / Faculty of Humanities and Arts / Macau University of Science and Technology
2002 - 2005	Lecturer / Department of Chemistry, Materials and Forensic Science / University of Technology, Sydney
2001 - 2005	Laboratory Instructor / Department of Chemistry, Materials and Forensic Science / University of Technology, Sydney

# Representative Publications

#### Journal Articles:

Ip KH (2015). Conservation of Macau Cultural Heritage Using Traditional Materials. Review of Culture - Chinese Edition, Institute of Culture, Macau; 95: 129 – 140.

Ip KH, Stuart B, Ray A, Thomas P (2011). ESEM-EDS Investigation of the Weathering of a Heritage Sydney Sandstone. *Microscopy and Microanalysis: Dec.3:1 – 4 (DOI:10.1017/S1431927610094249, Corpus ID: 31567129)* 

Ip KH, Stuart BH, Thomas PS, Ray AS (2011). Characterization of poly9vinyl alcohol) – montmorillonite composites with higher clay contents. *Polymer Testing:* **30:** 7, 732-736. (*DOI: 10.1016/J.Polymertesting.2011.06.004, Corpus ID: 94036411*)

Ip KH, Stuart BH, Ray AS, Thomas PS (2008). A spectroscopic investigation of the weathering of a heritage Sydney sandstone. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*; **71:** 3, 1032 – 1035. (*DOI:10.1016/j.saa.2008.02.042, Corpus ID: 12919291*)

Ip KH, Stuart BH, Thomas PS, Ray AS (2008). Thermal characterization of the clay binder of heritage Sydney sandstones. Journal of Thermal Analysis and Calorimetry; 92: 1, 97 – 100.

(DOI:10.1007/S10973-007-8743-Y, Corpus ID: 53063287)

Ip KH, Ray AS, Stuart BH, Thomas, PS (2005). Thermal Analysis of Heritage Stones. Journal of Thermal Analysis and Calorimetry; 80: 3, 559 – 563. (DOI: 10.1007/s10973-005-0694-6)

Friolo KH (2004). Development of polymer Clay nanocomposites as stone consolidants for Sydney's Heritage Buildings. Materials Australia; 37: 4, 12 – 14.

Friolo KH, Stuart BH, Ray AS (2003). Characterization of weathering of Sydney sandstones in heritage buildings. Journal of Cultural Heritage, 4: 3, 211 – 220. (10.1016/S1296-2074(03)00047-5)

#### Conference Proceedings:

Ip KH (2015). Sustaining traditional practice and utilizing local materials in heritage conservation. Australian ICOMOS – Fabric Conference, 5-8 November 2015, Adelaide Australia.

Ip, K.H. (2005), "Chemical Analysis of Cementing Clays in Sydney's Heritage Sandstone Buildings", The 5th Australian Industrial Minerals Conference, Sydney, Australia, Australian Institute of Geoscientists, Sydney.

Ip KH, Ray AS, Stuart BH, Thomas PS (2005). Investigation of the degradation of sandstones in Sydney's heritage buildings. The IV International Seminar on Structural Analysis of Historical Constructions, 10 – 13 November, Padova, Italy; 1: 239 – 244. (Corpus ID: 127901915)

Friolo KH, Thomas PS, Ray AS, Stuart BH (2004). Thermal analysis of yellow-block sandstones in Sydney's Heritage Buildings. 13th International Congress on Thermal Analysis and Calorimetry (ICTAC 13), 12 – 19 September, Chia Laguna, Sardinia, Italy; P1 – 136.

Friolo KH, Ray AS, Stuart BH, Thomas PS (2004). Degradation of historic sandstone buildings of Sydney. 7th Australasian Masonry Conference, 13 – 16 July, Newcastle, Australia; 420 – 427.

Friolo KH, Stuart BH, Ray AS (2001). A study of the weathering of Sydney sandstone using FTIR spectroscopy. 4th Australian Conference on Vibrational Spectroscopy, Brisbane.

#### **Research Grants/Projects**

2002 - 2007	PhD Thesis – Investigation into clay-based consolidants for Conservation of "Yellow Block Sandstones" in Sydney's Heritage Buildings – Supported by the Australian Postgraduate Award
2017 - 2019	Conservation of Masonry – Chemical Consolidation – Supported by the Department of Planning, Transport and Infrastructure (DPTI), Adelaide, South Australia

# Academic and Professional Membership

Member of the Royal Australian Chemical Institute Inc.

## **Professional Qualifications and Awards**

Robert K. Murphy Research Prize – most original research project (2002) Schering Plough Prize – The best project seminar in an advanced chemistry project (2002)