

Academic Staff Resume

Name: Qing Hu (Tsing Bohu, 呼慶)

Title: A/Professor



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Academic Qualification

Ph.D. in Geomicrobiology and Biogeochemistry, Friedrich Schiller University Jena, Germany

Research Area

Astrobiology

Geomicrobiology and Biogeochemistry

Environmental Microbiology

Working Experience

5/2021-Current, A/Professor, Macau University of Science and Technology

2/2020-4/2021, Research Project Leader, CSIRO Mineral Resources, Kensington, Australia

1/2016-4/2021, CSIRO Postdoctoral Fellow, CSIRO Mineral Resources, Kensington, Australia

6/2013-9/2013, Visiting Scientist, Department of Mineral Sciences, Smithsonian Institution, USA

6/2011-12/2015, Research Assistant, Jena University, Germany

7/2006-12/2010, A/Professor, Chinese Academy of Sciences

Certification, Awards and Membership

2020-Current, Editorial Board as a Topic Editor for *Microorganisms* (ISSN: 2076-2607)

2019, Best Poster Presentation Award, 23rd International Biohydrometallurgy Symposium, Japan

2019, CSIRO Mineral Resources Award for Science Achievement

2019-2021, CSIRO Research Plus Postdoctoral Scholarship

2016, Theo Murphy Australian Frontiers of Science Scholarship

2016-2018, CSIRO Office of Chief Executive Postdoctoral Scholarship

2011-2014, German Science Foundation Research Training Scholarship (DFG GRK 1257)

2011, DAAD Sino-German Scholarship

Member of Australian Society of Microbiology (ASM)

Member of The Association of Applied Geochemists (AAG)

Academic Publication (selected)

39. J Wang, S Zhang, T Que, AH Kaksonen, X Qian, X Zhuang, **T Bohu***, Mitigation of Eutrophication in a Shallow Lake: The Influences of Submerged Macrophytes on Phosphorus and Bacterial Community Structure in Sediments, 2021, *Sustainability* 13 (17), 9833.
38. H Wang, X Sha, R Li, Y Li, HN Khaleque, Y Zhang, **T Bohu***, Z Bai, X Zhuang, Comparative Genome Analysis Provides Molecular Evidence for Reclassification of the Photosynthetic Bacterium *Rhodobacter sphaeroides* EBL0706 as a Strain of *Luteovulum azotoformans*, 2021, *Microorganisms* 9 (8), 1754
37. J Gao, M Liu, S Shi, Y Liu, Y Duan, X Lv, **T Bohu et al.**, Disentangling Responses of the Subsurface Microbiome to Wetland Status and Implications for Indicating Ecosystem Functions, 2021, *Microorganisms* 9 (2), 211.
36. Y Liu, J Gao, Z Bai, S Wu, X Li, N Wang, X Du, H Fan, G Zhuang, **T Bohu et al.**, Unraveling Mechanisms and Impact of Microbial Recruitment on Oilseed Rape (*Brassica napus* L.) and the Rhizosphere Mediated by Plant Growth-Promoting Rhizobacteria, 2021, *Microorganisms* 9 (1), 161.
35. K Kudpeng, **T Bohu et al.**, Bioleaching of gold from sulfide ore concentrate and electronic waste by *Roseovarius tolerans* and *Roseovarius mucosus*, 2020, *Microorganisms*, 8 (11), 1783.
34. AH Kaksonen, X Deng, **T Bohu et al.**, Prospective directions for biohydrometallurgy, 2020, *Hydrometallurgy*, 2020/5, 10.1016/j.hydromet.2020.105376.
33. **T Bohu***, R Anand, R Noble *et al.*, Evidence for fungi and gold redox interaction under Earth surface conditions, 2019, *Nature Communications* 10 (1), 2290.
32. TJ Bushman, DM Akob, **T Bohu et al.**, Draft Genome Sequence of Mn (II)-Oxidizing Bacterium Oxalobacteraceae sp. Strain AB_14, 2019, *Microbiology resource announcements* 8 (43), e01024-19.
31. W Salama, R Anand, **T Bohu**, Biochemical and mechanical dispersion mechanisms of Au and As in areas covered by Permian glacial sediments and aeolian sand, 2019, *The 2nd Australasian Exploration Geoscience Conference*.
30. AH Kaksonen, NJ Boxall, Y Gumulya, HN Khaleque, C Morris, **T Bohu et al.**, Recent progress in biohydrometallurgy and microbial characterisation, 2018, *Hydrometallurgy* 180, 7-25.
29. AH Kaksonen, NJ Boxall, **T Bohu et al.**, Recent advances in biomining and microbial characterisation, 2017, *Solid State Phenomena* 262, 33-37.
28. **T Bohu**, DM Akob, M Abratis *et al.*, Biological low-pH Mn (II) oxidation in a manganese deposit influenced by metal-rich groundwater, 2016, *Appl. Environ. Microbiol.* 82 (10), 3009-3021.

27. **T Bohu**, CM Santelli, DM Akob *et al.*, Characterization of pH dependent Mn (II) oxidation strategies and formation of a bixbyite-like phase by *Mesorhizobium australicum* T-G1, 2015, *Frontiers in microbiology* 6, 734.
26. DM Akob, **T Bohu** *et al.*, Identification of Mn (II)-oxidizing bacteria from a low-pH contaminated former uranium mine, 2014, *Appl. Environ. Microbiol.* 80 (16), 5086-5097.
25. W Huang, **T Bohu** (Q Hu) *et al.*, Comparison of soil microbial communities between high and low yield organically managed orchards, 2013, *African Journal of Microbiology Research* 7 (40), 4768-4774.
24. X Lv, X Peng, **T Bohu** (Q Hu) *et al.*, Isolation and characterization of quizalofop-methyl degraders in soil using DGGE-colony in situ hybridization, 2013, *Environmental Science* 34 (1), 263-270.
23. W Huang, Z Bai, D Hoefel, **T Bohu** (Q Hu) *et al.*, Effects of cotton straw amendment on soil fertility and microbial communities, 2012, *Frontiers of Environmental Science & Engineering* 6 (3), 336-349.
22. P Man, HY Qi, **T Bohu** (Q Hu) *et al.*, Spatial Quantitative Distribution of Hydrocarbon-Oxidizing Bacteria of Unexploited Oil and Gas Fields, 2012, *Environmental Science* 33 (5), 1663-1669.
21. J Ning, G Gang, Z Bai, **T Bohu** (Q Hu) *et al.*, In situ enhanced bioremediation of dichlorvos by a phyllosphere *Flavobacterium* strain, 2012, *Frontiers of Environmental Science & Engineering* 6 (2), 231-237.
20. J Pan, M Cui, **T Bohu** (Q Hu) *et al.*, Multivariate analysis linkage of phyllospheric microbial community of transgenic cotton from SGK321 to Cry1Ac: a temporal expression dynamic, 2012, *African Journal of Microbiology Research* 6 (25), 5371-5382.
19. P Man, H Qi, **T Bohu** (Q Hu) *et al.*, Quantitative distribution of hydrocarbon oxidizing bacteria in the surface of undeveloped oil and gas fields, 2012, *Environmental Science* 33 (005), 1663-1669.
18. P Man, H Qi, **T Bohu** (Q Hu) *et al.*, Unravelling the surface microbial community structure in undeveloped oil and gas fields using PCR-DGGE, 2012, *Environmental Science* 33 (1), 305-313.
17. J Pan, **T Bohu** (Q Hu) *et al.*, Advance in the research of phyllospheric microorganism, 2011, *Acta Ecologica Sinica* 31 (2), 583-592.
16. L Li, **T Bohu** (Q Hu) *et al.*, Resistance and biosorption mechanism of silver ions by *Bacillus cereus* biomass, 2011, *Journal of Environmental Sciences* 23 (1), 108-111.

15. J Ning, Z Bai, G Gang, D Jiang, **T Bohu** (Q Hu) *et al.*, Functional assembly of bacterial communities with activity for the biodegradation of an organophosphorus pesticide in the rape phyllosphere, 2010, *FEMS microbiology letters* 306 (2), 135-143.
14. L Gu, Z Bai, B Jin, **T Bohu** (Q Hu) *et al.*, Assessing the impact of fungicide enostroburin application on bacterial community in wheat phyllosphere, 2010, *Journal of Environmental Sciences* 22 (1), 134-141.
13. **T Bohu** (Q Hu), L Li, Y Wang *et al.*, Construction of WCB-11: A novel phiYFP arsenic-resistant whole-cell biosensor, 2010, *Journal of Environmental Sciences* 22 (9), 1469-1474.
12. A Ma, **T Bohu** (Q Hu) *et al.*, Functional display of fungal cellulases from *Trichoderma reesei* on phage M13, 2008, *World Journal of Microbiology and Biotechnology* 24 (10), 2003-2009.
11. A Ma, **T Bohu** (Q Hu) *et al.*, The enzymatic hydrolysis rate of cellulose decreases with irreversible adsorption of cellobiohydrolase I, 2008, *Enzyme and microbial Technology* 42 (7), 543-547.
10. J zeng, H Qi, J Yang, **T Bohu** (Q Hu) *et al.*, Biosorption and crystallization of silver ions by *Bacillus cereus* HQ-1, 2008, *Environmental Science* 29 (001), 225-230.
9. C Hao, H Zhang, Z Bai, **T Bohu** (Q Hu) *et al.*, A novel acidophile community populating waste ore deposits at an acid mine drainage site, 2007, *Journal of Environmental Sciences* 19 (4), 444-450.
8. M Dou, **T Bohu** (Q Hu) *et al.*, A comparison on biosorption of cadmium and silver by heavy metal resistant bacterial isolate HQ-1, 2007, *Microbiology China* 34 (006), 1097-1103.
7. J zeng, H Qi, J Yang, **T Bohu** (Q Hu) *et al.*, Zinc adsorption by pre-treated activated sludge, 2007, *Chinese Journal of Environmental Engineering* 1 (6), 135-140.
6. **T Bohu** (Q Hu), H Qi, Z Bai *et al.*, Biosorption of cadmium by a Cd²⁺-hyperresistant *Bacillus cereus* strain HQ-1 newly isolated from a lead and zinc mine, 2007, *World Journal of Microbiology and Biotechnology* 23 (7), 971-976.
5. **T Bohu** (Q Hu), H Qi, M Dou *et al.*, Isolation and identification a cadmium-resistant *Bacillus cereus*, 2007, *Environmental Science* 28 (002), 427-430.
4. **T Bohu** (Q Hu), M Dou, H Qi *et al.*, Detection, isolation, and identification of cadmium-resistant bacteria based on PCR-DGGE, 2007, *Journal of Environmental Sciences* 19 (9), 1114-1119.

3. **T Bohu** (Q Hu), H Qi, J Zeng *et al.*, Bacterial diversity in soils around a lead and zinc mine, 2007, *Journal of Environmental Sciences* 19 (1), 74-79.
2. Z Li, Z Bai, B Zhang, H Xie, **T Bohu** (Q Hu) *et al.*, Newly Isolated *Bacillus gibsonii* S-2 Capable of using Sugar Beet Pulp for Alkaline Pectinase Production, 2005, *World Journal of Microbiology and Biotechnology* 21 (8-9), 1483-1486.
1. **T Bohu** (Q Hu), H Qi, H Zhang, Fluorescence in situ hybridization (FISH) and its applications in microbial ecology, 2004, *Acta Ecologica Sinica* 24 (5), 1048-1054.