

SHORT BIO

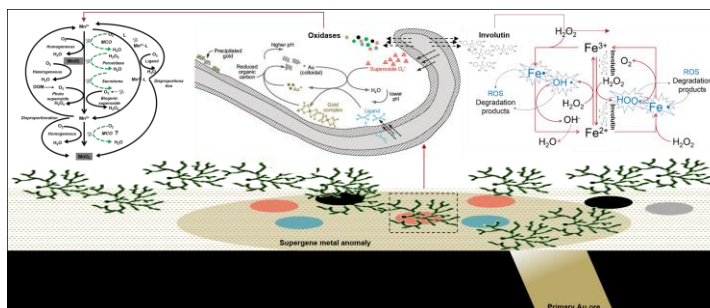
I am an Astrobiologist and geomicrobiologist in the State Key Laboratory of Lunar and Planetary Sciences, Macau University of Science and Technology, Taipa, Macau. My research tackles questions in astrobiological, environmental, and geobiological perspectives. The focuses are the impact of the interaction between organic/inorganic substances and microbes on geological and environmental processes on Earth and beyond such as elements biogeochemical cycling, natural nanoparticle occurrence and distribution, biomineralization, mineral alteration and biochemical weathering, metals and metalloids redox transformation, and metal-catalyzed biodegradation. As my research is highly interdisciplinary, I collaborate with a multidisciplinary team of scientists and students with diverse scientific backgrounds.

Asst. Prof.

Qing Hu
(Tsing Bohu)



PhD: Geomicrobiology – Jena University, Germany



Elements biogeochemical cycling- Tsing Bohu, 2021

KEY PUBLICATIONS *(first author)*

Bohu T., et al., 2021.

The role of fungi in the biogeochemical cycling of supergene gold and satellite transition metals: a potential new exploration tool. **Ore Geology Reviews**

Bohu T., et al., 2019.

Evidence for fungi and gold redox interaction under Earth surface conditions. **Nature Communications**

Bohu T., et al., 2016.

Biological low-pH Mn (II) oxidation in a manganese deposit influenced by metal-rich groundwater. **Applied and Environmental Microbiology**

PROFESSIONAL EXPERIENCE

Ongoing – 2021 – Macau University of Science and Technology, Macao (China) – Asst. Prof.

Ongoing – 2020 – Curtin University, Bentley, Australia – Adjunct Associate

2016 – 2021 – CSIRO, Kensington, Australia – Post Doctoral, Project Leader

2011 – 2016 – Jena University, Jena, Germany – Research Associate

2006 – 2011 – Chinese Academy of Sciences, Beijing, China – Asst. Prof.

GRANTS

CSIRO – 2019-2021 – Principal Investigator

Deep biosphere exploration

CSIRO-CAS – 2020-2022 – Principal Investigator

Global biogeochemical processes of elements migration and transformation through the Critical Zone of Chinese and Australian cratons