



# Research Field: ASTROBIOLOGY

## Focused Field: MARS ANALOGUES & BIOSINATURES

### SHORT BIO

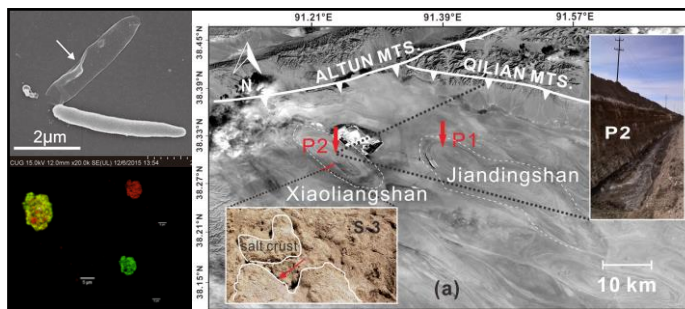
I completed my Ph.D. degree at China University of Geosciences (Wuhan) under the supervision of Prof. Long Xiao in Dec 2018. My doctoral research focused on astrobiology and involved studying hypersaline environments in the Qaidam Basin and acidic environments in the Rio Tinto. Specifically, I explored the comparison between extreme terrestrial environments and Mars, investigating the preserved life signatures in analogs that are crucial for assessing the potential existence of life on Mars. Following the completion of my Ph.D., I was offered a postdoctoral researcher position at the State Key Laboratory of Planetary Sciences in Macao, China, which is affiliated with the Chinese Space Administration. Collaborating with Prof. Long Xiao, I have continued my research on Mars analogs. Currently, I am working alongside Associate Prof. David C. Fernandez Remolar to search for biosignatures preserved in ancient materials such as salts and hydrated minerals.

### Postdoc

## Ting Huang



PhD: PLANETARY GEOLOGY AND COMPARATIVE PLANETOLOGY - China University of Geosciences (Wuhan)  
Degree: EXPLORATION TECHNOLOGY AND ENGINEERING-Guilin University of Technology



Astrobiology study in the Qaidam Basin- Ting Huang et al., 2018

### KEY PUBLICATIONS (first author)

**Huang T., et al.** *Sediminibacillus dalangtanensis* sp. nov., a moderate halophile isolated from hypersaline sediments of the Qaidam Basin in Northwest China. *International Journal of Systematic and Evolutionary Microbiology*. 2022;71(8):005501.

**Huang, T., et al.** Chapter 9: Habitability and astrobiological significances. *Mars on Earth: the Qaidam Basin case*. Long Xiao, World Scientific Press, Singapore. 2020;293-327.

**Huang, T., et al.** Dalangtan Playa (Qaidam Basin, NW China): Its microbial life and physicochemical characteristics and their astrobiological implications. *PLoS one*. 2018;13(8): e0200949.

### PROFESSIONAL EXPERIENCE

**Ongoing – 2019.6 - Macau University of Science and Technology, Macao (China) - Postdoctoral Researcher**

### GRANTS

**Ministry of Science and Technology of PR China - 2022-2027 – Co-PI – PI Honglei Lin**

Exploration of hydrated minerals on Mars and their implications to habitable environments

**Ministry of Science and Technology of PR China - 2021-2026 – Backbone Member – PI Shuanggen Jin**

Exploration of habitable environments and biosignatures on Mars

**Fundo para o Desenvolvimento das Ciências e da Tecnologia - 2020-2023 – Co-PI – PI David C. Fernandez Remolar**

Multidisciplinary search for biosignatures in ancient earthly evaporites as a proxy to find molecular evidence of primitive life on Mars