



## Master–PhD–Postdoc Positions

### In Planetary Geology and Geodynamics (PGG) Group

at State Key Laboratory of Lunar and Planetary Sciences of China,

### Macau University of Science and Technology

The Group of Planetary Geology and Geodynamics (PGG) at the State Key Laboratory of Lunar and Planetary Sciences, Macau University of Science and Technology (SKLplanets@MUST), is looking for enthusiastic Master/ PhD students and postdoctoral researchers to work on areas of planetary remote sensing, geology, and geophysics.

**Master and PhD projects :** The PGG group plans to recruit 3–5 outstanding students interested in planetary remote sensing, geology and geophysics. A solid background in mathematics and physics, together with a good understanding of the fields of planetary and Earth sciences, geology, physics, applied mathematics, or computer science, is required. Applicants committed to scientific exploration through independent and original thinking are preferred. Proposed research directions should include, but are not limited to:

- **For Master and Doctoral Programs in Earth and Planetary Sciences:** Impact processes in the Solar System (lab or numerical experiments); analysis and interpretation of remote sensing data; lithospheric structure and dynamics of terrestrial planets; thermodynamics of the cryosphere; planetary thermal evolution, etc.
- **For Master Program in Space Big Data Analysis:** Automated detection of geologic features (using CNN); Bayesian inference; model–data fusion; applications of AI techniques in planetary science, etc.

Outstanding students will have the opportunity to receive a full scholarship and research stipends. After a first–round screening, the interview will be held from



March to April 2022. Online application: [www.must.edu.mo/sgs/admission](http://www.must.edu.mo/sgs/admission); and the application deadline is March 7, 2022.

**Postdoctoral projects:** The group plans to recruit 3–4 enthusiastic and independent postdoc researchers to work on areas related to impact processes, planetary geology, and geophysics. A solid mathematical and physics background, professional English writing and communication skills, and PhD–level understanding of planetary geology, geophysics, remote sensing data, and/or impact processes are required. Applicants should have a proactive scientific attitude and a good scientific record.

A cover letter, resume, research proposal, and two letters of recommendation are required in the application. Proposed research projects include but are not limited to:

- **Interpretation of Planetary Remote Sensing Observations:** Analysis and processing of lunar and planetary remote sensing data. Experience in visible/near–infrared spectral analysis of Mars remote sensing observations will be preferred.
- **Impact Dynamics and Geodynamics Simulations:** Numerical simulations of impact, post–impact or other geologic processes. A PhD–level understanding of FD, FEM or other numerical simulation method is required. Experience in impact dynamics or lithospheric thermo(–chemo)–mechanics is preferred.

Outstanding postdoctoral applicants will be expected to receive funding from the Macau Young Scholars Program (~ 450,000 MOP per year).

- For more information, please directly contact group PIs: Prof. Meng–Hua Zhu ([mhzhu@must.edu.mo](mailto:mhzhu@must.edu.mo)), Min Ding ([miding@must.edu.mo](mailto:miding@must.edu.mo)), Roberto Bugiolacchi ([rbugiolacchi@must.edu.mo](mailto:rbugiolacchi@must.edu.mo)), or Yangyu Lu ([yangyulu@must.edu.mo](mailto:yangyulu@must.edu.mo)).
- PGG Group Website: <https://www.must.edu.mo/en/ssi/planetary-geology>
- SKLplanets Website: <https://www.must.edu.mo/en/ssi>