

# PhD Opportunities in Planetary Science at Curtin University

Planetary science involves the study of solar system formation and evolution, the geology of planets and their atmospheres, asteroid impacts and dynamics.

Fundamentally, it is the study of how a nebula of dust and gas can evolve to a planetary system, and generate planets capable of supporting life. It pulls together multiple fields, pure and applied, including engineering.

Curtin University has the largest planetary science research program in Australia, inclusive of the Desert Fireball Network, and is looking to extend this vibrant and diverse team of over 20 staff, postdocs and students with new PhD opportunities.

**Scholarship**  
**\$27,082 tax free**  
**plus top up travel**  
**allowance \$10 000**

2018 Australian Government Research Training Program (RTP) Stipend Scholarships are now available for domestic and international student graduates.

We have multiple projects in the field of planetary science, for undergraduates with backgrounds in geology, astronomy, engineering, computer science, maths, physics.

**Application deadline**  
**September 21st**  
**11:59pm AWST**

Further information and to apply visit  
[scholarships.curtin.edu.au/scholarships](https://scholarships.curtin.edu.au/scholarships)

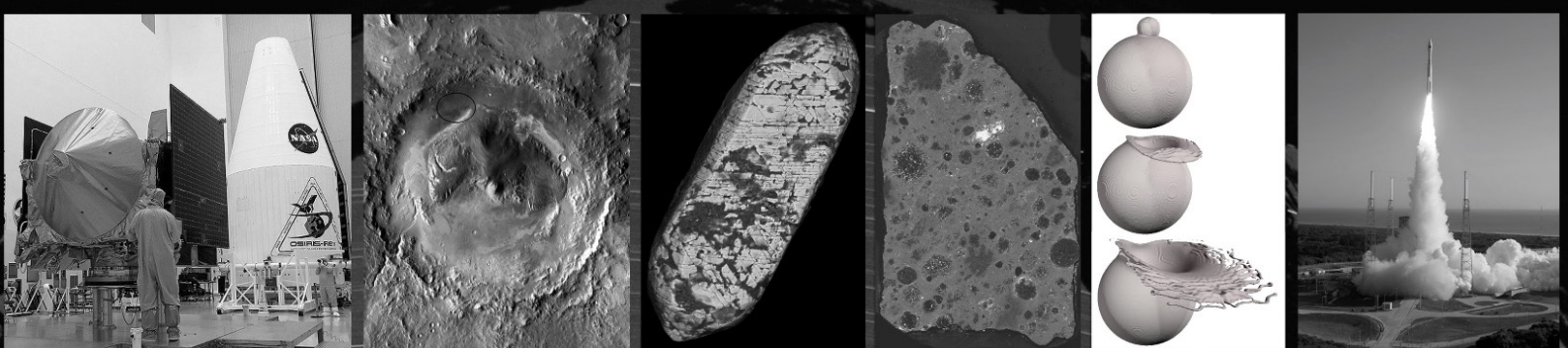


**Curtin University**



**DESERT**  
FIREBALL NETWORK





## RESEARCH THEMES

**Curtin Planetary has world class strengths in a number of areas: the impact history of the solar system, impact modelling, and impact geology; analysis of meteorites to constrain solar system origins; the geological history of Mars and the Moon; and the Desert Fireball Network, which is the worlds largest planetary observational facility. Our engineers find applied solutions in support of pure research across all of these areas.**

**Desert Fireball Network:** A network of cameras across Australia built to track meteorites coming through the atmosphere and determine their place of origin in the solar system.

*Projects for students with backgrounds in physics, astronomy, geophysics, geology, and engineering.*

**Impact modelling:** Studying the physics of the impact process, and impacts as a tool to probe solar system history, using advanced computer modelling.

*Projects for students with background in computer science, physics, and geophysics.*

**Geology of the Moon:** Formation and evolution of the Moon via analysis of Apollo samples and lunar meteorites; the geological and impact history of the Moon, using advanced analytical techniques.

*Projects for students with background in geology.*

**Applied planetary research and innovation:**

Engineering and machine learning solutions to pure research problems in planetary science.

*Projects across all research areas for students with backgrounds in engineering, mathematics, and computer science.*

**Geology of Mars:** The exploration of Mars is the worlds biggest single research project, with >\$20 billion worth of missions either currently at the planet or scheduled to fly in the near future. Curtin planetary scientists are working to understand the geology of Mars through its impact history, analysis of orbiter data, and Martian meteorites.

*Projects for students with background in geology, geophysics, computer science.*

**Impact geology:** The geological record of impacts on the early Earth, the Moon, Mars, and asteroids.

*Projects for students with background in geology.*

**Mission science:** Curtin scientists are formally represented on science teams for four planetary missions, and associated with several others, across NASA, ESA, and JAXA missions.

*Multiple projects in this area for students across a range of backgrounds.*

**Solar system formation and evolution:** Analysis of rare meteorites to probe the first few million years of solar system history.

*Projects for students with backgrounds in geology.*

**For more information visit [fireballsinthesky.com.au/phd-projects](http://fireballsinthesky.com.au/phd-projects)**

**Any questions, get in touch [planetary@curtin.edu.au](mailto:planetary@curtin.edu.au)**



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