

Press release

For immediate release

HKU Earth Science scholar Dr Joseph Michalski Becomes the first non-Chinese recipient of Xplorer Prize



Dr Joseph Michalski, Associate Professor in the Department of Earth Sciences at the Faculty of Science of the University of Hong Kong (HKU) has been awarded the prestigious Xplorer Prize 2023. Dr Michalski is the first non-Chinese recipient of this esteemed accolade, acknowledging his significant contributions to the field of planetary science and the study of Mars.

Dr Michalski's research centers on Mars' ancient crust, which he believes contains vital information about the origins of life on Earth and pre-plate tectonic processes.

“Mars and Earth had similar geological environments, so life could have formed there just the same as it formed here on Earth. Because Earth has plate tectonics and Mars does not, the crust of this planet has been almost completely recycled, but it is preserved on Mars. That means that our only hope to discover the steps that led to origins of life might only be found on Mars, not on Earth. This is why it is so important to study the ancient crust of Mars,” explained Dr Michalski, adding that Mars and Earth shared remarkably similar geological environments approximately 3.8 to 4 billion years ago, suggesting that life could have formed on the Red Planet as it did on Earth.

Utilising a range of remote sensing data, including infrared, visible, magnetic, gravity, and laser data from satellites orbiting Mars and rovers on its surface, Dr Michalski and his team at HKU focus on uncovering new discoveries about the volcanology, geochemistry, tectonics, and mineralogy of Mars. He has established the Planetary Spectroscopy and Mineralogy Laboratory (www.clays.space/lab) at HKU. This cutting-edge facility offers laboratory support for past, current, and future missions to Mars, the Moon, and asteroids in China and beyond. Dr Michalski also serves as Deputy Director of HKU's Laboratory for Space Research (<https://www.lsr.hku.hk>).

HKU congratulates Dr Michalski on this remarkable achievement and looks forward to his continued success in advancing our understanding of the universe.

The Xplorer Prize is a non-governmental merit-based award and one of the most generous talent funding programmes for young scientists in China. The Prize recognises no more than 50 outstanding scientists annually. Each winner receives a total of RMB 3 million over the next five years.

Please [click here](#) to visit the Xplorer Prize website for more information about the 2023 awardees.

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