IIT-Bombay student team sets foot on 'Mars' in expedition Down Under

Srinivas Laxman | TNN

Mumbai: Even as the momentum steadily builds on India's much-awaited rendevous with the Red Planet on September 24, seven students of IIT-Bombay, of different academic disciplines, have turned into astronauts temporarily, donning space suits and living and working in a simulated Martian environment in a remote desert in Australia.

The students belong to the Mars Society of India, which was launched at the Nehru Centre in 2012. The society is an initiative by IIT-Bombay and the official Indian chapter of the US-based Mars Society.

The Martian experience, which kicked off on July 7, will conclude on July 20. It is a collaborative exercise by IIT-Bombay, Saber Astronautics, an Australian organization dealing in space technology, and Mars Society of Australia. Saber Astronautics is funded by the Australian government to operate a joint Australia-India space exploration programme.

The students in a simulated 'Red Planet' environment at Arkaroola in Australia

The team is at a remote location, Arkaroola, in Australia's northern Flinders region. Arkaroola was chosen because it effectively simulates a Martian environment. The study includes geology and astrobiology in a Martian analogue environment.

TOI on Friday spoke to Dhruv Joshi, a former IIT-Bombay student and the Society's main founder. He was also the prime mover behind the current Mars project in Australia with regard to the IIT students.

Joshi explained that the purpose of the simulation is to validate the performance of the rover made by the students. "Our team is constantly interacting with scientists and evaluating the Martian rover designed and made at IIT-Bombay," he said.

He added that the team is staying on-site; and since the location is practically a desert, it gives a true feel of Mars. "They are sending in daily reports ... everything seems to be going smoothly," he said. Commenting on the team's compatibility to ensure success of the project, he said seven of them have worked together in the past and got on well. The Indian chapter of the Society's Facebook page says that as part of the exercise, the students had gone on a geology trip through the Mars Anologous region. The exercise involved monitoring of an astronaut's heartbeat, position logging using GPS and communication coordination with other astronauts.

TOI has accessed the team's Day One diary, which speaks of "remarkable geological areas in Australia spanning almost 1.8 billion years of history".

Another entry says that one of the places reminded them of the landing site of Nasa's Curiosity rover at Gale Crater on Mars.