'We experienced true spirit of science for humanity'

Article published in: The Times of India, Page No. 2, 01.09.2023



THE TIMES OF INDIA

jam, a faculty member of Earth and Planetary Sciences School, NISER Bhubaneswar, shared his experience of associating with Isro for the Chandrayaan-3 mission. He spoke to Hemanta Pradhan on the mission and future projects

n What is your reaction after the Chandrayaan-3 lander made soft-landing on the lunar surface?

We celebrated the historic moment. The livestream session at NISER's big lecture hall, heavily packed with our students and many faculties was full of energy. Everyone was cheering everyone.

ry moment. We experienced the true spirit of science and the holistic meaning of science for humanity.

How did you contribute to the Chandrayaan mission?

I am involved as a science team member of one of the onboard instruments Chandrayaan-3 lander called ChaSTE (Chandra's Surface Thermophysical Experiment). It measures the temperature profile of the lunar topsoil around the pole. We (with two of our students) also attended one of the Isro's Chandrayaan-3 science team meetings discussing the science ideas and exploration. We are looking forward to the science data and analysis to under-



stand the lunar near-polar surface's thermal and physical properties.

What was your experience in the Chandrayaan-2 mission that couldn't soft-land on the moon?

I am also one of the science team members in Chandrayaan-2 IIRS spectrometer onboard Chandrayaan-2 orbiter. By that time of landing, we also had the livest-ream session at NISER. Well, it was a crash landing, but I think the technical experi-

ence in terms of the last moments of descent paved the successful soft-landing of the Chandrayaan-3 lander.

How will the Aditya L-1 mission help India and the world understand the Sun?

Aditya L-1 mission is India's first space-based mission to study the photosphere, chromosphere and the outermost layers of the Sun. The mission concept and the scientific objectives are unique in many respects with active participation from various Indian research and academic institutions. This mission is going to definitely help the solar physics community from India and the world. My expertise is diffe-

rent from these kinds of studies, but the solar physics community in India is very well recognised across the globe and this mission is expected to bring even more important science returns and achievements.

Do you think this Chandrayaan-3 mission will inspire students to know many things about space, planets and Earth?

Yes, definitely. It will remain an inspiration and a stepping stone for not only the Indian community but also for entire humanity. It is worth mentioning that ambitious lunar and planetary exploration programmes, including setting up of human bases are underway from various space agencies (especially from USA and China). In this regard, India's pace in planetary exploration is very promising. We can see that Chandrayaan-3 is unique in many ways in terms of its technology from the launching to the landing and roving, cost effectiveness, promising science payloads and objectives, etc. I am very hopeful about high quality peer-reviewed publications in renown international journals like Nature and Science. Therefore, such scientific works can bring a change and inspiration to the young and future generation toward a more dedicated, hard-working and productive science and exploration.

