GOVERNMENT OF INDIA DEPARTMENT OF SPACE

RAJYA SABHA

UNSTARRED QUESTION NO. 1734

TO BE ANSWERED ON THURSDAY, MARCH 13, 2025

ISRO MISSIONS

1734. SMT. REKHA SHARMA:

Will the PRIME MINISTER be pleased to state:

- (a) whether ISRO is working on other science missions after Aditya L1 mission;
- (b) if so, the details of the science exploratory missions; and
- (c) whether ISRO involves academia and other Labs in these missions, if so, the level of the involvement??

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

- (a) Yes, Sir.
- (b) Subsequent to Aditya-L1 mission, ISRO launched X-ray Polarimeter Satellite (XPoSat), the second in the world X-ray Polarimetry observatory aimed at providing new insights in the behaviour and understanding of bright astronomical sources. Space science and exploration missions which are currently under development are as follows:
 - A mission to Venus for which science payloads are being identified to study the physics of Venus as well as the Sun-Venus interaction.
 - Chandrayaan-4 mission is planned as a lunar sample return mission. The prime objective of the mission is to bring the lunar samples back to Earth in pristine conditions for conducting transformative scientific analysis.
 - Chandrayaan-5/ LuPEX mission, a joint ISRO JAXA venture to study the lunar South pole and a landing mission to the planet Mars.

(c) ISRO involves a wider set of science community from the academia, research institutions, universities and colleges in the Space science programme.

The faculty, scientists and researchers contribute immensely, right from the conceptualisation of the mission i.e., identifying the gap areas in any space science field, deriving the open science questions keeping in view the global trends, studying suitable payloads for achieving the science goals, payload development with the support of ISRO, preparation of white papers, involvement in calibration and modelling, landing site characterisation etc. In addition, science support cells have been established between ISRO and academia to interface with the community.

ISRO conducts mission-specific training programmes, workshops and hands-on sessions throughout the country to train the interested users for doing space research. The science data from all the space science missions are released in public domain along with data user manuals for ease of research and to encourage student community in the country. ISRO also provides funding support to faculty and research students through data utilisation projects for maximising the user base and science returns from the mission.

In addition, ISRO conducts online introductory training for undergraduate and postgraduate science and technology students since 2023 to attract the youngsters to the fields of space science and technology.

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