

ISRO releases the special issue on 'Reusable Launch Vehicle-Technology Demonstrator'

The Indian Space Research Organisation (ISRO) published the special section on Reusable Launch Vehicle-Technology

Demonstrator (RLV-TD) in the 10 January 2018 issue of *Current Science*. In a release event planned at the ISRO head-

quarters on 21 March 2018, the issue was released by the ISRO Chairman K. Sivan. S. Pandian (Director, ISRO Propulsion Complex), B. N. Suresh (Chancellor, Indian Institute of Space Science and Technology) and S. K. Satheesh (Chief Editor, *Current Science*) were also present during the release and addressed the gathering. ISRO successfully launched the RLV-TD on 23 May 2016 from Sriharikota. Drawing from the experiences of the development, ISRO came up with the special section of 12 technical papers that address the complexities of the cutting-edge technologies used in RLV-TD. The successful flight of RLV-TD will help ISRO pursue development efforts to master reusable technologies to reduce launch cost and achieve faster turnaround time.



MEETING REPORT

The role of technology in charting India's progress towards climate change goals*

Technology is considered as one of the three key pillars along with policy and finance in achieving a nation's climate goals, and thereby forms a critical element in international climate negotiations. Equally important for a developing country like India is garnering financial assistance for technology development or transfer from developed countries. Within this context, the key challenge that arises, is assessing the technological needs of the country for contributing to adaptation and mitigation goals. This assessment needs to be carried out under multiple lenses that address important issues such as the availability of technologies in the country; their scale and level of deployment; approximate finance required, and technical, financial

and policy barriers for technology acquisition and transfer. Hence, the overarching objectives that need to be achieved are to identify, evaluate and prioritize environment-friendly technologies that have proven capacity for solving country-specific problems and will ultimately lead to fulfilling national climate goals mainly set in the Nationally Determined Contributions (NDCs).

Comprehending these complex issues for an emerging economy like India is not straightforward, especially given the country's diverse physical and socio-economic attributes. Considering a 'one size fits all' approach while problem-solving complex climate-related issues technically will not be an option. Diverse technologies have to be identified that are affordable, accessible and reliable.

Any study directed towards a nation's technology requirement assessments has to be country-driven, inclusive of all regions and a participatory process. Such

top-to-bottom approach will involve discussion with multiple stakeholders at the national, regional and local level for capturing technological gaps and problems, thereby giving a dynamic perspective of technical gap analysis prevalent in the country.

In this backdrop, a herculean task is presently being undertaken by India to identify, evaluate and prioritize technologies required for the country. In view of this national initiative, a validation workshop was recently held to assess and validate the progress of work towards the same. It also served as a platform for experts to engage and build consensus on the domestic front for cutting-edge technologies that will assist India in achieving its climate goals.

The objective of the workshop was mainly to discuss the technologies identified so far amongst different groups of experts with a view to understanding the appropriateness of the technologies in the climate change context. To be more

*A report on 'National validation workshop on Technology Needs Assessment', jointly organized by MoEFCC and TIFAC at Indira Paryavaran Bhawan, New Delhi during 9 March 2018.