

How Science is helping our drive for self-sufficiency: DST Secretary

Secretary, Department of Science and Technology (DST), Government of India Prof. Ashutosh Sharma highlighted how science can help our drive for self-sufficiency at the National Webinar on 'I-STEM: A Gateway for R&D Community & GoI Initiatives towards Aatm Nirbhar Bharat.

“Atmanirbharta is not about producing every single molecule only in India, but it is about having the right kind of structures and processes to make sure that all the things that are of critical need are available on time and scale and this is one of the things that COVID 19 has taught us,” Prof. Ashutosh Sharma pointed out at the one day webinar. He added that it is about empowerment of the entire knowledge ecosystem starting from the creation of relevant knowledge with quality (invention) to its consumption to produce new socio-economic opportunities (innovation).

The webinar was organized virtually by Indian Science Technology and Engineering facilities Map (I-STEM) supported by the Office of The Principal Scientific Adviser, Government of India, in association with National Education Enrichment in Villages (NEEV) - a social educational initiative of IIT Alumni Association on 17th September 2020.

Prof. Ashutosh Sharma highlighted some of the initiatives of the Government of India in line with 'Atmanirbhar Bharat'. NIDHI scheme (National Initiative on Developing and Harnessing Innovations) has provided more support and outcomes from our startups in the last five years than in the previous fifty! A recent independent evaluation showed that DST incubated startups generated 65864 jobs and created around 27262 crore wealth. Further, a scheme called Scientific and Useful Profound Research Advancement (SUPRA) by Science and Engineering Research Board has been launched, which is designed for supporting high-quality high-risk proposals consisting of new hypothesis or challenge existing ones, and provide 'out-of-box' solutions.

He also spoke about schemes like Teachers Associateship For Research Excellence (TARE) to facilitate mobility of faculty members working in a regular capacity in State Universities / Colleges and in private Academic Institutions to carry out research work in an established public-funded institution such as IITs, IISc, IISERs, National Institutions. A National Post-doctoral fellowship scheme is operational to identify motivated young researchers and provide them support for doing research in frontier areas of science and engineering. VAJRA (Visiting Advanced Joint Research) Faculty Scheme is a dedicated program exclusively for overseas scientists and academicians with emphasis on Non-resident Indians (NRI) and Persons of Indian Origin (PIO) / Overseas Citizen of India (OCI) to work as visiting faculty and seed long term collaborations in Indian public funded academic and research institutions.

“Atmanirbharta is about meeting our demands which are substantial and scalable but also about doing it with quality which would be globally acceptable and with initiatives geared towards it, we should be able to achieve those standards,” he added. “There are also three important cultural enablers of an Atamnirbhar Bharat—Atam-Viswas (self-confidence), Atam-Samman (self-respect which allows respect also for others) and Atam-Chintan (honest and committed self-appraisal without negativity) which would allow profound and relevant S&T to flourish,” explained Prof. Sharma.

He also mentioned that the national portal I-STEM portal is helping the scientific community in many ways with its value addition features, of being a Repository of Equipment & Software with 20000 equipment, 450 institutions, 2000 custodians of the equipment, 1500 users, and 170 experts of S&T. The Govt. of India chose the concept of I-STEM as one of the transformative ideas as it will save a lot of capital R&D budget of the GoI. Sharing of resources and shoring up of our innovation ecosystem are also important themes in our policies that are being formulated—one on the Scientific Social Responsibility, another on Scientific Infrastructure, and an overarching Science, Technology, and Innovation Policy 2020.

