

DST's programmes provide support for women from all walks & stages of life to boost their career in STEM fields

A group of schools students from the North East of India were star-struck. They were visiting Indian Institute of Technology (IIT) Guwahati, where they were meeting scientists from NASA and interacting with them.

The students were introduced to various opportunities in science and technology and emerging technologies like 3D printing, flexible electronics, design, polymers, solar cells, and so on during a programme called Vigyan Jyoti.

This new programme started by the Department of Science & Technology (DST) encourages young girls to take an interest in science. It had been running successfully in 50 Jawahar Navodaya Vidyalayas (JNV) since December 2019 and has now been expanded to 50 more JNVs for the year 2021-22.

Vigyan Jyoti activities include student-parent counselling, visit to labs and knowledge centres, interactions with role models, science camps, academic support classes, resource material distribution, and tinkering activities. Online academic support to students includes streaming of video classes, study materials, daily practice problems, and doubt clearing sessions.

Participation of women in STEM in India is limited right from the entry-level to the highest stage because of several societal and mindset obstacles. They also face challenges in moving up the academic and administrative ladder due to systemic barriers and structural factors.

DST's commitment to increase participation of women in STEM starts by tapping the young and talented girls and triggering their interest in science through the Vigyan Jyoti programme and then extends to creating an environment for women to flourish despite their challenges.

The Gender Advancement for Transforming Institutions (GATI) is an attempt to bring about gender balance in the institutions, the Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE) targets to improve infrastructure in women-only universities and the Indo-U.S. Fellowship for Women in Science, Technology, Engineering, Mathematics and Medicine (WISTEMM) exposes women to some of the best international scientific institutions for boosting their capability and enthusiasm.

GATI was launched for mentoring of institutions for transforming them towards more inclusive and sensitive approach towards women and to promote gender equity in Science, Technology, Engineering, Mathematics, and Medicine (STEMM) domains.

Support from the CURIE programme resulted in a significant increase of student enrolment at undergraduate, postgraduate, and PhD levels in CURIE-supported universities. It has also enhanced the number of NET/GATE qualified students. Extramural funding has also been increased due to the presence of sophisticated labs, which resulted in publications in high impact factor journals. DST has also established an artificial intelligence lab in 6 CURIE beneficiary

universities to foster AI innovations and set up AI-friendly infrastructure to prepare skilled manpower for the future.

The WISTEMM program in association with Indo-U.S. Science & Technology Forum (IUSSTF) has provided international exposure to several women scientists. Around 40 women scientists have visited leading institutions across the United States of America in two batches for furthering their research work and training in the state-of-the-art technologies related to their research.

DST's various women-exclusive schemes, with the mandate to bring gender parity in science and technology through various mechanisms, brings about support for women from all walks and stages of life to build and guide their career in STEM fields.