

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION No. 448**  
ANSWERED ON 06/02/2025

**PARTICIPATION OF WOMEN IN STEM**

448. SHRI SATNAM SINGH SANDHU:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the details of steps being taken to encourage women's participation in STEM fields (Science, Technology, Engineering and Mathematics) through scholarships, mentorship programmes and research grants;
- (b) the details of steps being taken to support women-led innovations and startups in the technology sector, and the funding mechanisms available for them;
- (c) the details of initiatives introduced to increase the representation of women in research and development roles in Indian institutions; and
- (d) the impact of the Women Scientist Scheme (WOS) in creating opportunities for women in the field of Science and Technology?

**ANSWER**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE  
MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES  
(DR. JITENDRA SINGH)

(a) The Department of Science and Technology (DST) is implementing a holistic scheme 'Women in Science and Engineering-KIRAN (WISE-KIRAN)' to encourage women's participation in STEM (Science, Technology, Engineering and Mathematics) fields. Under this scheme, the WISE Fellowship for Ph.D. (WISE-PhD) programme supports women to pursue research in basic and applied sciences. Further, the WISE-Post Doctoral Fellowship (WISE-PDF) and WISE-Societal Challenges with Opportunities (WISE-SCOPE) programmes encourage women to pursue Post-Doctoral research in STEM fields. The DST is also implementing the 'WIDUSHI' programme, which enables senior women scientists under two categories viz. retired (Category-A) and not in regular employment (Category-B) to continue their scientific careers. Another programme 'WISE Internship in IPR (WISE-IPR)' provides one-year on-the-job training in the field of Intellectual Property Rights. Further, the Vigyan Jyoti programme encourages meritorious girls of Class IX-XII by mentoring them through various year-round activities to pursue higher education and careers in STEM, especially in the areas where the participation of women is low.

BioCARE Fellowship programme of Department of Biotechnology (DBT) aims to enhance participation of women scientists in India towards research in Biotechnology and allied area. This endeavor of DBT is giving a strong foothold to women scientists into the scientific profession, to help them re-enter into the mainstream and to provide a launch pad for further forays into the field of science and technology.

(b) To foster innovations among the Women led startups in the technology sector across the country, DST has been supporting various activities under National Initiative for Developing and Harnessing Innovations (NIDHI) by providing them entrepreneurial capacity building, access to incubation facilities, mentorship, and early stage funding support. These initiatives empower and encourage women to convert their innovative ideas into successful business ventures. Financial support is provided, in terms of early stage seed funding, through NIDHI-Seed Support Program (NIDHI-SSP) to incubated startups, including women led startups.

DST has supported setting up of Technology Business Incubators in women universities, *viz.* Indira Gandhi Delhi Technical University for Women (IGDTUW), Delhi and Sri Padmavati Mahila Visvavidyalayam (SPMVV), Tirupati for incubating startups, primarily women led startups. DST has also supported setting up of NIDHI-Inclusive Technology Business Incubators (iTBI) to strengthen entrepreneurial inclusiveness in terms of gender, caste and geographies. Under this, an iTBI has been setup in Delhi Technological University (DTU), Delhi to support startups, preferably women led startups.

(c) The ‘Gender Advancement for Transforming Institutions (GATI)’ programme under WISE-KIRAN aims to transform institutions for a more gender-sensitive approach and inclusiveness to increase the representation of women in research and development roles in Indian institutions with the ultimate goal of improving gender equality in STEMM (Science, Technology, Engineering, Mathematics, Medicine).

(d) The Women Scientist Scheme (WOS) provides different opportunities to women scientists who had break in career through its three components *viz.* WOS-A for research in basic and applied sciences, WOS-B for society-based research and WOS-C for training in Intellectual Property Rights. In the last 10 years, 2076 women scientists and technologists have been supported under WoS-A programme. Out of these supported women Scientists about 40% beneficiaries completed their PhD and around 5000 research papers were published by WOS-A beneficiaries. Women scientists especially from tier-2 and tier-3 cities provided various S&T solutions relevant to the society under the WOS-B programme. Also during the last 10 years under WOS-C programme 523 women scientists and technologists were supported and about 40% of these trained women are registered as Patent Agents with the Indian Patent Office.

\*\*\*\*\*