

Women in Science Research & Development - Current Status

As per 2018 report by United Nations Educational Scientific & Cultural Organization (UNESCO), 44% of bachelor students and 41% of doctoral students in India are female students. Yet women are underrepresented in the field of Science and Technology. As per data available in 2018, there are approximately 39,300 women scientists working in various research institutions across India. As per reports, the percentage of women contributing to science education at school level and percentage of women in Government laboratories has increased. However, the percentage of women in high profile institutions and at leadership levels in Science and Technology is still low.

Government Schemes - To Boost Participation of Women in Science & Technology

The Department of Science and Technology (DST) through various schemes is trying to boost the participation of women in Science and Technology at multiple levels. Some of the Government schemes are listed below.

1. Knowledge Involvement in Research Advancement through Nurturing (KIRAN) - This was launched with the mandate of bringing in gender parity. This program primarily deals with the issues relating to break in scientific career due to relocation, due to family responsibilities etc.
2. Women Scientist Scheme-A (WOS-A) - The objective is to help women pursue research in basic or applied sciences in the areas of science and engineering.
3. Women Scientists Scheme-B (WOS-B) - This scheme focuses on boosting participation of women in science and technology with the objective of providing solutions at grassroots level for social benefit.
4. Women Scientists Scheme - C (WOS-C) - This scheme aims to promote self employment and sustainable careers for women in science and technology. One year internship will be provided in the domain of intellectual property rights (IPR).
5. Women Entrepreneur Quest (WEQ) - This is to promote women entrepreneurs in the domain of technology start-ups. The winners of WEQ competition will be sent to Silicon Valley to help them learn all about the startup ecosystem in the silicon valley and meet all the stakeholders.
6. Science & Technology for Women (S&T for women) - This program comes under the KIRAN scheme. Focus was to improve gender equality and empower women in science. After its launch more than 500 technologies have been developed.
7. Consolidation of University Research For Innovation and Excellence in Women (CURIE) - This program was launched in 2009. The objective of this mission was to strengthen

the Research and Development (R&D) infrastructure of women only universities. This has led to an increase in the number of quality research papers in the reputed journals.

8. Vigyan Jyothi - The aim was to increase the interaction of girl students with the women scientists working in premier institutes like IIT and other institutes of repute. This was done to encourage and promote science to girl students with the hope that they would build a career in science and technology inspired by the women scientists.
9. Indo-US Fellowship for Women in STEMM - This program gives opportunities for women to carry out collaborative research in premier US research institutes. The Government would take care of all the needs of the women scientists and they just have to focus on progressing in the field of science and technology. The program is available for women in a wide range of age groups, so that even women who have taken a career break are encouraged to return back to the research field.

SERB Award - Award for Women Excelling in Science and Technology

This award is given to recognize and reward outstanding achievements of young women scientists in the domains of science and engineering. The awardees are supported with a research grant of Rs 5 lakh per annum for a period of 3 years. The 3 winners of SERB Award for the year 2020 are listed below.

1. Dr K Geetharani - She is an inorganic chemist working at Indian Institute of Science (IISc, Bangalore). Her area of research has applications in the field of agrochemicals, liquid crystals, organic light emitting diodes and pharmaceuticals.
2. Dr Deepa Agashe - She is a biologist working in the field of evolution. She is working at National Centre for Biological Sciences - Tata Institute of Fundamental Research (NCBS - TIFR).
3. Dr Niti Kumar - She is a Biologist who has won many many accolades for her scientific research. She is from CSIR - Central Drug Research Institute (CDRI), Lucknow.

The Awards are given by the President of India on National Science Day (NSD). NSD is celebrated on 28th February, the day when India's most famous scientist C V Raman discovered the Raman Effect.