



## Women in STEM

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# International Day for Women and Girls in Science



## ABOUT

- Celebrated **every year on February 11** since 2015
- Observed by the United Nation to **promote the full and equal access and participation of women in Science, Technology, Engineering and Mathematics (STEM)** fields.

## THEME 2023

- Innovate. Demonstrate. Elevate. Advance. Sustain (I.D.E.A.S.)

## STATUS OF WOMEN PARTICIPATION IN THE SCIENCE SECTOR

- According to the **All India Survey on Higher Education 2020-2021**, number of science researchers in India has **doubled from 30,000 in 2014 to over 60,000 in 2022**.
- Women's participation is the **highest in biotechnology at 40% and medicine at 35%**.

## INITIATIVES TAKEN FOR WOMEN IN SCIENCE

- **Gender Advancement for Transforming Institutions (GATI):**
  - To develop a comprehensive Charter and a framework for assessing Gender Equality in STEM.
- **Vigyan Jyoti Scheme:**
  - To create a level-playing field for the meritorious girls in high school to pursue STEM in their higher education.
- **Indo-US Fellowship for Women in STEMM (WISTEMM) program:**
  - Women scientists can work in research labs in the US.
- **Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE) Programme:**
  - Improving R&D infrastructure and establishing state-of-the-art research facilities in order to create excellence in S&T in women universities.

## Women who Shaped India's Scientific History



**Anandibai Gopalrao Joshi (1865-1887)**

- First Indian female to **study and graduate with a degree in western medicines** from the United States.
- Believed to be the **first women to set foot on American soil from India**.



**Kamala Sohonie (1911-1998)**

- **First Indian woman to receive a PhD** in a scientific discipline.
- Discovered the enzyme '**Cytochrome C**' (helps in energy synthesis).



**Kadambini Ganguly (1861-1923)**

- Becomes **India's first female doctor & practitioner** of western medicine in the whole South Asia.



**Anna Mani (1918-2001)**

- First woman to join the **Meteorological department**.



**Bibha Chowdhary (1913-1991)**

- First woman **high energy physicist of India and the first woman scientist at the TFIR**.
- IAU honoured her by naming a white yellow dwarf star after her name.



**Kamal Ranadive (1917-2001)**

- **Established India's first tissue culture research laboratory** at the Indian Research Centre in Mumbai.



**Edavaleth Kakkat Janaki Ammal (1897-1984)**

- Made significant contributions to genetics, evolution, phytogeography and ethnobotany.
- **First director of the Central Botanical laboratory at Allahabad**.



**Sanghamitra Bandyopadhyay**

- She **has been conferred the Padma Shri in 2022**.
- She is the first woman director of the Indian Statistical Institute.



**Debala Mitra (1925-2003)**

- **First Indian archaeologist** served as Director General of the Archaeological Survey of India.
- Explored and excavated several Buddhist sites.



**Ms. Sujatha Ramdorai**

- She was **awarded the Padma shri award in 2023**.
- She became the **first Indian to win the prestigious ICTP Ramanujan Prize in 2006**.
- She was also **awarded the Shanti Swarup Bhatnagar Award**, the highest honour in scientific fields by the Indian Government in 2004.
- She is also the **recipient of the 2020 Krieger-Nelson Prize** for her exceptional contributions to mathematics research



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