



National Science Day 2020

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Why in News

National Science Day (NSD) is celebrated every year on 28th February to commemorate the discovery of the '**Raman Effect**'. The first NSD was celebrated on 28th February, 1987.

Key Points

- **Basic Objective:** To propagate the message of the **importance of science and its application among the people.**
- **Theme:** On this occasion, theme-based science communication activities are carried out all over the country. The theme of NSD 2020: '**Women In Science**'
- **Nodal Agency to Support Celebration: National Council for Science & Technology Communication (NCSTC)** of Ministry of Science and Technology.
- **Awards:** On the occasion of the NSD-2020, 5 women scientists received awards under two categories – **SERB Women excellence awards** and National Award for Young Woman Showing Excellence through Application of Technology for Societal Benefits.

Women in Science

- Women represent only about **a fifth of senior authors in all published research.**
- A study, published in the journal PLOS One in 2018, assessed 293,557 research articles from 54 journals and found that only 29.8% of all research authors were women.
- Another study by the UK's Intellectual Property Office (IPO) noted that women inventors account for just under **13% of patent applications globally.**
- In India, out of the 560 awardees of **Shanti Swarup Bhatnagar Prize** for Science and Technology, **only 18 recipients have been women.** The prize is one of the highest multidisciplinary science awards in India.

Raman Effect

- The Raman Effect is a phenomenon in spectroscopy **discovered by the eminent physicist Sir Chandrasekhara Venkata Raman** in 1928.

- In 1930, he got a Nobel **Prize** for this remarkable discovery and this was the **first Nobel Prize for India in the field of Science**.
- The Raman Effect is a **change in the wavelength of light that occurs when a light beam is deflected by molecules**. When a beam of light traverses a dust-free, transparent sample of a chemical compound, a small fraction of the light emerges in directions other than that of the incident (incoming) beam. Most of this scattered light is of unchanged wavelength. A small part, however, has wavelengths different from that of the incident light; its presence is a result of the Raman Effect.

Source: PIB