

**GOVERNMENT OF INDIA**  
**MINISTRY OF SCIENCE AND TECHNOLOGY**  
**DEPARTMENT OF SCIENCE AND TECHNOLOGY**  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 1602**  
**ANSWERED ON 04/12/2024**

**PROMOTION OF RESEARCH IN SCIENCE AND TECHNOLOGY AT WORLD LEVEL**

**1602. SHRI YADUVEER WADIYAR:**

Will the Minister of **SCIENCE AND TECHNOLOGY** विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

- (a) the amount spent by the Government on Science and Technology related research during the last decade along with its rank in the world level;
- (b) the measures the Government has implemented to support researchers by creating international opportunities and also ensuring job security within the country, with a view to preventing brain drain;
- (c) if so, the details thereof;
- (d) the steps taken by the Government in Science and Technology to promote career opportunities for women scientists and to encourage young students especially girls to pursue science stream; and
- (e) the total amount of funds disbursed as scholarships by the Government to the women students and scholars during the last decade, year-wise?

**ANSWER**

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

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)  
(डॉ. जितेंद्र सिंह)

(a) As per latest R&D Statistics, 2022-23 brought out by the Department of Science and Technology (DST), India is placed at 7<sup>th</sup> position in terms R&D Expenditure (billion Current PPP\$) in the world. The amount spent by the Government on Science and Technology related research during the last decade is as under:

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Investment in R&D by Government (Rs. Crore)	38903.05	40568.09	44419.34	50285.41	54976.45	59268.33	66715.95	76656.42	82623.32	75397.28

**Source: Data collected and compiled by NSTMIS, DST, GoI.**

**Note: Government Investment in R&D = Central Government Ministries/Department+ State Government + Higher Education**

(b) to (c): Several measures have been taken up to support researchers by creating International opportunities such as for exchange of information, generation of new knowledge, sharing of expertise, cost and optimal utilization of resources, and for providing access to advanced facilities and sophisticated instruments which are

not available in the country. This in turn enhance the quality and output of scientific research and also enhance skills for potential job opportunities. Ministry of Science and Technology is actively cooperating with more than 40 countries across the globe along with regional and multilateral entities, UN and other International S&T Organizations. The main aim of these collaborations is to connect Indian research with global efforts particularly in the frontier areas of S&T and in areas addressing global challenges. These programmes include joint R&D projects, seminars, fellowships, training programmes, advanced schools, exchange and exposure visits, access to advanced facilities etc. All these programmes have been designed to encourage scientists to do quality research in the country and thereby preventing brain drain.

In addition, INSPIRE Faculty Fellowship, J. C. Bose Fellowship, Swarnajayanti Fellowship, SERB-Ramanujan Fellowship, SERB-Visiting Advanced Joint Research Faculty (VAJRA) scheme, VAIBHAV fellowship, CSIR-Senior Research Associateship, DBT-Ramalingaswami re-entry Fellowship etc. are some of the programmes which provide temporary placement to highly qualified scientists to retain them in the country and also attract Indian scientists from abroad as well.

(d) The Ministry of Science and Technology is promoting career opportunities for women scientists including young students through various programmes such as: WISE Fellowship for Ph.D. (WISE-PhD) to pursue doctoral research in basic and applied sciences; WISE-Post Doctoral Fellowship (WISE-PDF) for post-doctoral research in basic and applied sciences; WISE-SCOPE to address societal challenges through S&T interventions and WISE Internship in IPR (WISE-IPR) to provide training in the field of Intellectual Property Rights; ‘Vigyan Jyoti’ programme to encourage meritorious girls to pursue careers in STEM (Science, Technology, Engineering, Mathematics); Women International Grant Support (WINGS) programme to provide opportunities to Indian Women scientists to undertake research in the International research labs and academic institutions; etc. The Anusandhan National Research Foundation (ANRF), a statutory body under DST has also been implementing some women specific programme viz. “SERB-POWER (Promoting Opportunities for Women in Exploratory Research)” to mitigate the gender disparity in science and engineering research funding in various S&T programs in Indian academic institutions and research and development (R&D) laboratories; “SERB-POWER Mobility Grant” for capacity building, knowledge, and skill enhancement of women scientists and technologists; "SERB Women Excellence Research Grant", Biotechnology Career Advancement and Re-orientation (BioCARE) Programme etc. to promote career opportunities for women scientists.

(e) The total amount of funds disbursed as scholarship by the ministry to women students and scholars during last decade, year-wise is as under:

Financial Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Amount (Rs. in lakh)	16621.49	14613.00	15964.90	23966.50	19155.10	27147.30	27388.30	30976.12	35782.05	31867.38

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