GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY

RAJYA SABHA

UNSTARRED QUESTION No. 3323

ANSWERED ON 21/08/2025

IMMIGRATION OF INDIAN RESEARCHERS

3323 SMT. RAJANI ASHOKRAO PATIL:

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

- (a) the estimated number of Indian researchers or STEM graduates who have migrated abroad for research or employment in the last five years;
- (b) whether any exit surveys or studies have been conducted to assess reasons behind brain drain;
- (c) the number of scientists returned under programs like VAJRA or Ramanujan Fellowships and their current institutional status;
- (d) whether the Ministry is planning new incentives for young researchers to pursue careers within India; and
- (e) the status of institutional support for postdoctoral researchers in central universities and IITs?

ANSWER

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

(a) to (b): The Government has been making sincere efforts to create adequate opportunities for research and development in the country, aiming not only to retain the country's highly skilled talent pool but also to encourage the return of world-class scientists from overseas.

The migration of STEM researchers and graduates is a common practice globally, often pursued to acquire specialized skills. However, no significant brain drain has been observed that could adversely impact the development of Science and Technology (S&T) in the country.

(c) To encourage return of the best-in-class scientists to India, the Government has been implementing several initiatives such as the Anusandhan National Research Foundation - Ramanujan Fellowship, DBT-Ramalingaswami Re-entry Fellowship, DST-INSPIRE Faculty Fellowship with the aim to encourage return of the best-in-class scientists, from abroad, to India. Over the past five years, approximately 550 researchers have returned under the Ramanujan Fellowship, while nearly 627 candidates have availed the DBT–Ramalingaswami Re-entry Fellowship since its inception in 2007.

The Visiting Advanced Joint Research (VAJRA) Faculty Program is not designed to encourage or facilitate the permanent return of Non-Resident Indian (NRI) or Persons of Indian Origin (PIO) researchers to India. Instead, its primary objective is to harness global expertise engaging both individuals of Indian origin and foreign nationals by providing structured opportunities for them to contribute to research, teaching, and academic collaboration within Indian institutions.

(d) The Ministry of Science and Technology has taken multifaceted approaches to encourage young researchers to pursue career within the country. Some of the key initiatives include the diverse extramural funding schemes of Department of Science and Technology (DST) and Department of Biotechnology (DBT); several high stake technology missions; and fellowship schemes of DST, DBT and Council of Scientific and Industrial Research (CSIR); strengthening the research infrastructure in the institutions across the country through programs like Fund for Improvement of S&T Infrastructures in universities and higher educational institutions (FIST), etc. The Government has also launched a fellowship programme 'Vaishvik Bhartiya Vaigyanik (VAIBHAV)' to connect the Indian STEMM diaspora with Indian academic and R&D institutions for collaborative research work leading to sharing of knowledge, wisdom, and best practices in the frontier areas of science & technology. Further, the Flexible Complementing Scheme / Merit based promotion scheme positioned in scientific departments and introduction of Performance Related Incentive Scheme (PRIS) in strategic Departments have also been instrumental in recruiting and retaining the scientists. All these measures taken by the Government are aimed at retaining our scientific workforce in the country.

Further, the Anusandhan National Research Foundation (ANRF) through the ANRF Act 2023 has recently been established towards strengthening our technological leadership, marking a paradigm shift in our R&D ecosystem. The ANRF aims to provide high level strategic direction for research, innovation and entrepreneurship in different fields of science & technology and has already initiated its effort towards seeding, growing and facilitating research at academic and research institutions across the country.

(e) There are several fellowship opportunities for postdoctoral researchers which can be availed while working in the central universities and IITs. These include, ANRF-National Postdoctoral Fellowship (NPDF), CSIR-Postdoctoral Fellowships, Biotechnology Post-Doctoral Fellowship (BPDF), M K Bhan-Young Researcher Fellowship Programme (MKB-YRF), and the DBT-Research Associateship (RA) programme, etc. In addition to the monthly remuneration, these fellowships also offer research grant or annual contingency funds to pursue research in all kinds of scientific institutions, including Central Universities and IITs.
