

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

STARRED QUESTION NO:51

ANSWERED ON:26.11.2014

BRAIN DRAIN OF SCIENTISTS

Kateel Shri Nalin Kumar;Sawaikar Shri Advocate Narendra Keshav

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

- (a) whether attrition of scientists from research institutions and laboratories is being witnessed and if so, the details in this regard;
- (b) whether any system of holding exit interviews of scientists who indicate their willingness to quit research institutions/labs exists and if so, the details thereof and if not, the reasons therefor;
- (c) whether the Government has taken any steps to encourage reverse brain drain of scientists from abroad and if so, the extent to which such measures have been successful and the details of the number of scientists who have been repatriated; and
- (d) the details of the steps taken/proposed to be taken to assist the scientific community and motivate them to continue their research in the country?

**Answer**

MINISTER FOR SCIENCE AND TECHNOLOGY AND MINISTER FOR EARTH SCIENCES (DR. HARSH VARDHAN)

(a) to (d): A statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PARTS (a) to (d) OF LOK SABHA STARRED QUESTION NO. 51 FOR 26.11.2014 REGARDING "BRAIN DRAIN OF SCIENTISTS"

(a) No, Madam.

(b) Though there is no institutionalized mechanisms to hold exit interviews of scientists who indicate their willingness to quit research institutions/labs, the agencies like CSIR holds consultations with the scientists.

(c) Government has taken several steps to encourage reverse brain drain of scientists from abroad. Ramanujan Fellowship of the Department of Science and Technology (DST) and Ramalinga- swami re-entry Fellowship of Department of Bio- technology (DBT) are targeted schemes aimed to attract highly skilled researchers (Indian nationals) working overseas by providing them attractive avenue to pursue their R&D interests in Indian institutions. Under the Innovation in Science Pursuit for Inspired Research (INSPIRE) Faculty Scheme of DST, young Indian citizens and people of Indian origin including NR/PIO status with PhD (in science, mathematics, engineering, pharmacy, medicine, and agriculture related subjects) from any recognized university in the world are offered contractual research positions in Indian Institutions / Universities to carry out independent research and emerge as a leader in future science & technology. Around 620 scientists of Indian origin working abroad including Non-Resident Indians (NRIs) have been offered to join Indian Scientific Institutions under Ramanujan, Ramalingaswami and INSPIRE Faculty schemes for undertaking quality research in the country. Council of Scientific and Industrial Research (CSIR) has a scheme to attract Scientists/ Technologists of Indian Origin (STIO) under which they are appointed at an identified CSIR laboratory so as to nurture a research field in their area of expertise.

(d) Government has several programmes to encourage scientific community and motivate them to continue their research in the country. The JC Bose Fellowship, Swarnajayanti Fellowship, Young Scientist Project Award, Women Scientist Scheme, National Women Bio-scientists Awards etc. have been designed to encourage individual scientists to do quality research. CSIR provides performance linked incentives to the awardees of Shanti Swarup Bhatnagar Prize. Some other incentive systems are: Sharing of proceeds with scientists from contractual R&D; and consultancy and premia & royalty received from the transfer of technology. Recently, the fellowships of Junior / Senior Research Fellows (JRF/SRF) and Research Associates (RA) have been enhanced substantially to the tune of 55 – 67% to attract more students to enroll themselves into research career.