

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO – 644
ANSWERED ON 05/02/2026

CONTRIBUTION OF RRC SCHEME

644. SHRI MAYANKKUMAR NAYAK
SMT. DARSHANA SINGH

Will the PRIME MINISTER be pleased to state:-

- (a) the number of Raja Ramanna Chair (RRC) positions sanctioned, active and completed along the distribution across host institutions and broad subject areas;
- (b) the major research outcomes, innovations, patents, policy-related contributions and mentoring-related achievements attained so far under the scheme;
- (c) whether any evaluation or review has been carried out to assess the effectiveness and value addition of the scheme; and
- (d) if so, the major findings thereof?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS
AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

- (a) The number of positions of Raja Ramanna Chair (RRC) sanctioned, the number of positions that are active and the number of positions that have been completed are 50, 25 and 9 respectively.

The number of RRCs whose terms have been completed are 4 from Bhabha Atomic Research Centre (BARC), 2 from Indian Institute of Science Education and Research (IISER), Pune, 01 from University of Mumbai, 01 from Council of Scientific and Industrial Research (CSIR), Hyderabad and 01 from University of Hyderabad.

Broad subject areas of those whose terms have completed are Hydrogen energy mission of BARC, Safety Regulation of BARC Facilities, Electron Beam Technology for societal benefits and upgradation of accelerators at Electron Beam Centre, Quantum Physics, Superconductivity, Photonic Crystal fabrication and numerical simulations of photonic band structure, Tsunami vulnerability and inundation issues related to DAE facilities, Theoretical High Energy Physics related to Quantum Chromodynamics, Policy framing and revision in respect of safety guidelines, a variety of employee welfare schemes, recruitment and service related matters and Administration of pan India Atomic Energy Schools.

- (b) Major research outcomes from 7 completed positions involved in scientific research can be broadly mentioned as Studies on magnetism and superconductivity at very low temperature, Scaling up of high temperature electrolysis for Hydrogen generation and R&D on Hydrogen storage technologies, Design and Planning of electron beam based facility for waste water treatment, Capacity enhancement of Electron Beam based Indian cargo Scanner, Design safety review for accelerator projects, Evaluation of Tsunami vulnerability for DAE facilities on Indian Shoreline, Synthesis of mono dispersed Nano particles and self-assembled 2D and 3D photonic crystals etc leading to around 32 publications.

Policy related contributions such as Preparation of safety documents, safety review for transport of Radioactive materials, new construction and physical protection systems. Policy framing and revision related to contributory health service schemes, employee welfare, career progression, recruitment, safety review and administration of pan India Atomic Energy Central Schools were carried out by 2 RRC positions which have completed their terms.

Approximately 10 students have been mentored for their research work, wide ranging teaching activities have been carried out by the Raja Ramanna Chair scientists, technologists and policy makers whose term has ended, apart from writing and publishing books and contributing towards public outreach activities of the Department.

- (c)&(d) Yes, the RRC scheme has been extremely effective towards deploying expertise in the niche areas of Nuclear Science and Technology by field experts post their superannuation, towards furtherance of departmental programs.
