



EMPOWERING RESEARCHERS

SERB is empowering the scientific community to address challenging issues of national interest and helping them to attain global competitiveness in R&D.

Science and Engineering Research Board (SERB) has its origin in the erstwhile Science and Engineering Research Council of the Department of Science and Technology, Government of India which was established more than four decades ago.

Its vision is to position science and technology as the fulcrum for social and economic change by supporting competitive, relevant and quality scientific research and development.

SERB has been created to promote science and technology research through appropriate policy interventions and to provide extramural funding to academic institutions, research laboratories and other R&D organisations for carrying out basic research in frontier areas of science and engineering. SERB strives to serve the needs of researchers through quick and responsive funding decisions.

To achieve this, SERB has put in place the required policy and administrative framework that overrides conflicts of interest of grant-seeking applicants, reviewers, committee members and SERB officers to bring its functioning on par with leading global R&D



funding agencies. The aim is to bring in more transparency and increased accountability to assure the public that processes followed are fair and non-discriminatory.

THEMATIC PILLARS OF GOVERNANCE

SERB seeks to achieve its mandated objectives through activities built around six programmatic themes, referred to as 'pillars'. SERB provides a dynamic vehicle of choice catering to the diversified needs of institutions engaged in science and technology research by developing inclusive processes in the various programmes and schemes listed under these pillars.

Pillar 1: Support for Core Research & Innovations

Pillar 2: Fostering the Young Researchers

Pillar 3: Building Research Networks

Pillar 4: Strengthening Linkages with Society

Pillar 5: Awards & Recognitions

Pillar 6: Support for Science and Technology Events

FUNDING OPPORTUNITIES

SERB has many schemes to cater to the funding needs of different segments of researchers within these Six Pillars.

Core Research Grant is the flagship scheme of the board to support individual scientists. Cutting-edge research

themes range from unfolding the secrets of hadrons to exploring the proliferative and differentiation potential of Ayurvedic Rasayanas are funded through this scheme.

SERB is adapting to the changing needs of the country and has introduced two new schemes, namely, **Industry Relevant R&D** and **High Risk High Reward Research**. The former attempts to address the gap between publicly funded research and industry-related research with the involvement of an industry partner. The latter focusses on supporting proposals that are

SERB RECOGNISES HUMAN RESOURCES AS AN IMPORTANT COMPONENT IN SCIENCE AND TECHNOLOGY

conceptually new and risky, and if successful, expected to have a paradigm-shifting influence on science and technology.

SERB also has a special window for supporting high priority research areas through the establishment of centres of excellence and facilities.

SERB recognises human resources as an important component in science and technology and offers many fellowship and awards. **National Post-Doctoral fellowships** and the **Early Career Research Award** are two popular programmes for young researchers. The **JC Bose Fellowship** is awarded to recognise the performance of scientists whereas the **Ramanujan Fellowship** enables researchers working in overseas institutions to return to India. The Board has also introduced programmes to train PhD students and post-doctoral researchers in identified overseas institutions of repute. SERB is also partnering with different departments and organisations both within the country and abroad for addressing sector-specific research issues.

SERB recently signed a new memorandum of understanding with the European Research Council (pictured), opening the pathway for Indian researchers to work in Europe. "The new implementation agreement will foster and strengthen long-term links between the Indian and European scientific communities," said Dr Rajiv Sharma, Secretary of the SERB. "It will act as a gateway for top Indian researchers to partner with their European counterparts to create world-class science," said European Union Ambassador to India, Tomasz Kozlowski.

THE WAY FORWARD

As the premier national research funding agency, SERB aspires to augment the quality and footprint of Indian science and engineering globally. SERB's calibrated, competitive support hopes to be the 'wind beneath the sail' for India's researchers. ■

Recent initiatives

Visiting Advance Joint Research provides for adjunct/visiting faculty positions to overseas scientists, faculty members and R&D professionals, including non-resident Indians and overseas citizens of India, to undertake high quality collaborative research in publicly funded academic and research institutions in India.

Teachers Associateship for Research Excellence aims to facilitate mobility of faculty members working in State universities or colleges as well as private academic institutions to carry out research in premier central institutions and other such organisations to achieve equitability in R&D.

Uchhatar Avishkar Yojana has been launched by the Ministry of Human Resource Development with a view to promote innovation of a higher order that directly impacts the needs of industries, thereby improving the competitive edge of Indian manufacturing capabilities.

Mathematical Research Impact-Centric Support is to provide fixed-grant support to active researchers with good credentials in Mathematical Sciences. The funding provided caters to the specific needs of Mathematical Sciences research.

Abdul Kalam Technology Innovation National Fellowship aims to recognise, encourage and support translational research by Indian nationals to achieve excellence in engineering, innovation and technology development.

Accelerate Vigyan strives to provide a big push to high-end scientific research and prepare scientific human resources that can enter into research careers and the knowledge-based economy. The aim is to expand the research base in the country, with three broad goals: consolidation/aggregation of all scientific training programs; initiating internships; and high-end workshops.

SERB connectivity at a glance on an annual basis

