

## **Empowering Basic Research in India: SERB**

The Science and Engineering Research Board (SERB) has its origins from the erstwhile Science & Engineering Research Council (SERC), DST, Government of India which promoted and served the cause of extramural funding for more than four decades. The Board's creation five year ago had truly been an important milestone. in the field of Science and Engineering. Importantly, it also signifies commencement of a new era to meet the ever increasing aspirations of the scientific community in the country.

SERB is a statutory body established through an Act of Parliament with an aim to provide it with financial and administrative autonomy. The Board, chaired by Secretary, Department of Science and Technology (DST), is comprised of 17 members including seven Secretaries to the Government of India. As per the provisions of the Act, the Board has an Oversight Committee to advise and assist the Board.

SERB strives to ensure expeditious decision making in R&D funding thereby greatly improving the responsiveness to the genuine needs of the researchers. Appropriate policy interventions on conflict of interest for grant seeking applicants, reviewers, committee members and own officers ensure that the business in the Board is at par with many of the leading global funding agencies. The aim is always to bring more transparency, increased accountability and provide assurance to the general public that processes followed for the award of grants are fair and non-discriminatory.

It's been an interesting journey for the SERB, where in we are trying to ensure that the rich legacy of erstwhile SERC is carried forward and the new organisation is enriched with requisite infused energy and vigour. This is being achieved through revamping of the existing schemes and at the same time initiate, plan and implement several new and innovative schemes to cater to the diverse needs of scientific community.

Our research funding can be classified broadly under :-Schemes and Programs, :-Awards and Fellowships and :-Partnership Programs. Extra Mural Research Funding is provided to individual researchers to undertake research in frontier areas of science and engineering. While "High Risk - High Reward" Scheme aims at supporting "out of box" thinking research, "Industry Relevant R&D" scheme provides research support to address industry-specific problems. Intensification of Research in High Priority Areas (IRHPA) program is for doing research in identified high priority areas in multi-institutional, multi-

investigator centric mode in synergic manner to achieve desired impact The Empowerment and Equity Opportunities for Excellence (EMEQ) ensures enhanced participation of people from the weaker sections of the society in research and development. Programs under S & T Support System provide funds for organizing national and international seminars & symposia in the country and for attending international scientific events held abroad.

SERB has also established different Fellowships and Awards to recognize scientists for their promise or for rewarding performance. These fellowships target different categories of researchers with varying objectives. These include encouraging scientists to return to India from abroad, building national capacity in frontier areas by undertaking collaborative research with foreign institutions, rewarding promising young women researchers with research grant and supporting superannuated researchers to sustain their research activity.

The Board also actively engage itself with other departments, and implements programs of relevance to the country. Cell Tower Radiation in partnership with Department of Telecommunications, Food Processing program with Ministry of Food Processing, and IMPRINT with Ministry of Human Resources Development are examples of such partnerships. SERB has also established partnership with various international organizations. It has already developed programs with NSF & NIH, USA and Royal Society, UK. We are also an active participant in the Global Research Council, a forum for sharing data and best practices for quality collaboration among research funding agencies globally.

### **The Genesis**

The concept of institutionalizing a formal mechanism of extramural funding for scientific R&D is fairly old and well established in India. For long, this function was discharged by the Government directly through Science & Engineering Research Council (SERC) in DST. Over the years, SERC/DST diligently nurtured this activity and evolved a well-established, objective and transparent mechanism of providing extramural research funding to scientists and scientific institutions across the country. This scheme was regarded as the most important and enabling amongst the scientific community. So much so, that most of the people in academic institutions. Unhesitatingly assign their professional success to the support they had received from DST/SERC at different times of their career.

Having reached a level of high maturity, it was considered appropriate for the Government to disengage from the direct implementation of this scheme and allow it to function as an independent entity. And hence was born the SERB. The support for the creation of SERB was so strong that the Indian Parliament unanimously cleared the corresponding Bill.

It is expected that the autonomous structure of SERB will bring in more professionalism at the implantation level while unlocking the resources of DST to focus on policy matters and larger issues in the overall national context. SERB is committed to promote scientific research while DST will continue to support institution building, institution centric support and development of overall S&T ecosystem in the country.

**Source: SERB**