

DST-SERB - Scientific Social Responsibility initiative can boost mentoring in science

The Department of Science and Technology (DST) along with Science and Engineering Research Board (SERB) has developed a Scientific Social Responsibility (SSR) initiative, which aims to spread the benefits of research beyond the borders of the direct beneficiaries especially to schools and colleges, universities and institutions in and around the location of the research.

The initiative intends to effectively utilize the R&D infrastructure and expertise of researchers to benefit other S&T stakeholders and the society and embed a participatory, inclusive, and sustainable culture of social responsibility among research grantees.

The SSR initiative focuses on infrastructure sharing, mentoring, and training, leveraging the experience of accomplished researchers to young mentor faculty, researchers, and aspiring research students, fostering research culture through research grantees who can act as facilitators in motivating students to pursue a research career, public outreach, and knowledge dissemination.

Through this initiative, researchers will play the role of teachers, a crucial role in any society which is irreplaceable as they can shape the future of their society by the impact they have on their students.

“The SSR initiative has a very strong thrust on harnessing the experience of senior and young researchers in mentoring and nurturing of future talents in science in various ways like providing access to facilities, ideas, guidance, and such interaction at a young age could create effective scientific leaders for the future. This is an immediate requirement for the country today,” said DST Secretary Dr. Ashutosh Sharma.

“Through the SSR initiative, senior and active young researchers, could share research infrastructure and act as facilitators to encourage brilliant students towards scientific research and this could bring a scientific temper among the masses which may lead to development of rich research eco-culture of integrated scientific and social commitments in the country,” said Dr. Sandeep Verma, Secretary Science and Engineering Research Board (SERB).

Infrastructure sharing

Research vigor and R&D infrastructure vary widely in Indian Institutions across the country. Eminent research institutions have developed their infrastructure facilities over the years through various means of support. The SSR initiative will help share these facilities among researchers belonging to more universities and institutions, which may be less endowed in scientific resources or certain aspects of them. It can also help the institutions and universities exchange facilities in their areas of strength and benefit from each other.

This would be an effective way to address the research needs of the scientific community, thus enhancing the overall scientific research capability of the nation. It would also augment the

national mobility of researchers and aid in collaborative research. Research grantees would provide students access to their scientific facility so that they can use and learn from them.

Mentoring and Training

Like R&D infrastructure, the research expertise also varies substantially across various categories of institutions. Scientific knowledge, skills, and experience of accomplished researchers can be leveraged to mentor young faculty and researchers and aspiring research students. This would have a positive impact on enhancing scientific capacity and lead to more inclusive growth.

The research grantees would provide mentorship for college and university faculty, train other researchers on high-end scientific skills and research facilities created in their lab or institution, provide students with internships.

Fostering research culture

In the knowledge-and technology-driven economy, the demand for human resources in science and technology is increasing to a great extent. Therefore, it is imperative to build the basis for a continuous supply of human resources in science and technology.

Research grantees can act as facilitators in motivating students to pursue a research career through various measures, such as direct interaction with students, conducting workshops, etc. and introduce and inspire members of the academic community to the best practices of research.

Research grantees would organize workshops for faculty members of nearby colleges on topics like scientific area of research undertaken and project proposal writing, project management, and ethics in science. They can also enable school and college students to visit their lab or institution and interact with scientists and faculty to develop a scientific culture among school and college students. They would also deliver individual lectures to students in nearby colleges and schools for inculcating the scientific temper.

Public outreach and knowledge dissemination

The aim of public outreach activities is to bring science to society through special programs, workshops, lectures, science festivals, open houses, etc. Dissemination of science will focus on communicating research outputs to the general public. It is a way to inform the public of the research activities that are being carried out by public funding and also to enhance the public understanding of science. The researchers would conduct public lectures on science, publish popular articles in science journals, and reports in newspapers, web articles, and so on.

Scientific Services

The present competitive research funding landscape depends predominantly on the services of the scientific community of the nation. Peer review of research proposals are being done by

scientists and researchers on a voluntary basis. In the recent past, the reach and demand for funding has increased multifold, whereas an increase in quality reviewers had not kept up with the pace. A positive intervention seems to be required to expand the reviewer pool and strategically revive the enthusiasm for quality and timely review. The aim of this activity is to involve SERB grantees in the peer review process in a more systematic manner through SSR. This is expected to create immense mutual benefit by aiding to increase the reviewer base as well as to provide an avenue for researchers to fulfill their scientific obligation. The researchers would also peer review research proposals submitted for funding, as and when assigned.