



Department of Science & Technology
Govt. of India

SERB Scientific Social Responsibility Policy

Science and Engineering Research Board
Department of Science and Technology
Government of India

1. Context

Scientific research continues to spur various technological advances and is one of the pivotal factors driving the economic growth of any nation. Science in India has witnessed rapid progress over the past several years and number of research institutions, scientific infrastructure and resources along with research output have increased significantly. Scientific resources and knowledge thus developed are an unprecedented wealth which when strategically tapped and channelized can create a huge impact on the research ecosystem of the nation. Hon'ble Prime Minister in the 104th Indian Science Congress at Tirupati emphasized "On the lines of Corporate Social Responsibility, the concept of Scientific Social Responsibility needs to be inculcated to connect our leading institutions to all stakeholders, including schools and colleges. We must create an environment for sharing of ideas and resources." On the basis of the above concept, it is desirable that various scientific agencies/departments/institutions take up the initiative to device policy and criteria for SSR. for the programs managed by them. The combined efforts of all stakeholders would thus lead to a development of rich research culture of integrated scientific and social commitments in the country.

Science and Engineering Research Board (SERB), being a premier organization for funding basic research in the country, caters to researchers belonging to various disciplines of science and engineering. With total R&D budget of Rs. 800 crore, about 10000 researchers were directly supported in the year 2017-18 through its various programs and schemes. SERB has devised its Scientific Social Responsibility (SSR) Policy which aims to spread the benefits beyond these direct beneficiaries especially to the less-endowed researchers. The approach is to integrate and align the social responsibility activities within the SERB Grantees' committed research activities

2. Objectives

SERB SSR policy intends to

- Effectively utilize the R&D infrastructure and expertise of SERB grantee to benefit other S&T stakeholders and the society
- Embed a participatory, inclusive and sustainable culture of social responsibility among SERB grantee

3. Scope of SERB SSR

SSR Initiative would focus on:

- A. Infrastructure sharing
- B. Mentoring/Training
- C. Fostering research culture
- D. Public outreach and knowledge dissemination
- E. Scientific Services

A. 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. It will be immensely beneficial if these facilities are shared with researchers belonging to universities/institutions which are less endowed in scientific resources. 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. This would also augment national mobility of researchers and aid in collaborative research.

B. Mentoring/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/researchers and aspiring research students. This would have a positive impact in enhancing the scientific capacity and lead to a more inclusive growth.

C. 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 continuous supply of human resources in science and technology. SERB grantee can act as a facilitator in motivating students to pursue research career through various measures, such as direct interaction with students, conducting workshops, etc. and introduce and inspire members of academic community to the best practices of research.

D. Public outreach and knowledge dissemination

The aim of public outreach activities is to bring science to the society by special programs, workshops, lectures, science festivals, open house, 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.

E. 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 recent past, the reach and demand for funding has increased multifold whereas 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 fulfil their scientific obligation.

4. **Activities**

The activities associated with SSR under various categories are listed below:

Infrastructure sharing

1. Access to scientific facilities of SERB grantee

Mentoring/Training

1. Mentorship of college/university faculty by SERB grantee
2. Training on high end scientific skills and research facilities created at SERB grantee's lab/institution for other researchers
3. Providing student internships

Fostering research culture

1. Organize workshop to faculty members of nearby colleges on topics not limited to (i) scientific area of research undertaken (ii) project proposal writing (iii) project management and (iv) ethics in science
2. Enabling school and college students to visit SERB grantee's lab/institution and interact with scientists/faculty to develop a scientific culture among school/college students
3. SERB grantee delivering individual lectures to students in nearby colleges/schools for inculcating the scientific temper

Public outreach and knowledge dissemination

1. Public lectures on science
2. Popular articles in science journals such as Current Science, etc.
3. Reports in newspapers, web articles, etc.

Scientific Services

1. Peer review of research proposals submitted to SERB for funding, as and when assigned

5. SERB SSR framework

All researchers who receive funding from SERB will be part of SERB SSR initiative. The principal commitment of SERB grantee is to carry out quality research and achieve the objectives of the proposed work within the sanctioned budget and time frame. Social commitment would be part of the research initiatives without affecting their principal mandate of research activities as mentioned in the project approval. The activities to be carried out by SERB grantee of various programs are given in Annexure.

SERB SSR Activities – Program Wise

Activity	Category	Target beneficiary	Program/Scheme						Financial Support	Conditions
			ECR, EMEQ, DIA (with project), RJN	CRG, HRHR, IRRD, IMPRINT, JCB	IRHPA	MATRICS DIA (only fellowship)	NPDF	OPDF/OVDF		
Access to PI scientific facilities	A	Researchers of other institutions	Minimum 8 hrs per month	Minimum 8 hrs per month	Minimum 8 hrs per month	-	-	-	NA	*Mandatory for equipment costing \geq Rs.10 lakh
Mentoring of faculty	B	SERB TARE Faculty; SERB PIs requiring mentorship for conducting research	Once in project duration	Once in project duration	Once in project duration	-	-	-	NIL (For TARE – Financial support as per TARE guidelines)	At least one activity from Category B is mandatory
Student Internship	B	Students in undergraduate engineering or postgraduate science	One student in project duration	One student in project duration	One student in project duration	-	-	-	Upto Rs. 5000 per month (max two months) as student assistantship	
Research Facility Training Program	B	Researchers (10 number)	One day training, once in project duration	One day training, once in project duration	Two-day training, once in project duration	-	-	-	Upto Rs.10000 per day	
Workshop to faculty of nearby colleges	C	Faculty of nearby college (25 number)	One day workshop, once in project duration	Two-day workshop, once in project duration	Two-day workshop, once in project duration	-	-	-	Upto Rs.25000 per day	At least one activity from Category C is mandatory
Visit of college/ school students in PI institution	C	Students (A group of 25)	One day visit	One day visit	-	-	-	-	Upto Rs. 10,000	
Individual lectures	C	School/ college students	Once in a year	Once in a year	Once in a year	Once in a year	Once in fellowship period	One lecture within one month of return	NIL	
Public lectures on science	D	General Public	Once per project duration	Once per project duration	Once in a year	Once per project duration	Once in fellowship period	-	NIL	At least one activity from Category D is mandatory
Popular Articles	D	General Scientific Audience	Once per project duration	Once per project duration	Once in a year	Once per project duration	Once in fellowship period	Once in fellowship period		
Reports in newspaper, web articles, etc.	D	General Public	Once per project duration	Once per project duration	Once in a year	Once per project duration	Once in fellowship period			
Peer review of research proposals	E	Scientific Community through SERB	As and when referred	As and when referred	As and when referred	As and when referred	-	-	NIL	Mandatory

Abbreviations

CRG	Core Research Grant
DIA	Distinguished Investigator Award
ECR	Early Career Research Award
EMEQ	Empowerment and Equity Opportunities for Excellence in Science
HRHR	High Risk High Reward
IRHPA	Intensification of Research in High Priority Areas
IMPRINT	Impacting Research Innovation and Technology
IRRD	Industry Relevant R&D
JCB	JC Bose Fellowship
MATRICES	Mathematical Research Impact Centric Support
NPDF	National Postdoctoral Fellowship
RJN	Ramanujan Fellowship
OPDF	Overseas Postdoctoral Fellowship
OVDF	Overseas Visiting Doctoral Fellowship