

Department of science and technology
<https://dst.gov.in/>

- **Scientific & Engineering Research**

1. **INSPIRE Scheme**
2. **R&D Infrastructure (FIST, SAIFs, PURSE, SATHI,STUTI)**
3. **Cognitive Science Research Initiative (CSRI)**

1. **INSPIRE Scheme- "Innovation in Science Pursuit for Inspired Research (INSPIRE)"** is an innovative programme sponsored and managed by the Department of Science & Technology for attraction of talent to Science.

Objectives The basic objective of the ‘Innovation in Science Pursuit for Inspired Research (INSPIRE)’ scheme is to communicate to the youth the excitement of pursuing science. INSPIRE attracts and nurtures **young bright students** to study basic and natural sciences at the college and university level and to pursue research careers in both basic and applied science areas including engineering, medicine, agriculture and veterinary sciences. The same is done through the following components:

- **INSPIRE INTERNSHIP** aims to provide exposure to the top 1% students at Class X Board level by organizing Science Camps either during summer or winter which provides opportunity to them to interact with Science icons from India and abroad, including Nobel Laureates, to experience the joys of scientific pursuit. These science camps nourish the curiosity of students in science, help them to think out-of-the box and attract students at an early age of 16-17 years to choose science subjects for further studies.
- **SCHOLARSHIP for HIGHER EDUCATION (SHE)** component of the INSPIRE aims to encourage meritorious students to study basic and natural sciences at undergraduate level through attractive scholarship and mentorship opportunities. **SHE** offers 12,000 scholarships every year to meritorious students in the age group 17-22 years.
- **INSPIRE FELLOWSHIP** component offers 1000 Fellowships every year to bright students in the age group of 22-27 years to pursue Ph.D. in basic and applied sciences including engineering, medicine, agriculture and veterinary sciences.
- **INSPIRE FACULTY FELLOWSHIP** component provides opportunities to 100 persons every year with Ph.D. qualification in the age group of 27-32 years for 5 years to carry out research in both basic and applied science areas including engineering, medicine, agriculture and veterinary sciences for establishing themselves as independent researchers. It grants an attractive fellowship for a duration of 5 years.

INSPIRE Components Details:

Scheme Component	Target Group	Target Age Group	Target Number	Aim
-------------------------	---------------------	-------------------------	----------------------	------------

INSPIRE Internship	Top 1% students in Class X Boards	16-17 years	50,000	To expose students to joys of creative science during 5-day camps through lectures by experts, innovative experiments etc.
Scholarship For Higher Education (SHE)	Top 1% students in Class XII Boards + top 10000 performers in IIT-JEE + other national exams	17-22 years	12,000	To encourage meritorious students to study B.Sc. & M.Sc. (basic and natural sciences) by providing scholarship (Rs. 60,000/- p.a.) and mentorship grant (Rs. 20,000/- p.a.)
INSPIRE Fellowship	INSPIRE-SHE Scholars with 70% marks in M.Sc. + M.Sc. Toppers	22-27 years	1000	To encourage students to pursue Ph.D. in areas of S&T, Medicine, Agriculture, Pharmacy and Veterinary Sciences
INSPIRE Faculty Fellowship	Ph.D.	27-32 years	100	To encourage young researchers to continue research in areas of S&T, Medicine, Agriculture, Pharmacy and Veterinary Sciences.

INSPIRE Scheme Implementation:

Implementation of INSPIRE Scheme is a fully automated process through INSPIRE Web-portal. Link for INSPIRE Web-portal is:<https://www.online-inspire.gov.in>

2. **R&D Infrastructure-** The R&D Infrastructure Division of the Department aims to strengthen the S&T infrastructure of the country by fostering well-equipped R&D labs in the academic/ research institutes/ universities as well as a strong culture of research collaboration between institutions and across disciplines. It has four schemes the objectives of which, at large, are establishment of R&D labs, centres, upgradation of research facilities orienting towards creating a self-reliant India.

-
- **FIST (Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions)**: This scheme is operated in competitive mode of support at four levels. The financial support circumscribes six basic purposes i.e. Equipment, Infrastructural Facilities, Networking & Computational Facilities, Industrial R&D Support, SSR Activities and Maintenance. Depending on the level, the total financial support is limited to Rs. 1.50Crore (Level 0), Rs. 3.0 Crore (Level 1), Rs.5.0 Crore (Level 2) and Rs.10.0 Crore

(Level 3).The program prefers to focus towards supporting interdisciplinary problems, solution-centric and translational research, and increasing the scope for participation of industries and start-ups and new ideas, aiming towards AatmaNirbhar Bharat' as well as cater to the needs and aspirations of the society (SSR).

-
- **PURSE (Promotion of University Research and Scientific Excellence)**: The main objective of the scheme is to strengthen the research capacity of performing Indian Universities and provide support for nurturing the research ecosystem and strengthening the R&D base of the Universities in the country. Department of Science & Technology has restructured and re-oriented PURSE in the year 2020. A combination of i10-index of faculty members in the University, H-index of the University along with NIRF Ranking is used to formulate the new criteria for selection of Universities under PURSE.
 - **SAIF (Sophisticated Analytical Instrument Facilities)** The SAIF scheme is being implemented regionally with the objective to provide facilities of sophisticated analytical instruments to the research workers in general and especially from the institutions which do not have such instruments to enable them to pursue R&D activities. This enables the institutions acquiring such facilities to keep pace with development taking place globally.
 - **SATHI (Sophisticated Analytical & Technical Help Institutes)**: This scheme initiates the setting up of shared, professionally managed Science & Technology Infrastructure facility readily accessible to academia, start-ups, manufacturing units, industries and R&D Labs. SATHI Centres will be equipped with major analytical instrument and advanced manufacturing facility, which is usually not available at Institutes/ Organisations. The aim is to provide professionally managed services with efficiency, accessibility and transparency of highest order under one roof to service the demands of industry, start-ups and academia.
 - **STUTI (Synergistic Training program Utilizing the Scientific and Technological Infrastructure)**: The program has been designed to cater to human resource and its capacity building through open access to S&T Infrastructure across the country by organizing short term courses/ workshops on the awareness, use and application of various instruments and analytical techniques. Visit www.dststutitraining.com for more detailed and up-to-date information on current and future events being organized under the program.
 - **FIST (Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions)**: This scheme is operated in competitive mode of support at four levels. The financial support circumscribes six basic purposes i.e. Equipment, Infrastructural Facilities, Networking & Computational Facilities, Industrial R&D Support, SSR Activities and Maintenance. Depending on the level, the total financial support is limited to Rs. 1.50Crore (Level 0), Rs. 3.0 Crore (Level 1), Rs.5.0 Crore (Level 2) and Rs.10.0 Crore (Level 3).The program prefers to focus towards supporting interdisciplinary problems, solution-centric and translational research, and increasing the scope for participation of industries and start-ups and new ideas, aiming towards AatmaNirbhar Bharat' as well as cater to the needs and aspirations of the society (SSR).

3. Cognitive Science Research Initiative (CSRI)

Cognitive Science is the study of human mind and brain, focusing on how mind represents and manipulates knowledge and how mental representations and processes are realized in the brain. The field is highly transdisciplinary in nature, combining ideas, principles and methods of psychology, computer science, linguistics, philosophy, neuroscience etc. In Indian scenario which is full of diversity, it is important to foster scientific research in interdisciplinary field of Cognitive Science for better understanding of Indian mind sets, languages and cognitive disorders etc. With this aim, the Department of Science & Technology (DST) had initiated a highly focused programme "Cognitive Science Research Initiative (CSRI)" in 2008 during 11th Five year plan. The Cognitive Science Research Initiative facilitates a platform to scientific community to work for better solution of challenges related with cognitive disorders and social issues through various psychological tools & batteries, early diagnosis & better therapies, intervention technologies and rehabilitation programmes.

Activities Supported under CSRI:

1. **Individual R&D Projects:** Grant is available for R&D projects in any thrust areas identified. Support will be provided for Equipments, Manpower and other research grant.
2. **Multi-centric Mega Projects:** Multi-centric projects are encouraged to provide better solution of issues related with social relevance, better understanding of neurodegenerative diseases and their therapeutics.
3. **Post Doctoral Fellowship:** Two years 'Post Doctoral Fellowship' Programme is aimed to develop human resource in Cognitive Sciences. The Scheme provides Opportunities to Young Scientists (below 40 years) for pursuing innovative research in frontier areas of Cognitive Science.
4. **Support for Schools, Training, Workshops, Conferences etc:** The CSRI programme extends partial support for organizing conference/seminar/symposia/training programmes/workshops/schools on a selective basis. The support is provided to Academic or Research Institutions, Universities and other Professional bodies to encourage young researchers and keep scientific community abreast of the latest developments in various areas of Cognitive Science.

Programme Schedule: Department invites Individual Project Proposals and application for Post Doctoral Fellowship once in a year through advertisement in all leading Newspapers and DST website. Mega projects for intensified research in particular area are supported under top-down approach in discussion with DST and stakeholders. Proposals for conducting Schools /Conferences are open throughout the year and considered on request.