



A Handbook of Indian R&D Funding Schemes

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Executive Summary

The landscape of Research and Development (R&D) in India is enriched with a multitude of schemes and programs initiated by various ministries of the government. These schemes serve as vital catalysts for fostering innovation, enhancing competitiveness, and driving economic growth across diverse sectors.

This comprehensive document presents an overview of the Indian R&D schemes and programs offered by different ministries in India. It serves as a valuable resource for organizations seeking support and assistance from the government to fuel their research and development endeavors. By providing a clear roadmap to navigate through the myriad of options, it empowers entities to identify and leverage the most suitable schemes tailored to their specific needs and aspirations.

Furthermore, this document outlines the expanding ecosystem for innovation and R&D, thereby propelling India towards becoming a global leader in technological advancement and sustainable development. As organizations dvelve into this document, they will find a wealth of opportunities awaiting them, each scheme representing a gateway to unlock their potential for growth, innovation, and excellence in the ever-evolving landscape of R&D in India.





Foreword

The landscape of Research and Development (R&D) in India is undergoing a transformation from the collective effort of industry, academia, and government. As we seek to make more of a mark in innovation and technology, the role of R&D cannot be overstated.

Over the last decade or so, many schemes have been launched to encourage firms to invest more in R&D. Some foster partnerships with academia or national laboratories, some with other countries, and some are to encourage R&D in specific sectors. This comprehensive document has been carefully put together to present a quick overview of the R&D schemes offered by different ministries and departments. It enables organizations to navigate through the options available, to identify and leverage schemes tailored to their unique needs and aspirations.

The handbook is expected to serve as a valuable resource for all those dedicated to advancing the frontiers of knowledge and driving innovation forward.

I hope you will find the handbook useful.

Dr. Naushad Forbes

Chairman, Cll National Committee on Technology, Innovation and R&D Co-Chairperson Forbes Marshall



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Department of Science & Technology (DST)



Department of Science & Technology (DST) was established in May 1971, with the objective of promoting new areas of Science & Technology and to play the role of a nodal department for organising, coordinating and promoting S&T activities in the country. The Department has major responsibilities for specific projects and programmes as listed below:

1. Formulation of policies relating to Science and Technology.

2. Matters relating to the Scientific Advisory Committee of the Cabinet (SACC).

3. Promotion of new areas of Science and Technology with special emphasis on emerging areas.

4. Research and Development through its research institutions or laboratories for development of indigenous technologies concerning bio-fuel production, processing, standardization and applications, in co-ordination with the concerned Ministry or Department

5. Research and Development activities to promote utilization of by-products to development value added chemicals.

6. Futurology.

7. Coordination and integration of areas of Science & Technology having crosssectoral linkages in which a number of institutions and departments have interest and capabilities.

8. Undertaking or financially sponsoring scientific andtechnological surveys, research design and development, where necessary.9. Support and Grants-in-aid to Scientific Research

Institutions, Scientific Associations and Bodies.

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Abdul Kalam Technology Innovation National Fellowship	Abdul Kalam Technology Innovation National Fellowship recognize, encourage and support translational research by Indian Nationals to achieve excellence in engineering, innovation and technology development.	https://www.inae.in/researc h-innovation/abdul- kalam-technology- innovation-national- fellowship/
2	Advanced Hydrogen and Fuel Cell Programme (AHFC)	The Advanced Hydrogen and Fuel Cell Programme aims to promote and support activities related to indigenous development of new and existing material in large quantities, catalysts, membrane, components for fuel cells, electrolysers, hydrogen storage materials, materials for type IV cylinders and prototypes for implementation of various applications of hydrogen and fuel cell in the country.	https://dst.gov.in/callforpro posals/advanced- hydrogen-and-fuel-cell- programme-ahfc-date- extended-till-15-august- 2021
3	Biomedical Devices and Technology Developme nt (BDTD)	BDTD initiated during considering the concern of medical device industry for R&D to develop new innovative products as per global standards.	https://dst.gov.in/biomedic al-device-and- technology-development- bdtd
4	Building Energy Efficiency Research Initiative (BERI)	The focus of the Initiative is to promote R&D activities to improve energy performance of buildings and cities.The programme also supports enhancement of knowledge and practice to save energy indesign, construction and operation of human habitats.	https://dst.gov.in/building- energy-efficiency- research-initiative-beri
5	Carbon Capture, Utilisation and Storage (CCUS)	The carbon Capture, Utilization, and Storage program (CCUS) aims to reduce carbon emissions by either storing or reusing them so that captured carbon dioxide does not enter the atmosphere.	https://dst.gov.in/carbon- capture-utilisation-and- storage-ccus
6	Clean Air Research Initiative (CARI)	The clean Air Research Initiative (CARI) program focuses to identify the technologies that can provide a viable deployable solution to mitigate air pollution and to establish a technical resource unit.	https://dst.gov.in/clean- air-research-initiative-cari

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
7	Clean Coal Research Initiative (CCRI)	The main focus of the Clean Coal Research Initiative is to utilise indigenous fuel in clean and efficient way for reducing the carbon footprint. Clean coal technology encompass a new generation of energy processes that sharply reduce air emissions and other pollutants from coal-burning power plants.	https://dst.gov.in/clean- coal-research-initiative- ccri
8	Clean Energy Material Initiative (CEMI)	Clean Energy Material Initiative (CEMI) initiative aims to accelerate the innovation process for high-performance, low-cost clean energy materials and automate the processes needed to integrate these materials into new technologies.	https://dst.gov.in/clean- energy-material-initiative- cemi
9	Clean Fuel Research Initiative (CFRI)	The aim of the Clean Fuel Research Initiative (CFRI) is to use the renewable substance which can be used as fuel other than conventional fossil fuels so that they can serve, at least partly, as a substitute for fossil fuel in transportation and have the potential to contribute to its decarbonization and enhance the environmental performance of the transport sector.	https://dst.gov.in/clean- fuel-research-initiative-cfri
10	Climate Change Programme	The Government of India launched National Action Plan on Climate Change (NAPCC) outlining eight National Missions. They focus on promoting understanding of climate change, adaptation and mitigation, energy efficiency and natural resource conservation. ¹	https://dst.gov.in/climate- change-programme
11	Cognitive Science Research Initiative (CSRI)	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. Grant is available for R&D projects in any thrust areas identified. Support will be provided for Equipments, Manpower and other research grant.	https://dst.gov.in/cognitive- science-research-initiative- csri
12	Consolidation of University Research for Innovation and Excellence (CURIE) in Women Institutions	Support for RD Infrastructure in Women Universities and Women PG Colleges.	https://onlinedst.gov.in/Project proposalformat.aspx

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
13	Cross-Cutting and Futuristic initiatives (CCFI)	Cross-Cutting and Futuristic initiatives aims is to establish science and technology hub/ living lab that focuses on sustainable technologies development for a rural area, creates awareness about sustainable environmental technologies, and offers training to marginal communities as well as cross sector ally explore the nexus of water with energy, food, and health.	https://dst.gov.in/carbon- capture-utilisation-and- storage-ccus
14	Drugs & Pharmaceutic al Research Programme (DPRP)	The aim of this program is to promote collaborative R&D in the drugs and pharmaceuticals sectors like Chiral synthesis of drugs, Resolution of racemic drugs, Clinical studies, Development of new formulations, and standardization/testing of traditional formulations.	https://dst.gov.in/drugs- pharmaceutical-research
15	DST- Science, Technology, and Innovation Policy Fellowships Programme (DST-STI-PFP)	DST-STI-PFP provides scientists, engineers and policy enthusiasts, an opportunity to gain exposure from the close quarters of policy making and contribute their knowledge and analytical skills in the STI policy realm. These initiatives started delivering results.	https://dstcpriisc.org/about -us-2/dst-sti-policy- fellowship/
16	Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) Program	The Scheme "Fund for Improvement of S&T Infrastructure (FIST)" is intended to provide basic infrastructure and enabling facilities for promoting R&D activities in new and emerging areas and attracting fresh talents in universities & other educational institutions.	https://dst.gov.in/scientific- programmes/scientific- engineering-research/fund- improvement-st- infrastructure-higher- educational-institutions-fist
17	Hydrogen Research Initiative (HRI)	The objective of the Hydrogen Research Initiative (HRI) is to use and produce Hydrogen in multiple ways. It has two programs under it. 1. Hydrogen and Fuel Cell (HFC) 2. Renewable and Clean Hydrogen programmes.	https://dst.gov.in/hydrogen- research-initiative-hri
18	India US Grand Challenge	The purpose of this scheme is to encourage collaborative research within and between both the countries to propose new approaches to the measurement of Blood Pressure that are unobtrusive or passive, low cost and which can automatically provide frequent data recording and reporting to healthcare workers as well as feed back to the patients.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/india-us-grand- challenge

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
19	Innovation in Science Pursuit for Inspired Research (INSPIRE) Programme	The objective of INSPIRE is to communicate to the youth population of the country the excitements of creative pursuit of science and attract talent to the study of science at an early stage and build the required critical human resource pool for strengthening and expanding the Science & Technology system and R&D base.	https://www.online- inspire.gov.in/
20	INSPIRE Awards - MANAK (Million Minds Augmenting National Aspirations and Knowledge)	The INSPIRE Awards - MANAK, aims to motivate students in studying in classes 6 to 10. The objective of the scheme is to target one million original ideas/innovations rooted in science and societal applications to foster a culture of creativity and innovative thinking among school children.	https://www.inspireawards- dst.gov.in/
21	Interdisciplinar y Cyber Physical Systems (ICPS) Scheme	National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) is a comprehensive Mission aimed at complete convergence with all stakeholders by establishing strong linkages between academia, Industry, Government and International Organisations.	https://dst.gov.in/interdisciplin ary-cyber-physical-systems- icps-division
22	Materials for Energy Conservation and Storage (MECSP)	Materials for Energy Conservation and Storage (MECSP), a theme based initiative to support research and development for entire spectrum of energy conservation and storage technologies from early stage research to technology breakthroughs in materials, systems and scalable technologies to maximise resource use efficiency.	https://dst.gov.in/scientific- programmes/scientific- engineering-research/fund- improvement-st- infrastructure-higher- educational-institutions-fist
23	Mega Facilities for Basic Research	This programme is aimed to create Mega Science facilities and launch Mega Science projects in and out of the country to improve access to such state-of-the-art facilities for the Indian scientific community, especially from the academic sector.	https://dst.gov.in/hydrogen- research-initiative-hri
24	Methanol Economy Research Programme (MERP)	The objective of the program is to exploit production routes hitherto unexplored but having future potential and requiring research interventions viz development of novel catalysts, utilization of methanol in direct methanol fuel cell, development of engines fuelled on methanol and DME, etc.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/hydrogen- twentyfifty%C2%A0programme

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
25	Mission on Nano Science and Technology (Nano Mission)	Nano Mission provides critical funding to competent groups (preferably from a group of Institutions) to carry out very focused research in Nanoscience and develop nanotechnology-based applications aimed at delivering breakthroughs in Nano S&T and applications in a concerted manner.	https://dst.gov.in/scientific- programmes/mission-nano- science-and-technology- nano-mission
26	Nano Bio Scheme	This scheme is designed to produce interdisciplinary researchers and engineers capable of creating fusion fields of nano, bio and information science and engineering.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/nano-bio- scheme
27	Nano Science Scheme	The Nano Mission is an umbrella programme for capacity building which envisages the overall development of this field of research in the country and to tap some of its applied potential for nation's development.	https://dst.gov.in/scientific- programmes/mission-nano- science-and-technology- nano-mission
28	National Initiative for Developing and Harnessing Innovations TECHNOLOGY BUSINESS INCUBATOR (NIDHI-TBI)	Innovation and Entrepreneurship Division is supporting Technology Business Incubators primarily in and around academic, technical and management institutions to tap innovations and technologies for venture creation by utilizing expertise and infrastructure already available with the host institution.	https://www.nstedb.com/new- programmes.htm
29	National Science & Technology Management Information System	The National Science and Technology Management Information System (NSTMIS), is responsible for building the information base on a continuous basis on resources devoted to scientific and technological activities for policy planning in the country.	https://dst.gov.in/scientific- programmes/scientific- engineering- research/national-science- technology-management- information-system-nstmis
30	National Super Computing Mission	The National Supercomputing Mission was launched to enhance the research capacities and capabilities in the country by connecting them to form a Supercomputing grid, with National Knowledge Network (NKN) as the backbone.	https://dst.gov.in/national- super-computing-mission
31	Natural Resources Data Management System	NRDMS Programme is the geospatial technology based which aims at promoting R&D for solving area specific problems. NRDMS is supporting seven sub programmes.	https://www.india.gov.in/natur al-resources-data- management-system- department-science-and- technology

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
32	NIDHI- Accelerator - Fast tracking a start-up through focused intervention	National Science and Technology Entrepreneurship Development Board (NSTEDB) of the Department of Science and Technology (DST), Govt. of India is supporting Technology Business Incubators primarily in and around academic, technical and management institutions to tap innovations and technologies for venture creation by utilizing expertise and infrastructure already available with the host institution.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/nidhi- accelerator-fast-tracking- start-through-focused- intervention
33	NIDHI-Centers of Excellence (NIDHI-COE)	Business incubation has been globally recognized as an important tool for economic development and job creation. Innovation and Entrepreneurship Division of Department of Science and Technology (DST) has been supporting the technology based stratups through its flagship programme of "Technology Business Incubator".	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/nidhi-centers- excellence-nidhi-coe
34	Promotion of University Research and Scientific Excellence (PURSE)	The 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.	https://www.nstedb.com/new- programmes.htm
35	Ramanujan Fellowship	The scheme provides support to active researchers/ scientists/engineers who want to return to India from abroad and contribute their work for the country.	https://serbonline.in/SERB/npdf
36	Renewable Energy System (RES) including Solar Energy Research Initiative (SERI)	Renewable Energy System (RES) including Solar Energy Research Initiative (SERI) initiative aims to develop national research competence to drive down the cost of solar energy through pre-competitive translational research, oriented solar research & human and institutional capacity development.	https://dst.gov.in/scientific- programmes/scientific- engineering- research/national-science- technology-management- information-system-nstmis
37	Scheme for Young Scientists and Technologists (SYST)	Scheme for Young Scientists and Technologists (SYST) objective is to encourage young scientists to identify social challenges and provide S&T based solutions using lab-to- land approach. The scheme was revamped, rejuvenated and reenergized in 2014, to inspire young S&T professionals to present ideas of social relevance.	https://dst.gov.in/scheme- young-scientists-technologist- syst

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38	Science and Heritage Research Initiative (SHRI)	Science and Heritage Research Initiative SHRI, is a programme on Heritage Research, plans to engage experts from diverse fields for data capture and analysis, to form new collaborations, and provide viable technology to address cultural heritage related issues.	https://dst.gov.in/science-and- heritage-research-initiative- shri
39	Science and Technology of Yoga and Meditation (SATYAM)	Science and Technology of Yoga and Meditation (SATYAM) programme is aimed to foster scientific research on the effects of yoga and meditation on physical & mental health and on cognitive functioning in healthy people as well as in patients with disorders.	https://dst.gov.in/science- and-technology-yoga-and- meditation
40	Scientific Research Infrastructure Sharing Maintenance and Networks (SRIMAN)	The SRIMAN Guidelines aims to promote efficient utilisation and wider access of Research Infrastructure (RI) to scientists, researchers and industry professionals across the country by creating a network of relevant stakeholders.	https://dst.gov.in/document/g uidelines/scientific-research- infrastructure-sharing- maintenance-and-networks- sriman
41	Smart Grids Research Initiative (SGRI)	Smart Grids Research Initiative (SGRI) aims to conduct research, development, and demonstration to foster technology innovations that are technically feasible, robust, and cost effective to facilitate a greater share of renewable energy in the overall energy mix, and develop research pathways to allow 100% renewable-powered grid eventually.	https://dst.gov.in/smart-grids- research-initiative-sgri
42	Sophisticated Analytical & Technical Help Institutes (SATHI)	The aim of SATHI is to provide a shared, professionally managed services and strong Science and Technology infrastructure / facilities, with efficiency, accessibility and transparency of highest order under one roof to service the demands of faculty, researchers, scientist and students of Host and User institutes / organisations to enable them to carry out R&D activities on a round the clock basis with minimum downtime.	https://dst.gov.in/sophisticated -analytical-technical-help- institutes-sathi
43	Sophisticated Analytical Instrument Facilities (SAIFs)	DST is providing facilities of sophisticated analytical instruments to researchers through its Sophisticated Analytical Instrument Facilities (SAIF) Programme so that the non- availability of these instruments in their institutes may not come in the way of scientists in pursuing R&D activities requiring such facilities and they are able to keep pace with developments taking place globally.	https://dst.gov.in/scientific- programmes/scientific- engineering- research/sophisticated- analytical-instrument- facilities-saifs

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
44	Start-Up Research Grant (Young Scientists)	Start-up grant for Young Scientists is awarded into two new schemes: 1. Early Career Research Award (ECRA): It is a one-time award and carries a research grant up to Rs. 50 Lakhs (excluding overheads) for a period of three years. 2. National Post-Doctoral Fellowship (NPDF).	https://www.indiascienceandtec hnology.gov.in/programme- schemes/research-and-
45	State Science & Technology Programme	The objective of the State Science and Technology (S&T) Programme has been to popularize Science and Technology in the region and create awareness about the benefits of S&T which lead to solving the regional challenges is worth mentioning.	https://dst.gov.in/scientific- programmes/st-and-socio- economic-development/state- science-technology-programme
46	Swarnajayanti Fellowships Scheme	Under this scheme young scientists are provided special assistance and support to enable them to pursue basic research in frontier areas of science and technology.	https://dst.gov.in/scientific- programmes/scientific- engineering-research/human- resource-development-and- nurturing-young-talent- swarnajayanti-fellowships- scheme
47	Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI)	The Scheme 'Synergistic Training program Utilizing the Scientific and Technological Infrastructure' (STUTI) is intended to build human resources and its knowledge capacity through open access to S&T Infrastructure across the country. STUTI scheme envisions a hands-on training program and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access of S&T facilities.	https://dst.gov.in/synergistic- training-program-utilizing- scientific-and-technological- infrastructure-stuti
48	Technical Research Centres Programme	This programme was launched as a follow-up of the budget announcement. There are 05 Technical Research Centres (TRCs) were established during FY 2015-16 in the following DST institutions: Sree ChitraTirunal Institute for Medical Sciences and Technology (SCTIMST), Trivandrum International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, Indian Association for the Cultivation of Science (IACS), Kolkata, S.N. Bose National Centre for Basic Sciences, Kolkata.	https://dst.gov.in/technical- research-
49	Technological Advancement for Rural Areas (TARA)	Start-up grant for Young Scientists is awarded into two new schemes: 1. Early Career Research Award (ECRA): It is a one-time award and carries a research grant up to Rs. 50 Lakhs (excluding overheads) for a period of three years. 2. National Post-Doctoral Fellowship (NPDF).	https://dsttara.in/

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
50	Visiting Advanced Joint Research (VAJRA)	Visiting Advanced Joint Research (VAJRA) is a Faculty scheme which enables NRIs and overseas scientific community to participate and contribute to research and development in India.	https://vajra-india.in/
51	Water Technology Initiative (WTI)	Water Technology Initiative (WTI) aims to strengthen the R&D capacity and capability to develop research-based solutions for existing and emerging water challenges facing the country in the area of water quality, quantity, and water reuse and recycling.	https://dst.gov.in/water- technology-initiative- programme-wti
52	Women Involvement in Science and Engineering Research (WISER)	The scheme aims to build scientific capacity, retain and promote women researchers in India & Germany by utilising complementary expertise in science, technology, innovation and research partnerships.	https://www.igstc.org/home/wi ser
53	WIDUSHI (Womens Instinct for Developing and Ushering in Scientific Heights & Innovation)	WIDUSHI Programme aims to encourage and support senior women scientists to conduct research in interdisciplinary areas of Science & Technology. WIDUSHI programme provides support to women scientists who are at the verge of retirement or retired from Government service and also to the women scientists who are not at permanent position but are active researchers and continuously excelling in research field.	https://onlinedst.gov.in/Project proposalformat.aspx
54	WISE-PhD (Wise Fellowship for Ph.D.)	WISE-PhD Programme aims to provide support to women who want to pursue a Ph.D. in 5 subject areas of basic and applied sciences. Women of the age group between 27-45 years are eligible to apply.	https://onlinedst.gov.in/Project proposalformat.aspx
55	WISE SCOPE Fellowship	Start-up grant for Young Scientists is awarded into two new schemes: 1. Early Career Research Award (ECRA) 2. National Post- Doctoral Fellowship (NPDF).	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/start-research- grant-young-scientists

Science and Engineering Research Board (SERB) (now subsumed into ANRF)



One of the most notable developments in the S&T sector in the XI Plan has been the setting up of the Science and Engineering Research Board (SERB) through an Act of Parliament, viz. the Science and Engineering Research Board Act, 2008. Promoting basic research in Science and Engineering and to provide financial assistance to persons engaged in such research, academic institutions, research and development laboratories, industrial concerns and other agencies for such research and for matters connected therewith or incidental thereto are the primary and distinctive mandate of the Board.

SERB aims to build up best management systems which would match the best global practices in the area of promotion and funding of basic research.

The Science and Engineering Research Board (SERB) is a statutory body established through an Act of Parliament. Supporting basic research in emerging areas of Science & Engineering are the primary and distinctive mandate of the Board. The Board structure, with both financial and administrative powers vested in the Board, would enable quicker decisions on research issues, greatly improving thereby our responsiveness to the genuine needs of the research scientists and the S&T system.

With the establishment of Anusandhan National Research Foundation, SERB has been subsumed into ANRF. ANRF will forge collaborations among the industry, academia, and government departments and research institutions, and create an interface mechanism for participation and contribution of industries and State governments in addition to the scientific and line ministries.

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Accelerate Vigyan	Accelerate Vigyan" (AV) strives to provide a big push to high-end scientific research and prepare scientific manpower which can venture into research careers and knowledge- based economy. This scheme is primarily focusing on young potential researchers with an aim to give an opportunity to them to spend quality time in the pre-identified premier institution, labs / organizations and empower them through best practices and environment.	https://acceleratevigyan.gov.in /
2	Core Research Grant (CRG)	Core Research Grant (CRG) is funding scheme of SERB to academic institution, research laboratories and other R&D organizations to carry out basic research in all frontier areas of Science and Engineering. This scheme encourages emerging and eminent scientist in field of science and engineering for individual centric competitive mode of research funding.	https://www.serbonline.in/SERB/ emr?HomePage=New
3	Core Research Grant (Individual Centric)	Extramural Research (EMR) funding scheme encourages academic institution, research encourages emerging and eminent scientist in field of science and engineering for individual centric competitive mode of funding. Since the scheme provides core research support to the active researchers, the existing name Extramural Research (EMR) has been renamed as Core Research Grant (CRG).	https://www.serbonline.in/SERB/ emr?HomePage=New
4	DISTINGUISHED INVESTIGATOR AWARD (DIA)	To award best performers among PIs of completed SERB/DST projects which are rated "Excellent". SERB DIA is a one-time career award. The PI who receives the award will be called "SERB DIA" Fellow. Initially, completed projects under SERB Core Research Grant (CRG) would be considered. Completed projects under other schemes would be brought under the ambit of DIA Scheme in the subsequent years.	https://www.serbonline.in/SERB/ dia
5	Early Career Research Award	Early Career Research Award scheme aims to provide quick research support to the young researchers who are in their early career for pursuing exciting and innovative research in frontier areas of science and engineering Early Career Research Award (ECRA) Scheme has been restructured into Start-up Research Grant (SRG).	https://serbonline.in/SERB/ecr

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
6	Empowerment and Equity Opportunities for Excellence in Science	The Empowerment and Equity Opportunities for Excellence in Science (EMEQ) scheme is aimed at providing research support to researchers belonging to the Scheduled Caste and Scheduled Tribe in undertaking research in frontier areas of science and engineering.	https://www.serbonline.in/SERB/ Weaker_section?HomePage=N ew
8	Financial Assistance to Professional Bodies and Seminar/Symp osia	The primary focus of the scheme is to support events having strong orientation towards scientific research in the areas of basic sciences, engineering, technology, agriculture & medicines. The scientific/technical contents of the events, thematic relevance, contextual impact and extent & level of participation are key components for deciding the support worthiness and quantum of support for individual events.	https://www.serbonline.in/SERB/ seminar_symposia
9	Fund for Industrial Research Engagement (SERB-FIRE)	The Program "Fund for Industrial Research Engagement (SERB-FIRE) intends to address the challenges in the research and innovation space in India, by creating an ecosystem that would accelerate the growth in the research work with national impact, and drive the R&D landscape efficiently and effectively.	https://www.serbonline.in/SERB/ fire
10	Graduate Research Opportunities Worldwide (GROW) Program	The Graduate Research Opportunities Worldwide (GROW) program provides NSF Graduate Research Fellows with opportunities to enhance their professional development through research collaborations at top- caliber science and engineering research sites in India.	https://prism.serbonline.in/RS- GROW
11	High-End Workshops ("KAARYASHAL A") under ABHYAS	'KAARYASHALA' is an effort to improve research productivity of promising PG and PhD students from universities and colleges through high- end workshops on specific themes. This program aims to provide opportunities to acquire specialized research skills.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/high-end- workshops- %E2%80%9Ckaaryashala%E2%8 0%9D-under-abhyas
12	IMPacting Research, INnovation and Technology IMPRINT - Round IIC (IMPRINT IIC)	IMPRINT bolsters challenge driven innovation and translation of knowledge into viable technology. The entire gamut of activities was divided into ten identified domains namely, Advanced Materials (AM), Energy (EN), Environment &Climate change (EC), Healthcare (HC), Information &Communication Technology (IT), Manufacturing (MT), Nanotechnology hardware (NT), Security &Defence (SD), Sustainable Habitat (SH) and Water &River Systems (WR).	https://www.serbonline.in/SERB/ IMPRINT2C

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
13	Indo-US Fellowship Program	The major objective of Indo-US Research Fellowship Program is to introduce Indian scientists and engineers in the early stages of their careers to international collaborative research opportunities in premier institutions in USA, thereby furthering their research capacity and global perspective and forging long-term relationships with scientists, technologists and engineers in leading American R&D institutions and laboratories.	https://www.serbonline.in/SERB/ indous?HomePage=New
14	Intensification of Research in High Priority Area (IRHPA)	The IRHPA program supports proposals in high priority areas where multidisciplinary / multiinstitutional expertise is required. The necessary facilities required for implementing the identified high priority areas will be supported through this scheme.	https://serbonline.in/SERB/irhpa
15	Intensification of Research in High Priority Areas (IRHPA)	The Intensification of Research in High Priority Areas (IRHPA) program supports proposals in high priority areas where multidisciplinary / multi-institutional expertise is required which will put our nation in international science map in that particular discipline.	https://www.serbonline.in/SERB/ Irhpa_Instruction?HomePage= New
16	International Travel Scheme (ITS)	The ITS scheme is to provide financial assistance for presenting a original research paper or chairing a session or delivering a keynote address in an international scientific event held abroad. This scheme also provides support to young researchers (Age<35 years on the date of start of event) for attending workshop, short term training programmes and schools being organized outside India.	https://www.serbonline.in/SERB/ its?HomePage=New
17	J C Bose National Fellowship	The JC Bose fellowship is awarded to active scientists in recognition for their outstanding performance. The fellowship is scientist- specific and very selective.	https://www.serbonline.in/SERB/ jcbose_fellowship
18	Mathematical Research Impact Centric Support	Considering the overwhelming response for the fixed grant scheme MATRICS, devised for active researchers pursuing Mathematical Sciences and the demand from researchers belonging to other Theoretical Sciences, the Science and Engineering Research Board (SERB) has decided to extend the fixed grant scheme to other Theoretical Sciences including Quantitative Social Sciences.	https://www.serbonline.in/SERB/ matrics_new

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
19	Mathematical Research Impact Centric Support (MATRICS)	To provide fixed grant support to active researchers with good credentials in Mathematical Sciences, Theoretical Sciences and Quantitative Social Sciences. The main attribute of this scheme would be submission of a simple 1-2 page mathematical/theoretical proposal.	https://www.serbonline.in/SERB/ matrics_new
20	National Post Doctoral Fellowship (N- PDF)	The SERB-National Post Doctoral Fellowship (N-PDF) is aimed to identify motivated young researchers and provide them support for doing research in frontier areas of science and engineering.	https://serbonline.in/SERB/npdf
21	National Science Chair	The aim of the scheme is to recognise active eminent senior resident Indian superannuated scientists for their outstanding contributions both nationally and internationally, in the area of Science, Technology, Engineering, Mathematics (STEM) and Medicine, to promote excellence and growth in R&D.	https://www.serbonline.in/SERB/ nationalScienceChair?HomePa ge=New
22	Overseas Visiting Doctoral Fellowship	Application for support to undertake research training during the doctoral research in Overseas Universities on a competitive mode is sought from eligible researchers. To build national capacity in frontier areas of Science and Engineering, which are of interest to India by providing research training to PhD students admitted in the Indian institutions in overseas universities / institutions of repute.	https://www.serbonline.in/SERB/ ovdf?HomePage=New
23	SERB Overseas Doctoral Fellowship	This Program is for the students to do doctoral programs abroad in several leading universities of the world	https://www.serbonline.in/SERB/ ovdf
24	Prime Minister's Fellowship for Doctoral Research	Prime Minister's Fellowship for Doctoral Research scheme is to attract talent for doctoral research, nurture leadership qualities in scholars, provide exposure to international best practices & innovations and encourage industrial research in academic institutions	https://prism.serbonline.in/RS- PMFDR
25	Ramanujan fellowship	Ramanujan Fellowship is meant for brilliant Indian scientists and engineers from outside India to take up scientific research positions in India, those Indian scientists/engineers who want to return to India from abroad. The fellowship is scientist -specific and very selective.	https://www.serbonline.in/SERB/ Ramanujan_fellowship?HomeP age=New

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
26	Scheme for Funding Industry Relevant R&D	The scheme aims to support any Indian citizen with a regular academic/research position to associate with any industry to solve industry specific problems for the larger benefit of society. The scheme is aimed at supporting ideas that address a well-defined problem of industrial relevance.	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- associations/scheme-funding- industry-relevant-rd
27	Scientific and Useful Profound Research Advancement (SUPRA)	SERB-SUPRA (Scientific and Useful Profound Research Advancement) seeks to explore new scientific breakthroughs, with long-term impact on our fundamental scientific understanding, and offer disruptive technologies at the cutting edge. SERB-SUPRA is a scheme beyond normal core research grants and purposefully designed for high quality proposals consisting of new hypothesis or challenge existing ones and provide 'out- of-box' solutions.	https://www.serbonline.in/SERB/ Supra?HomePage=New
28	SERB – POWER Translation Grant	SERB -POWER Translational verticals is envisaged to encourage women researchers to translate their innovative ideas, discoveries and inventions and to catalyse the spirit of entrepreneurship among women researchers from tier I and tier II institutions.	https://www.serbonline.in/SERB/ Spt
29	SERB Graduate Student Exchange Program	SERB has joined National Science Foundation (NSF), USA in the Graduate Research Opportunities Worldwide (GROW) Program. Graduate students from US will be invited to undergo training in identified institutes in India.	https://www.serbonline.in/SERB/g sep?HomePage=New
30	Partnerships for International Research and Education (PIRE)	Partnerships for International Research and Education (PIRE) is a program supported by the National Science Foundation (NSF), USA, and promotes international activities across all NSF-supported disciplines.	https://prism.serbonline.in/RS- PIRE
31	SERB Overseas Postdoctoral Fellowship (SEPB-OPDE)	SERB Overseas Postdoctoral fellowship aims to build national capacity in frontier areas of Science and Engineering, which are of interest to India by providing postdoctoral fellowship for a period of one year. The Program admits candidates in identified areas and sends them to top institutions around the globe, other than USA and to institutions where internationally acclaimed scientists are working.	https://iusstf.org/serb-indo-u-s- postdoctoral-fellowship-for- india-researchers

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
32	SERB POWER (Promoting Opportunities For Women in Exploratory Research)	SERB - POWER (Promoting Opportunities For Women in Exploratory Research) program is formulated to mitigate gender disparity in science and engineering research funding in various S&T programs in Indian academic institutions and R&D Laboratories.	https://www.serbonline.in/SERB/s erbPowerInstructions
33	SERB Research Scientists Scheme	The objective of this scheme is to identify and provide a platform for sustainment of the research career of INSPIRE Faculty and Ramanujan Fellows for an additional period of two years after completion of the regular tenure of five years in the respective schemes	https://prism.serbonline.in/RS- SERBRESEARCHSS
34	SERB SCIENCE AND TECHNOLGY AWARD FOR RESEARCH (SERB-STAR)	SERB Science and Technology Award for Research (SERB-STAR) is a prestigious award instituted by SERB to recognize and reward outstanding performance of Principal Investigators (PIs) of SERB Projects. SERB has been supporting basic research in frontier areas of science and engineering through its various programs and schemes.	https://www.serbonline.in/SERB/ Star?HomePage=New
35	SERB Science and Technology Award for Research (SERB-STAR)	SERB Science and Technology Award for Research (SERB-STAR) award instituted by SERB is to recognize and reward outstanding performance of Principal Investigators (PIs) of SERB Projects.	https://serb.gov.in/page/serb_ star
36	SERB Scientific and Useful Profound Research Advancement (SUPRA)	SERB has developed a newly approved scheme that seeks to explore new scientific breakthroughs, with long-term impact on our fundamental scientific understanding, and offer disruptive technologies at the cutting edge. SERB-SUPRA is a scheme beyond normal core grants and purposefully designed for high quality proposals consisting of new hypothesis or challenge existing ones, and provide 'out-of-box' solutions.	https://www.serbonline.in/SERB/ Supra
37	SERB Women Excellence Research Grant	To reward young women scientists (below age 40) who have excelled in science and got recognition from any of the National Science Academies in India, Science & Engineering Research Board (SERB) has launched a scheme called "SERB Women Excellence Research Grant".	https://www.serbonline.in/SERB/ Women_excellence?HomePag e=New

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
38	SERB-NIH Collaborative Program	An Indo - US Grand Challenge Initiative between Science & Engineering Research Board (SERB), and the National Institute of Biomedical Imaging and Bioengineering (NIBIB, NIH), USA has been launched to encourage collaborative research within and between both the countries on affordable, reliable and simple hypertension technologies	https://www.serbonline.in/SERB/ nih?HomePage=New
39	SERB-POWER Mobility Grant	The program aims to provide opportunities for Indian Women Scientists, Engineers, and Technologists to undertake collaborative research and gain exposure to excellent research facilities at the international level.	https://www.serbonline.in/SERB/ Spm
40	Start-up Research Grant (SRG)	The Start-up Research Grant (SRG) scheme aims to assist researchers to initiate their research career in a new institution. This grant meant to enable researchers working in frontier areas of science and engineering to establish themselves and move on to the mainstream core research grant. SRG would be a one-time career grant.	https://www.serbonline.in/SERB/ srg_Instructions?HomePage=N ew
41	State University Research Excellence (SERB-SURE)	SERB-SURE scheme provides research support to active researchers belonging to state universities and colleges including private universities and colleges across India to undertake research and development in frontier areas of science, engineering and quantitative social science.	https://www.serbonline.in/SERB/ Sure
42	Teachers Associateship for Research Excellence (TARE)	This scheme aims to facilitate mobility of faculty members working in a regular capacity in State Universities / Colleges and in private Academic Institutions to carryout research work in an established public funded institution such as IITs, IISc, IISERS, National Institutions and Central Universities, located preferably nearer to the institution where the faculty member is working.	https://www.serbonline.in/SERB/ Tare
43	Utilisation of the Scientific Expertise of Retired Scientists (USERS)	The main objective of the scheme is to utilize expertise and potential of large number of eminent scientists in the country who remain active and deeply motivated to participate in S&T development activities even after their retirement.	https://www.serbonline.in/SERB/ users?HomePage=New

Council of Scientific & Industrial Research (CSIR)



The Council of Scientific & Industrial Research (CSIR), known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. CSIR has a dynamic network of 37 national laboratories, 39 outreach centres, 1 Innovation Complexes, and three units with a pan-India presence.

CSIR's R&D expertise and experience are embodied in about 3521active Scientists supported by about 4162 technical and support personnel as of 31st March 2022.

Pioneer of India's intellectual property movement, CSIR today is strengthening its patent portfolio to carve out global niches for the country in select technology domains. CSIR filed about 229 Indian patents and 202 foreign patents during 2021-22. CSIR has a patent portfolio of 1,132 unique patents in force, out of which 140 patents have been commercialized. CSIR also has 2,587 in force patents granted abroad in multiple countries. Amongst its peers in publicly funded research organizations globally, CSIR is a leader in filing and securing patents worldwide.

CSIR has pursued cutting edge science and advanced knowledge frontiers. In 2021, CSIR published around 5769 papers in SCI Journals with an average impact factor per paper of 5.401.

CSIR is ranked 37th among 1587 government institutions worldwide and is the only Indian organization among the top 100 global government institutions, according to the Scimago Institutions Ranking World Report 2021. CSIR holds the 7th rank in Asia and leads the country at the first position.

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	CSIR Bhatnagar Fellowship	The objective of the scheme is to leverage expertise of outstanding scientists for innovative technology development, thereby enhancing the technological competitiveness of the nation, and for mentoring young scientists within the system.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/csir-bhatnagar- fellowship
2	CSIR Diamond Jubilee Research Interns Awards	The internship is granted for two years, with the grant of INR 24000/- per month (fixed).	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/csir- diamond-jubilee-research- interns-awards
3	CSIR Nehru Science PDF (Tenable at CSIR Labs)	The fellowship is granted usually for two years, with the grant of INR 50000/- per month, along with annual contingency grant of INR 3 Lakh.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/csir-nehru- science-pdf-tenable-csir-labs
4	CSIR Partial Financial Assistance scheme	The Scheme is aimed at providing Partial Financial Assistance (PFA) to Indian regular employees (NON-CSIR) for participation in International Scientific Events such as Conference, Seminar, Symposium, Workshop, etc. abroad.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/csir-partial- financial-assistance-scheme
5	CSIR Research Grants	CSIR provides financial assistance to promote research work in the fields of Science & Technology, including Agriculture, Engineering and Medicine. The assistance is provided by way of grants to Professors/Experts in regular employment, in the universities, IITs, post- graduate institutions, recognised R&D laboratories both in public and private sectors.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/csir- research-grants
6	CSIR Travel Grant Scheme	The Scheme is aimed at providing financial assistance to Young Indian Researchers, Emeritus Scientists and non-regular researchers for participation / presenting their research papers in international Scientific Events such as conferences/ Seminars/ Symposia/ Workshops/ Short-term School/ courses/ training programs.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/csir-travel- grant-scheme

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
7	CSIR Young Sccientist Awards	This award is given to Young Scientists in CSIR system in order to promote excellence in various fields of science and technology. These Awards are known as "CSIR Young Scientist Awards".	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/csir-young- sccientist-awards
8	CSIR'S Junior Research Fellowship (JRF) - GATE	The objective of this fellowship is to promote academic excellence in CSIR labs and to generate high level science, the scheme is aimed at GATE qualified engineering graduates and GPAT qualified pharmaceutical graduates to pursue research through a suitable PhD programme in AcSIR or in any other institution.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/csirs-junior- research-fellowship-jrf-gate
9	Diamond Jubilee Research Interns Awards	This Internship is meant to be a preparatory phase for young Interns imbibing the spirit of inquiry and learning the tools and techniques of research through participation and doing.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/diamond- jubilee-research-interns- awards
10	Distinguished and Outstanding Scientists Scheme for the Scientists and Technologists of Indian Origin (STIOS)	Distinguished and Outstanding Scientists Scheme is for the Scientists and Technologists of Indian Origin (STIOS) to engage global Indian S&T experts in the effort of CSIR focussed on shaping a new S&T landscape to address global scientific challenges.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/distinguished- and-outstanding-scientists- scheme-scientists-and- technologists-indian-origin- stios
11	Dr Shyama Pras ad Mukherjee (SPMF) Fellows hip	The fellowship is granted for five years, upgraded to SRF after 2 years, with the grant of INR 29000/- per month, upgraded to INR 34000/- per month, along with annual contingency grant of INR 70,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/dr%C2%A0shyam a%C2%A0prasad-mukherjee- spmf%C2%A0fellowship
12	Emeritus Scientist	The Council of Scientific & Industrial Research (CSIR) under the Emeritus Scientist(ES) scheme provides financial assistance to superannuated outstanding scientists to pursue research in their respective fields of specializations especially in those which are of relevance to the programmes and activities of CSIR.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/emeritus- scientist

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
13	Funding of Research Sche mese (RS)	The scheme is granted usually for three years, with a grant of up to 15 Lakhs.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/funding- research%C2%A0schemese-rs
14	Funding of Sponsored Research Sche mes	The scheme is granted usually for three years, with a grant of up to 25 Lakhs.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/funding- sponsored- research%C2%A0schemes
15	G N Ramachandran Gold Medal for Excellence in Biological Sciences & Technology	This award is given each year for outstanding contributions to Biological Sciences & Technology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/g-n- ramachandran-gold-medal- excellence-biological- sciences-technology
16	Grant for holding Symposium/Se minar	The scheme is granted any time of the year, preferably three months before the event, with an annual grant between INR 10,000 and 1,00,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/grant- holding-symposiumseminar
17	Grant for Journals	The scheme is granted on year to year basis, with an annual grant between INR 10,000 and 1,00,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/grant- %C2%A0journals
18	JRF- GATE (Tenable at CSIR Labs)	The fellowship is granted for five years, upgraded to SRF after 2 years, with the grant of INR 25000/- per month, along with annual contingency grant of INR 20,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/jrf- gate%C2%A0tenable-csir-labs
19	Junior Research Fellowship (JRF- NET)	The fellowship is granted for five years, upgraded to SRF after 2 years, with the grant of INR 25000/- per month, along with annual contingency grant of INR 20,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/junior- research-fellowship-jrf-net

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
20	Junior Research Fellowships (JRF through CSIR-UGC NET)	The scheme provides Research Fellowships and Associateships to bright young men and women for training in methods of research under the expert guidance of faculty members/ scientists working in University Departments/Institutes of National Importance/National Laboratories and Institutes of CSIR in various fields of Science & Technology and Medical Sciences.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/junior- research-fellowships-jrf- through-csir-ugc-net
21	Nehru Science Postdoctoral research Fellowship	CSIR-Nehru Science Postdoctoral research Fellowship Scheme has been instituted to identify promising young researchers with innovative ideas and provide them with training and research opportunities in niche areas of basic science, engineering, medicine and agriculture.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/nehru-science- postdoctoral-research- fellowship
22	New Idea Fund Scheme	The scheme is meant for persuing hitherto unreported novel ideas having far reaching scientific or industrial implication. The tenure of the scheme is normally two years.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/new-idea-fund- scheme
23	Research Associateships (RA)	A certain number of RA-ships may be awarded each year directly by CSIR to young research workers who have shown promise in original research and propose to pursue research work in science, engineering, medicine or technology on specific projects.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/research- associateships-ra
24	Research Schemes	The assistance is provided by way of grants to Professors/Experts in regular employment. Research grants of CSIR are intended mainly to supplement the research facilities available with the sponsoring institutions. Funds provided are for one or more Junior Research Fellows (JRF), Senior Research Fellows (SRF) and Research Associates (RA), contingencies and equipment.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/research- schemes
25	Research Assoc iateship (RA)	The fellowship is granted for three years, with the grant of INR 36000/- to 40000/- per month, along with annual contingency grant of INR 20,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/research%C2%A0 associateship%C2%A0ra

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
26	Senior Research Associateship (Scientist's Pool Scheme)	The Senior Research Associateship (SRA ship) is primarily meant to provide temporary placement to highly qualified Indian scientists, engineers, technologists, and medical personnel returning from abroad, who are not holding any employment in India.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/senior-research- associateship-scientists-pool- scheme
27	Senior Research Fellowship (SRF)	The fellowship is granted for two years, with the grant of INR 28000/- per month, along with annual contingency grant of INR 20,000.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/senior- research-fellowship-srf
28	Senior Research Fellowships (SRF-Direct)	Council of Scientific & Industrial Research (CSIR) provide CSIR Research Fellowships and Associateships to bright young men and women for training in methods of research under the expert guidance of faculty members/scientists working in University Departments/Institutes of National Importance/National Laboratories and Institutes of CSIR in various fields of Science & Technology and Medical Sciences.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/senior-research- fellowships-srf-direct
29	Senior Research Assoc iateship (SRA)- Scientist Pool	The fellowship is granted for three years, with the grant of basic INR 21000/- to 25810/- per month, along with allowances.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/senior- research%C2%A0associateship -sra-scientist-pool
30	Shanti Swarup Bhatnagar Prize For Science and Technology	The Prize is given each year for outstanding contributions to science and technology. The purpose of this prize is to recognize outstanding Indian work in science and technology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/shanti-swarup- bhatnagar-prize-science-and- technology
31	Shyama Prasad Mukherjee Fellowship	To commemorate the birth centenary year (2000) of Dr. Shyama Prasad Mukherjee, who was the first Vice-President of CSIR in the Independent India, CSIR has instituted a special fellowship, namely, "DR. SHYAMA PRASAD MUKHERJEE (SPM) FELLOWSHIP" open to toppers of CSIR-UGC JRF (NET) awardees.The objective of this fellowship is to nurture the budding scientific talent and to nourish the objective of pursuit of scientific research.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/shyama- prasad-mukherjee-fellowship

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
32	Sponsored Research Schemes	The Council of Scientific & Industrial Research (CSIR) provides financial assistance to promote research work in the fields of Science & Technology, including Agriculture, Engineering and Medicine. The assistance is provided by way of grants to Professors/Experts in regular employment, in the universities, IITs, post-graduate institutions, recognised R&D laboratories both in public and private sectors.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/sponsored- research-schemes
33	Symposium Grants	Under the Scheme, financial assistance is provided to Universities, Academic institutions, Colleges, Government Departments, registered societies to organize scientific events such as Symposia/ Seminars/ Conferences/ Workshops or any other similar scientific activity that provides platform/forum to professionals, scientists, research and educational institutions to share knowledge and experience in various fields of Science and Technology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/symposium- grants
34	Technology led entrepreneur- ship programm e (TEP) to Research Scholars	The training is granted for 20-30 days, with no course fees and free boarding and lodging.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/technology- led-entrepreneur- ship%C2%A0programme- tep%C2%A0-research-scholars
35	Travel Grants	The scheme is granted any time of the year, preferably three months before the event, with a full or partial travel grant.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/travel%C2%A0gra nts
36	Visiting Associa teship (VA)	The scheme is granted for three years, with TA & DA for two visits to a CSIR lab, upto 60 days in a year.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/visiting%C2%A0a ssociateship%C2%A0va

Department of Scientific and Industrial Research (DSIR)

The Department of Scientific and Industrial Research (DSIR) is a part of the Ministry of Science and Technology, which was announced through a Presidential Notification, dated January 4, 1985 (74/2/1/8 Cab.) contained in the 164th Amendment of the Government of India (Allocation of Business) Rules, 1961. The Department of Scientific and Industrial Research (DSIR) has a mandate to carry out the activities relating to indigenous technology promotion, development, utilization and transfer. The primary endeavour of DSIR is to promote R&D by the industries, support a larger cross section of small and medium industrial units to develop state-of-the art globally competitive technologies of high commercial potential, Catalyse faster commercialization of lab-scale R&D, enhance the share of technology intensive exports in overall exports, strengthen industrial consultancy & technology management capabilities and establish user friendly information network to facilitate scientific and industrial research in the country. It also provides a link between scientific laboratories and industrial establishments for transfer of technologies through National Research Development Corporation (NRDC) and facilitates investment in R&D through Central Electronics Limited (CEL).



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Access to Knowledge for Technology Development and Dissemination (A2K+)	The Access to Knowledge for Technology Development and Dissemination Events programme provides a platform for exchange of views leading to useful Insights on issues relating to industrial research and technological innovation. The programme supports the organization of workshops, interactions, training programmes and other events to facilitate industry and consultancy organizations, academic and research institutions in identifying, developing and learning tools and techniques to effectively combat technology change and pressure in the constantly evolving and highly competitive business climate that is the order of the day.	https://www.dsir.gov.in/access -knowledge-technology- development-and- dissemination-a2k-0
2	Common Research and Technology Development Hubs (CRTDHs)	The innovation capacity of the Indian industry depends not only on large enterprises having access to financial and other resources, but crucially on Micro Small and Medium Enterprises targeting radical innovation and new product development. Micro and Small enterprises (MSEs) particularly, even though steered by talented individuals, often find it difficult to invest in R&D and technology development due to lack of access to suitable equipment, skill-sets, instruments, and other such resources.	https://www.dsir.gov.in/commo n-research-and-technology- development-hubs-crtdhs
3	Fiscal Incentives for Scientific Research	Government has evolved, from time to time, fiscal incentives and support measures to encourage R&D in industry and increased utilization of locally available R&D options for industrial development. Incentives to encourage investments in R&D by industry are announced time to time in the Union Budget	https://www.dsir.gov.in/fiscal- incentives-scientific-research- fi
4	Industrial R&D Promotion Programme (IRDPP)	Government of India has announced several fiscal incentives for promoting R&D in industry and institutes. These incentives are in terms of tax rebate and customs /Excise duty waiver on inputs for R&D. Some of these incentives are reviewed time to time so as to make it more effective and easy to implement.	https://www.dsir.gov.in/industri al-rd-promotion-programme- irdpp
5	Patent Acquisition and Collaborative Research and Technology Development (PACE)	The PACE scheme provides catalytic support to industries and institutions for development and demonstration of innovative product and process technologies, traversing the journey from proof of concept or laboratory stage to pilot stage, so that they can be launched for commercialization.	https://www.dsir.gov.in/patent- acquisition-and-collaborative- research-and-technology- development-pace

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
6	Promoting Innovations in Individuals, Start-ups and MSMEs (PRISM)	PRISM (Promoting Innovations in Individuals, Start-ups and MSMEs) scheme aims at to support individual innovators which will enable to achieve the agenda of inclusive development - one of the thrust areas of XIIth five year plan (2012-2017). It would also provide support to institutions or organizations set up as Autonomous Organization under a specific statute or as a society registered under the Societies Registration Act, 1860 or Indian Trusts Act, 1882 leading to development of state-of-art new technology solutions aimed at helping MSME clusters.	https://www.dsir.gov.in/promoti ng-innovations-individuals- start-ups-and-msmes-prism
7	Public Funded Research Institutions (PFRI)	Public funded research institutions, universities, IITs, IISc., Bangalore; Regional Engineering Colleges (other than a hospital) are eligible for availing customs and central excise duty exemption on inputs / purchase of equipment, spares and accessories and consumables for research purposes through a simple registration with the DSIR. The heads of the public funded research institutions / organizations duly registered with DSIR can certify the R&D goods for duty free import as per relevant notifications.	https://www.dsir.gov.in/public- funded-research-institutions- pfri
8	Recognition of in-house R&D Units (RDI)	The Department of Scientific & Industrial Research (DSIR) is operating a scheme for granting recognition & registration to in- house R&D units established by corporate industry.	https://www.dsir.gov.in/recogni tion-house-rd-units-rdi
9	Scientific and Industrial Research Organizations (SIRO)	The Recognition Scheme for Scientific and Industrial Research Organisations (SIROs) will bring together voluntary organizations operating in non-commercial sector with a view to promote their activities in the area of scientific and industrial research, design and development of indigenous technology to achieve technological self-reliance and minimize foreign inputs.	https://www.dsir.gov.in/scientifi c-and-industrial-research- organizations-siro
10	Technology Development and Utilization Programme for Women (TDUPW)	The program is aimed to meet specific needs of women and to enhance their contribution towards technology capability building. The scheme provides assistance for those projects which are relevant to technology development and utilization by women with special emphasis to technologies developed by scientific establishments.	https://www.dsir.gov.in/technol ogy-development-utilization- programme-women-tdupw

Minis trv Of **Earth Scie** MOES 101 1 0 1 0 1 0 1 1 1 0 1 0 1 0 0



The Ministry of Earth Sciences (MoES), under the Government of India, is mandated to provide services for weather, climate, ocean and coastal state, hydrology, seismology, and natural hazards; to explore and harness marine living and non-living resources in a sustainable manner for the country and to explore the three poles of the Earth (Arctic, Antarctic and Himalayas).

MoES was formerly the Department of Ocean Development (DOD), which was created in July 1981 as a part of the Cabinet Secretariat directly under the charge of the Prime Minister of India. It came into existence as a separate department in March 1982. The erstwhile DOD functioned as a nodal institution for organizing, coordinating and promoting ocean development activities in the country. The Government of India notified DOD as the Ministry of Ocean Development in February 2006.

In July 2006, the Ministry of Ocean Development was reorganized by the Government of India vide Presidential notification into the new Ministry of Earth Sciences (MoES). This brought the Indian Meteorological Department (IMD), Delhi, the Indian Institute of Tropical Meteorology (IITM), Pune, and National Centre for Medium Range Weather Forecasting (NCMRWF), Noida under the purview of MoES administration. The Government also approved the setting up of Earth Commission on the pattern of Space Commission (government department responsible for administration of the Indian space program) and Atomic Energy Commission (governing body of the Department of Atomic Energy).



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Agro Meteorology	Agrometeorological services programme of the Ministry has a direct impact on agricultural production. The services are available in 550 districts. Farmers receive advisories before various stages of farming. Currently, about 25 lakh farmers are using this information through mobiles.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/agro- meteorology
2	Atmospheric Observations Network	The objective of this scheme is sustenance and augmentation of observational networks comprising of Doppler Weather Radars , Automatic Rain Gauges, Automatic Weather systems, Upper Air, Surface and Environmental Observatories and Sustenance & Establishment of Multi processing, computing and communication facilities for Satellite Meteorological Applications.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/atmospheric- observations-network
3	Atmospheric, Climate Science and Services (ACROSS)	ACROSS is composed of the 7 Sub-schemes. 1) Monsoon Convection, Clouds, and Climate Change; 2) High Performance Computing System; 3) Monsoon Mission; 4) Atmospheric Observations Network; 5) Weather & Climate Services; 6) Upgradation of Forecast System; 7) Commissioning of Polarimetric Doppler Weather Radars.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/atmospheric- climate-science-and- services-across
4	Aviation Services	The programme has the following objectives: Upgradation of Airport Meteorological Instruments (AMIs) at runway locations for the major airports, Aviation Weather Decision Support System (AWDSS) for four metro airports, Implementation of Aircraft Meteorological Data Relay (AMDAR).	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/aviation-services
5	Centre for Atmospheric Technology	The programme aims to establish an exclusive Centre for Atmospheric Technology to develop indigenous capabilities in India through innovative efforts towards development of contemporary instrumentation sensors/communication assembly components for atmospheric measurements.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/centre- atmospheric-technology
6	Deep Ocean Mission (DOM)	This scheme is made with a view to explore deep ocean for resources and develop deep sea technologies for sustainable use of ocean resources. Deep Ocean Mission will support the Blue Economy Initiatives of the Government of India.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/deep-ocean- mission-dom

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
7	High Impact Severe Weather Warning System	The programme has the following objectives: To carry out field research through observations and modeling to improve the basic understanding of severe weather processes, Development and testing of cloud resolving model to improve forecast & warning of severe weather systems, Development of Observation Test Beds for severe weather systems.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/high-impact- severe-weather-warning- system
8	Monsoon Convection, Clouds, and Climate Change (MC4)	The MC4 scheme was envisioned to improve the observational database and climate models for enhanced predictive understanding of monsoonal precipitation changes and their impacts in a warming environment.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/monsoon- convection-clouds-and- climate-change-mc4
9	Monsoon Mission (MM-II)	The objective of this scheme is to build a working partnership between the academic and R&D organizations, both national and international, to improve the operational monsoon forecast skill over the country and to setup a state-of-the-art dynamical modelling frame work for improving prediction skill of 'seasonal and extended range predictions' and 'short and medium range (up to two weeks) prediction'.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/monsoon- mission-mm-ii
10	Numerical Modeling of Weather & Climate	The objective of this programme is to improve the accuracy, reliability and range of weather forecasts through better understanding of atmospheric processes and their representation in numerical model, assimilation of data from all available platforms including satellites/radars, and use of ensemble and multi-model ensemble techniques.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/numerical- modeling-weather-climate
11	Ocean— Services, Modelling, Application, Resources and Technology (O- SMART)	The objectives of O-SMART scheme is to generate and regularly update information on Marine Living Resources and their relationship with the physical environment in the Indian Exclusive Economic Zone; To periodically monitor levels of sea water pollutants for health assessment of coastal waters of India, to develop shoreline change maps for assessment of coastal erosion due to natural and anthropogenic activities; To develop high resolution models for ocean forecast and reanalysis system; To develop algorithms for validation of satellite data for coastal research and to monitor changes in the coastal research etc.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/ocean%E2%80%9 4services-modelling- application-resources-and- technology-o-smart

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
12	Polar Science and Cryosphere (PACER)	The objective of this scheme is to improve our understanding of Polar Science and cryosphere system. PACER encompasses the following six components: 1. Construction of polar research vessel 2. Construction of the third research base in Antarctica 3. Indian scientific endeavours in the Arctic 4. Polar expeditions-Antarctica 5. Replacement of Maitri station 6. Southern Ocean.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/polar-science- and-cryosphere-pacer
13	Research and Development in Earth System Science (RDESS)	The aim of Research and Development in Earth System Science (RDESS) scheme is to improve the understanding of the earth system that would aid in attaining the national goals set up by MoES. For this, multidisciplinary and multi-institutional projects are encouraged and formulated.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/research-and- development-earth-system- science-rdess
14	Research, Education, Training and Outreach (REACHOUT)	The objective of this scheme is to support various R&D activities in the thrust areas of different components of Earth system sciences that are theme and need-based, and that would help in attaining the National goals set up for MoES.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/research- education-training-and- outreach-reachout
15	Seismology and Geosciences (SAGE)	In Seismology and Geosciences (SAGE) scheme several important programmes and activities are implemented with its network of institutions. It includes six activities: 1. Seismological monitoring and microzonation; 2. Geodynamics and surface processes; 3. Indian Ocean: deep ocean observations and dynamics of lithospheric evolution 4. Scientific deep drilling in the Koynaintra plate seismic zone; 5. Seismicity and earthquake precursors; 6. Setting up a facility for geochronology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/seismology- and-geosciences-sage
16	Weather & Climate Servi ces	This is continuing Scheme primarily encompassing ongoing programs in an integrated manner aimed at providing efficient weather and climate services across. The program aims to develop an Advanced Weather Prediction System for block level forecasts, skilful for next 3-5 days and develop advisories for sectors.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/weather- climate-services

Ministry of Electronics and Information Technology (Meity)



Ministry of Electronics and Information Technology is responsible for formulation, implementation and review of national policies in the field of Information Technology, Electronics and Internet). The Vision of the Department is e-Development of India as the engine for transition into a developed nation and an empowered society. The Mission is to promote e-Governance for empowering citizens, promoting the inclusive and sustainable growth of the Electronics, IT & ITeS industries, enhancing India's role in Internet Governance, adopting a multipronged approach that includes development of human resources, promoting R&D and innovation, enhancing efficiency through digital services and ensuring a secure cyber space. The objectives of MeitY are as under:

1. e-Government: Providing e-infrastructure for delivery of e-services

2. e-Industry: Promotion of electronics hardware manufacturing and IT-ITeS industry 3. e-Innovation / R&D: Implementation of R&D Framework - Enabling creation of Innovation/ R&D Infrastructure in emerging areas of ICT&E/Establishment of mechanism for R&D translation

- 4. e-Learning: Providing support for development of e-Skills and Knowledge network5. e-Security: Securing India's cyber space
- 6. e-Inclusion: Promoting the use of ICT for more inclusive growth
- 7. Internet Governance: Enhancing India's role in Global Platforms of Internet Governance.



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	BPO promotion Schemes	The schemes provide financial support in the form of Viability Gap Funding (VGF) to eligible companies, with the following objectives: 1. Creation of employment opportunities for the youth, by promoting the IT/ITeS Industry particularly by setting up the BPO/ITeS operations in smaller cities. 2. Promotion of investment in IT/ITeS Sector in order to expand the base of ITeS Industry and secure balanced regional growth.	https://www.meity.gov.in/bpo- promotion-schemes
2	Duty Exemption and Remission Schemes	Duty exemption schemes enable duty free import of inputs required for export production. Duty exemption schemes consist of: Advance Authorization scheme Duty Free Import Authorization (DFIA) scheme.	https://www.meity.gov.in/electr onic-hardware-schemes#tab1
3	Electronics Hardware Technology Park (EHTP) Scheme/ Export Oriented Unit (EOU) Scheme	The details of EOU/EHTP schemes are available in Chapter-6 of India's Foreign Trade Policy and Procedures on the website of the Department of Commerce, Ministry of Commerce & Industry.	https://www.meity.gov.in/electr onic-hardware-schemes#tab1
4	Export Promotion Capital Goods (EPCG) Scheme	The Zero duty EPCG Scheme is available to exporters of electronic products. It allows import of capital goods for pre-production, production and post-production (including CKD/SKD thereof as well as computer software systems) at zero% customs duty, subject to an export obligation equivalent to 6 times of duty saved on capital goods imported under EPCG scheme, to be fulfilled in 6 years reckoned from Authorization issue-date.	https://www.meity.gov.in/electr onic-hardware-schemes#tab1
5	Multiplier Grant Scheme (MGS)	The aim of the scheme is to encourage industry to collaborate with premier Academic and Government R&D institutions (hereafter also called institute) for development of products/packages.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/multiplier-grant- scheme-mgs
6	Scheme for Skill Development in ESDM for Digital India	MeitY had approved the Scheme "Skill Development in ESDM for Digital India" on 09.12.2014 with a total target of 3,28,000 candidates to facilitate creation of an eco- system for development of ESDM Sector in the entire country. The Scheme is being implemented by three Key Implementing Agencies (KIAs) namely NIELIT, ESSCI and TSSC.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/scheme- skill-development-esdm- digital-india

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
7	Special Economic Zones (SEZ) Scheme	As per the "Special Economic Zones Rules, 2006", notified by the Department of Commerce, in case a SEZ is proposed to be set up exclusively for electronics hardware and software, including information technology enabled services, the area shall be ten hectares or more with a minimum built up processing area of one lakh square meters.	https://www.meity.gov.in/electr onic-hardware-schemes#tab1
8	Support for International Patent Protection in Electronics & Information Technology	Ministry of Electronics and Information Technology has launched a scheme, Support for International Patent Protection in E&IT to provide financial support to MSMEs and Technology Startup units for international patent filing to encourage innovation and recognize the value and capabilities of global IP along with capturing growth opportunities in ICTE sector.	https://www.ict- ipr.in/sipeit/login
9	Support for international patent protection in electronics & inf ormation technology	SIP-EIT is a scheme to provide financial support to MSMEs and Technology Startup units for international patent filing to encourage innovation and recognize the value and capabilities of global IP along with capturing growth opportunities in ICTE sector.	https://www.ict- ipr.in/sipeit/SIPEITForm#:~:text= SIP%2DEIT%20is%20a%20schem e,growth%20opportunities%20in %20ICTE%20sector.
10	Technology Incubation and Development of Entrepreneurs	TIDE has a multipronged approach in diverse areas of Electronics, ICT and Management. It aims to assist institutions of higher learning to strengthen their Technology Incubation Centers and enable young entrepreneurs to initiate technology startup companies for commercial exploitation of technologies developed by them.	https://www.meity.gov.in/conte nt/technology-incubation- and-development- entrepreneurs
11	Visvesvaraya PhD Scheme for Electronics & IT	The scheme aims to enhance the number of PhDs in Electronics System Design and Manufacturing (ESDM) and IT/IT Enabled Services (IT/ITES) sectors in the country. "Visvesvaraya PhD Scheme" is an Institutional Scheme, where the PhD seats are allocated to the institutions and the institutes enroll the PhD candidates on these seats following their admission procedures.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/visvesvaraya- phd-scheme-electronics-it

Ministry of New and Renewable Energy (MNRE)



The Ministry of New and Renewable Energy (MNRE) is the nodal Ministry of the Government of India for all matters relating to new and renewable energy. The broad aim of the Ministry is to develop and deploy new and renewable energy to supplement the energy requirements of the country.

The role of new and renewable energy has been assuming increasing significance in recent times with the growing concern for the country's energy security. Energy selfsufficiency was identified as the major driver for new and renewable energy in the country in the wake of the two oil shocks of the 1970s. The sudden increase in the price of oil, uncertainties associated with its supply and the adverse impact on the balance of payments position led to the establishment of the Commission for Additional Sources of Energy in the Department of Science & Technology in March 1981. The Commission was charged with the responsibility of formulating policies and their implementation, programmes for development of new and renewable energy apart from coordinating and intensifying R&D in the sector. In September 1982, a new department, i.e., Department of Non-conventional Energy Sources (DNES), that incorporated CASE, was created in the then Ministry of Energy. In 1992, DNES became the Ministry of Non-conventional Energy Sources. In October 2006, the Ministry was renamed as the Ministry of New and Renewable Energy.

MNRE facilitates research, design, development, manufacture, and deployment of new and renewable energy systems/devices for transportation, portable and stationary applications in rural, urban, industrial and commercial sectors

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Central Public Sector Undertaking (CPSU) Scheme Phase-II	The objective of this scheme is to set up solar PV projects through Government Producers using domestic cells & modules in a WTO- compliant manner to facilitate national energy security and environmental sustainability for Government purposes.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/central-public- sector-undertaking-cpsu- scheme-phase-ii- government-producer- scheme-setting-12000-mw
2	Development of Solar Parks and Ultra Mega Solar Power Projects	The scheme envisages supporting the States/UTs in setting up solar parks at various locations in the country with a view to creating the required infrastructure for setting up solar power projects. The solar parks provide suitable developed land with all clearances, transmission systems, water access, road connectivity, communication network, etc.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/development- solar-parks-and-ultra-mega- solar-power-projects
3	Grid Connected Solar Rooftop Programme	The objective of this scheme is to create awareness, capacity building, human resource development, etc. and to promote sustainable business models.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/grid-connected- solar-rooftop-programme
4	New National Biogas and Organic Manure Programme (NNBOMP)	The objective of the scheme is to provide clean cooking fuel for kitchens, lighting, and meeting other thermal and small power needs of farmers/dairy farmers /users including individual households, and to improve organic manure system based on bio-slurry from biogas plants in rural and semi-urban areas by setting up of small size biogas plants of 1 to 25 Cubic Metre capacity.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/new-national- biogas-and-organic-manure- programme-nnbomp
5	Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyan	The scheme aims to add solar and other renewable capacity of 25,750 MW by 2022 with total central financial support of Rs. 34,422 Crore including service charges to the implementing agencies.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/pradhan- mantri-kisan-urja-suraksha- evam-utthaan-mahabhiyan
6	Scheme for Setting up of Distributed Grid- Connected Solar PV Power Projects in Andaman & Nicobar and Lakshadweep Islands with Capital Subsidy from MNRE	The objective of this scheme is to develop Carbon Free Islands by phasing out use of diesel for generation of electricity and to contribute to the National Action Plan on Climate Change and Greening of the Islands along with reduction in cost of electricity generation. The scheme is being implemented through Central Public Sector Undertakings (CPSUs) viz., NTPC, NLC, REIL, SECI etc. on Build, Own and Operate (BOO) basis.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/scheme-setting- distributed-grid-connected- solar-pv-power-projects- andaman-nicobar-and- lakshadweep

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
7	Scheme for setting up of over 5000 MW Grid-connected SPV power projects under IV of JNNSM PHASE-II	The objective of this scheme is Setting up of over 5000 MW Grid-connected SPV power projects under IV of JNNSM PHASE-II and scaling up of sizes of projects thereby leading to economies of scale.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/scheme-setting- over-5000-mw-grid- connected-spv-power- projects-under-iv-jnnsm- phase-ii
8	Small Hydro Power Programme	The objective of the SHP scheme is to encourage the State Government entities and Independent Private Producers (IPPs) to set up new Small Hydro projects so as to realize the entire 21000 MW potential in a phased manner.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/small-hydro- power-programme
9	Biogas Power Generation (Off- Grid) and Thermal energy application Programme (BPGTP)	The aim of the scheme is to promote biogas- based Decentralized Renewable Energy Sources of power generation (Off-Grid), in the capacity range of 3 kW to 250 kW or thermal energy for heating/ cooling applications from the biogas generation produced from Biogas plants of 30 M3 to 2500 M3 size.	https://www.indiascienceandte chnology.gov.in/listingpage/all -programmes- schemes?field_ministries_tid= 4758&field_program_schemes _type_tid=All
10	Renewable Energy Research and Technology Development (RE- RTD) Programme	renewable energy such as solar photovoltais systems, biogas systems, waste to energy	https://cdnbbsr.s3waas.gov.in/s3 716e1b8c6cd17b771da7739135574 9f3/uploads/2023/01/2023011018. pdf
n	National Renewable Energy Fellowship (NREF)	Fellowships will be provided for pursuing higher studies in renewable energy viz. M.Sc, M. Tech, Ph.D in renewable Energy technologies. Research Associates, Post- Doctoral Fellows will be provided financial support in MNRE institutions and other key institutions to pursue advanced research.	https://mnre.gov.in/fellowships -in-higher-studies-and- research/
12	National Renewable Energy Science Fellowship (NRESF)	Ministry supports National Renewable Energy Science Fellowship (NRESF) to provide a platform to young scientists to pursue advanced research in development of frontier RE technologies/systems. The targeted beneficiaries will be Ph.D degree holders in the field of science / engineering with specialization in RE/ and renewable energy sciences, with outstanding track record with experience of at least ten years.	https://mnre.gov.in/fellowships -in-higher-studies-and- research/

Ministry of Heavy Industries



The Ministries of Heavy industry is concerned with the development of the Heavy Engineering and Machine Tools Industry, Heavy Electrical Engineering Industry and Automotive Industry and administering the following 40 Central Public Sector Enterprises (CPSEs) and their subsidiaries and four autonomous bodies.



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Technology Acquisition Fund Programme (TAFP)	Under the scheme, the funding is provided for exploring opportunities for Accelerated technology upgradation through Acquiring Technologies for specific projects and Activities. The Illustrative list of eligible activities include Technology, Energy, Efficiency, Productivity, Quality Audit, Evaluation, Assessment Studies and preparatory activities. Government grant is limited to 25% of the cost of Technology Acquisition and maximum amount shall not exceed Rs.10 crore per technology The implementing partner for the scheme is Global Innovation & Technology Alliance (GITA; https://www.gita.org.in/), a is a "not- for-profit" Section-8 Public Private Partnership (PPP) company promoted jointly by the Technology Development Board (TDB), Department of Science & Technology (DST), Government of India and the Confederation of Indian Industry (CII).	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/technology- acquisition-fund-programme- tafp
2	PLI Scheme for National Programme on Advanced Chemistry Cell (ACC) Battery Storage	National Programme on Advanced Chemistry Cell (ACC) Battery storage was approved by the Union Cabinet on 12.05.2021 with budgetary outlay of Rupee 18,100 crores. This scheme will strengthen the ecosystem for Electric Mobility and Battery Storage in the country. The scheme envisages to enhance India's manufacturing capabilities of Advanced Chemistry Cell (ACC) by setting up of Giga scale ACC and battery manufacturing facilities in India with emphasis on maximum domestic value addition. This scheme will promote Make in India initiative.	https://heavyindustries.gov.in/ pli-scheme-national- programme-advanced- chemistry-cell-acc-battery- storage

Department of Space



The Department of Space (DOS) has the primary objective of promoting development and application of space science and technology to assist in all-round development of the nation.Towards this, DOS has evolved the following programmes :

• Launch Vehicle programme having indigenous capability for launching spacecrafts.

• INSAT Programme for telecommunications, broadcasting, meteorology, development of education etc.

• Remote Sensing Programme for application of satellite imagery for various developmental purposes.

• Research and Development in Space Sciences and Technology for serving the end of applying them for national development.

Organisation With the setting up of Indian National Committee for Space Research (INCOSPAR) in 1962, the space activities in the country were initiated. In the same year, the work on Thumba Equatorial Rocket Launching Station (TERLS) near Thiruvananthapuram was also started. Indian Space Research Organisation (ISRO) was established in August 1969. The Government of India constituted the Space Commission and established the Department of Space (DOS) in June 1972 and brought ISRO under DOS in September 1972.



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S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	RESPOND (Sponsored Research)	ISRO started the RESPOND (Sponsored Research) programme in the 1970s, with the objective of encouraging academia to participate and contribute in various Space related research activities. Under RESPOND, projects are taken up by Universities/Academic Institutions in the areas of relevance to Space Programme. ISRO has evolved the RESPOND programme through which necessary financial and technical support is provided to academia in India for conducting research and development activities related to Space Science, Space Technology and Space Applications. This is the flagship programme of ISRO to promote the extra-mural research in emerging areas of Space at Academia.	https://www.indiasciencean dtechnology.gov.in/progra mme-schemes/research- and- development/respond- sponsored-research
2	Aatmanirbha r Bharat ARISE-ANIC	The Aatmanirbhar Bharat ARISE-ANIC program is a national initiative to promote research & innovation and increase competitiveness of Indian startups and MSMEs. The objective is to proactively collaborate with esteemed Ministries and the associated industries to catalyse research, innovation and facilitate innovative solutions to sectoral problems. The objective is also to provide a steady stream of innovative products & solutions where the Central Government Ministries / Departments will become the potential first buyers.	https://www.indiasciencean dtechnology.gov.in/progra mme-schemes/startup- support/aatmanirbhar- bharat-arise-anic
3	Space Enterprise Encourageme nt & Development (SEED)	Space Enterprise Encouragement & Development (SEED) is envisaged as a competitive early stage encouragement program to innovative small business concerns/start-ups, interested in developing products/services in focus areas of interest to ISRO. A formal mechanism for the above program will be announced.	https://www.indiasciencean dtechnology.gov.in/progra mme-schemes/startup- support/space-enterprise- encouragement- development-seed
4	YUVIKA - YUva Vlgyani KAryakram (Young Scientist Programme)	The ISRO young scientist programme has been started, with the broad objective of imparting basic knowledge of space technology, space science and space applications to younger ones. The programme includes 2 weeks residential training, involving 4 centers of ISRO viz. VSSC, URSC, SAC and NESAC and a visit to SDSC, SHAR as a part of the programme. The schedule will include invited talks, experience sharing by the eminent scientists, experimental demonstration, facility and lab visits, exclusive sessions for discussions with experts, practical and feedback sessions.	https://www.indiasciencean dtechnology.gov.in/progra mme-schemes/human- resource-and- development/yuvika-yuva- vigyani-karyakram-young- scientist-programme

Defence
Research &
Development
Organisation
(DRDO)

DRDO is the R&D wing of Ministry of Defence, Govt of India, with a vision to empower India with cutting-edge defence technologies and a mission to achieve self-reliance in critical defence technologies and systems, while equipping our armed forces with state-of-the-art weapon systems and equipment in accordance with requirements laid down by the three Services. DRDO's pursuit of self-reliance and successful indigenous development and production of strategic systems and platforms such as Agni and Prithvi series of missiles; light combat aircraft, Tejas; multi-barrel rocket launcher, Pinaka; air defence system, Akash; a wide range of radars and electronic warfare systems; etc., have given quantum jump to India's military might, generating effective deterrence and providing crucial leverage.

DRDO was formed in 1958 from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO). DRDO was then a small organisation with 10 establishments or laboratories. Over the years, it has grown multi-directionally in terms of the variety of subject disciplines, number of laboratories, achievements and stature.

Today, DRDO is a network of around 41 laboratories and 05 DRDO Young Scientist Laboratories (DYSLs) which are deeply engaged in developing defence technologies covering various disciplines, like aeronautics, armaments, electronics, combat vehicles, engineering systems, instrumentation, missiles, advanced computing and simulation, special materials, naval systems, life sciences, training, information systems and agriculture. Several major projects for the development of missiles, armaments, light combat aircrafts, radars, electronic warfare systems etc are on hand and significant achievements have already been made in several such technologies.

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	DRDO Aeronautics Research & Development Board Grant- in-aid Scheme	The scheme aims to encourage and fund basic and applied re search in pertinent scientific disciplines directly relevant to our aeronautical systems needed for future by enabling and supporting emerging talents, particularly in academic and research institutions to create and evolve a potential knowledge-base system applicable to future aeronautics needs of the country.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/drdo- aeronautics-research- development-board-grant- aid-scheme
2	DRDO Armaments Research Board-Grant- in-aid scheme	To enlarge the scientific community in India in the field of armament technology by harnessing and nurturing the research talent available in various academic & research institutions and to develop expertise and technologies in the field of armaments and also in certain cases having direct application to ongoing projects with DRDO.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/drdo- armaments-research-board- grant-aid-scheme
3	DRDO Life Sciences Research Board-Grant- in-aid scheme	The Life Sciences Research Board (LSRB) was set up to support and strengthen research base in the area of life sciences through projects under Grant-in-Aid Scheme to meet the national needs of Defence Services. To expand and deepen the knowledge base in the area of life sciences in order to harness and nurture the research talent in the academic institutions of the country to meet the national needs of Defence Services.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/drdo-life- sciences-research-board- grant-aid-scheme
4	DRDO Naval Research Board-Grant- in-aid scheme	Naval Research Board (NRB) of Defence Research and Development Organization (DRDO) was set up in September 1996 to strengthen and deepen the knowledge base related to the Naval Science & Technologies. The Board has instituted a Grants-in-Aid Scheme to nurture scientific talent to create research base in IITs, Universities, higher technological institutions, colleges and other research centers in the country.	https://www.drdo.gov.in/drdo/n aval-research- board/submission-proposals.
5	Technology Development Fund (TDF)	Technology Development Fund (TDF) has been established to promote self-reliance in Defence Technology as a part of the 'Make in India' initiative. It is a programme of MoD (Ministry of Defence) executed by DRDO to meet the requirements of Tri-Services, Defence Production and DRDO.	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/technology- development-fund-tdf

Department of Atomic Energy (DAE)



The Department of Atomic Energy (DAE) was set up under the direct charge of the Prime Minister through a Presidential Order on August 3, 1954. As per this order, all businesses of the Government of India, related to Atomic Energy and to the functions of the Central Government under the Atomic Energy Act, 1948 (XXIX of 1948) were directed to be transacted in the Department of Atomic Energy.

Research and development for the peaceful uses of atomic energy had made important and rapid strides by the year 1958. These developments called for an organisation with full authority to plan and implement the various measures required for the expansion of the atomic energy programme. Accordingly, the Atomic Energy Commission with full executive and financial powers was set up by the Government through a resolution dated March 1, 1958. The Atomic Energy Commission is responsible for formulating the policy of the Department of Atomic Energy.

DAE is at the fore-front of research and development, leveraged by a strong synergy between R&D and technology development in a number of core disciplines of national and international importance. DAE continued to develop and deploy spin-off technologies for societal applications like advanced seed and crop varieties, food preservation, clean water, urban waste management, etc.



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	DAE Doctoral Fellowship Scheme (DDFS)	The aim of the programme is to provide an opportunity to work on projects of interest to DAE to those students who aspire to attain the highest academic qualification, to achieve the basic objective of strengthening linkages between the grant-in-aid institutions and the research centres for the benefit of advancing the pace of research in nuclear sciences, and to accelerate the speed to translating R&D into technology products and their applications.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-doctoral- fellowship-scheme-ddfs-0
2	DAE Doctoral Fellowship Scheme (DDFS)	Human Resource Development Division (HRDD), Bhabha Atomic Research Centre (BARC) invites applications from Engineering post-graduates (M. E. / M. Tech. / Equivalent Degree) for admission to DAE Doctoral Fellowship Scheme (DDFS) formerly known as DGFS- Ph.D for pursuing Ph.D under the aegis of Homi Bhabha National Institute (HBNI) a Deemed to be University, commencing from August, 2021.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-doctoral- fellowship-scheme-ddfs
3	DAE Graduate Fellowship Scheme (DGFS- M.Tech.)	To attract such individuals, DGFS was initiated for inducting engineers at M.Tech./M.Chem.Engg. level in collaboration with eight IITs viz. Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras, Roorkee, BHU- Varanasi and also NIT-Rourkela and ICT- Mumbai. The scheme also strengthens the research-education linkage with premier institutes of the country in areas of interest to DAE. The M. Tech. project work is carried out under the supervision of two guides, one from IIT and the other from DAE.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-graduate- fellowship-scheme-dgfs- mtech
4	DAE Graduate Fellowship Scheme for Engineering Graduates and Physics Postgraduates	Many young professionals like to start their careers only after acquiring an advanced degree. To attract such individuals, DGFS was initiated for inducting engineers at M.Tech./M.Chem.Engg. level in collaboration with eight IITs viz. Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras, Roorkee, BHU- Varanasi and also NIT-Rourkela and ICT- Mumbai. The scheme also strengthens the research-education linkage with premier institutes of the country in areas of interest to DAE.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-graduate- fellowship-scheme- engineering-graduates-and- physics-postgraduates

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
5	DAE Young Scientist Research Award	The main objective of the scheme is to encourage young scientists in the initial years of settling down in their career. Highly qualified young scientists are provided with the necessary grants for research in setting up their first laboratories. The scheme is particularly aimed at NRI scientists willing to return to the country.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/dae- young-scientist-research- award
6	DAE- Raja Rammana Fellowship (RRF)	Department of Atomic Energy is pursuing a national level fellowship scheme known as "Raja Ramanna Fellowship Scheme" which is intended to utilize the services of active retired scientists, engineers and technologists, who have been involved in high quality research in their specialized disciplines in the units of the DAE or any National Laboratory or University or Institute and who after retirement are keen to carry out R&D in the field of their choice and of interest to the DAE.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-raja- rammana-fellowship-rrf
7	DAE-Relevant Research Project (RP)	Board of Research in Nuclear Sciences (BRNS) supports high quality research & development on advanced concepts of relevance to DAE. The key objective is to encourage and promote scientific research in areas of relevance to the mandate of DAE in research groups outside DAE to derive benefits from their expertise.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-relevant- research-project-rp
8	DAE-Symposia and Conferences	DAE considers presentation and discussion of the results of R&D in open meetings as an important activity for the promotion of science and technology. Department also sends promising DAE researchers abroad to pursue post-doctoral research work and also to attend and participate in symposia/conferences	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae-symposia- and-conferences
9	DAE— Homi Bhabha Chair for Distinguished Scientists /Professors	The DAE— Homi Bhabha Chair for Distinguished Scientists /Professors is a scheme to give recognition and opportunity to outstanding Scientists and Engineers including those retired/superannuated scientists/engineers who were involved in the development of sensitive and/or critical technologies to carry out research and development work in the fields of their choice and of interest to DAE.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae%E2%80%94- homi-bhabha-chair- distinguished-scientists- professors-0

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
10	DAE— Homi Bhabha Chair for Distinguished Scientists /Professors	In order to give recognition and an opportunity to outstanding Scientists and Engineers including those retired/superannuated scientists/engineers there shall be a Scheme known as the DAE— Homi Bhabha Chair for Distinguished Scientists /Professors.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dae%E2%80%94- homi-bhabha-chair- distinguished-scientists- professors
11	Dr. K.S.Krishnan Research Associateship (KSKRA)	With an objective of encouraging talented science and engineering doctorates to pursue a career in scientific research in the field of atomic energy, BRNS instituted a scheme named after the renowned physicist, Dr K. S. Krishnan. Under this scheme Research Associates are inducted for a period of two one year.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dr-kskrishnan- research-associateship-kskra
12	Initiatives by Homi Bhabha National Institute	In this scheme scientists belonging to Indian S&T diaspora may be invited as visiting faculty members to some of the Constituents Institutes (Cis) of Homi Bhabha National Institute. It is possible to admit foreign students to five of the constituent institutions of HBNI viz. National Institute of Science Education and Research (NISER).	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/initiatives-homi- bhabha-national-institute
13	Orientation Course for Engineering Graduates and Science Postgraduates (OCES)	OCES is the flagship program of the BARC Training Schools for Engineering Graduates and Science Postgraduates. The Training Program aims to ensure that the Trainee Scientific Officers (TSOs) are provided with the necessary facilities and opportunities to acquire knowledge and develop skills in R&D pertaining to Nuclear Science & Technology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/orientation- course-engineering- graduates-and-science- postgraduates-oces
14	DAE-Scientific Research Council (DAE- SRC) Award	The DAE SRC proposes to set up Frontier Area Research Units around outstanding individuals in order to impart a fresh momentum to advanced research in the areas of science and engineering of interest to DAE.	https://www.indiascienceandte chnology.gov.in/funding- opportunities/research- grants/individual/dae- scientific-research-council- dae-src-award
15	DAE Young Scientist Research Award (DAE- YSRA)	The main objective of the scheme is to encourage young scientists in the initial years of settling down in their careers. Highly qualified young scientists are provided with the necessary grants for research in setting up their first laboratories.) is applicable to only scientists below the age of 35 years.	https://www.indiascienceandte chnology.gov.in/funding- opportunities/research- grants/individual/dae-young- scientist-research-award- dae-ysra

Indian Council of Medical Research (ICMR)



The Indian Council of Medical Research (ICMR), New Delhi, the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world.

The ICMR has always attempted to address itself to the growing demands of scientific advances in biomedical research on the one hand, and to the need of finding practical solutions to the health problems of the country, on the other. The ICMR has come a long way from the days when it was known as the IRFA, but the Council is conscious of the fact that it still has miles to go in pursuit of scientific achievements as well as health targets.



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Clinical Training/Transl ational Research Workshops	The objective of this scheme is to give grant for giving hands-on training for any specific clinical procedures to medical students or young clinicians/scientists in the selected/related field	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/clinical- trainingtranslational-research- workshops
2	Financial Support for MD/MS/DM/MC h/DNB/DrNB/M DS Thesis	This Scheme is primarily aimed at promoting good quality research in medical college's students pursuing post graduation courses as well as to improve visibility and accessibility of their research work to larger research audience.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/financial- support- mdmsdmmchdnbdrnbmds- thesis
3	ICMR -Adjunct Faculty Scheme	The objectives of Adjunct Faculty scheme is to develop and promote strong collaboration among medical/ academic/scientific institutions/universities; To promote cutting edge research in the country; To promote trans-disciplinary approach and synergize the outside real world with the inside intellectual pursuits of ICMR-Hqrs and ICMR institutes	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr-adjunct- faculty-scheme
4	ICMR Centre For Advanced Research (ICMR-CARE)	This scheme was formulated to encourage in- depth research on an identified research problem with the aim of generating new knowledge and having a better understanding of a disease or a health condition. A scientist with outstanding achievements and recognition in a given field can approach ICMR with a specific proposal.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr-centre- advanced-research-icmr-care
5	ICMR Chairs for Sr. Retired Medical / Biomedical Teachers/ Scientists	There are two types of Chairs: Dr. C. G. Pandit National Chairs and Dr. A. S. Paintal Distinguished Scientist Chairs of ICMR to utilize the services of senior eminent medical/ biomedical researchers to serve as think tanks for the organization for strengthening and shaping up its research and human research agenda. On the lines of such Chairs/ positions being available in various science/academic agencies of ICMR.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr-chairs-sr- retired-medical-biomedical- teachers-scientists
6	ICMR Emeritus Scientist Scheme	This scheme is primarily aimed at engaging retired scientist who have been actively engaged in biomedical research of a high standard.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr-emeritus- scientist-scheme

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
7	ICMR Extramural Ad- Hoc	To promote research in the country in the field of biomedical research ICMR provides financial support in the form of ad-hoc projects to Scientists / Professionals who have a regular employment. Types of Extramural Research Programme 1.1. Short duration low cost proposals 1.2. Ad-hoc project – Investigator defined 1.3. Task Force project – Solve a pre-defined problem (Centrally identified) 1.4. Cohort study 1.5. National Registry 1.6. Centers of Advanced Research (CAR) 1.7. Capacity building / support for sustained high quality research.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr- extramural-ad-hoc
8	ICMR International Fellowship Programme For Biomedical Scientists From Developing Countries	The objective of this scheme is that India can take a lead in sharing and offering opportunities to scientists from developing countries to come and work in Indian institutes/laboratories.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/icmr- international-fellowship- programme-biomedical- scientists-developing- countries
9	ICMR Nurturing Clinical Scientists Scheme	The focus of this scheme is to foster high- quality research opportunities for fresh MBBS/BDS candidates, within two years of completing their degrees in the cutting edge areas, fundamental Basic/Clinical Research incommunicable and non-communicable diseases, and reproductive health including nutrition, etc. at MCI/DCI recognized medical colleges/ICMR network of Institutes/Centers, among others. In this scheme is Special focus will be on fundamental research in areas of health research and other priority areas	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/icmr- nurturing-clinical-scientists- scheme
10	ICMR- Post Doctoral Research	ICMR Post doctoral Research Scheme is being instituted to foster high quality research opportunities to promising fresh Ph.D./ MD/MS holders in the cutting edge areas of basic science, communicable and non communicable diseases, and reproductive health including nutrition at ICMR Institutes /Centers. Special focus will be on fundamental research in areas of science and other priority areas identified by ICMR from time to time.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr-post- doctoral-research
11	ICMR Scheme For MD/MS-PhD Programme	The programme is designed to identify young medical graduates with brilliant academic records for pursuing postgraduate qualifications & to motivate them to opt for career in its research cadre.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/icmr-scheme- mdms-phd-programme

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S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
18	Joint Collaboration with industry for Salmonella Vaccine	joint collaboration in R&D, manufacturing, and commercialization of broad specificity Salmonella vaccine useful against typhoid and paratyphoid fever and Salmonella Typhimurium gastroenteritis	https://main.icmr.nic.in/call%20 for%20proposals
19	Medical Innovation	The scheme is aimed to promote innovation and creativity in biomedical research among the scientists of Council. These proposals are meant for pursuing hitherto unreported, novel ideas having far reaching scientific and medical implications. The scheme is for individuals or a group of collaborating scientists and is non transferable .The scheme is intended to be carried out by ICMR institutes where basic infrastructure already exists.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/medical- innovation
20	Programme to encourage research personnel (NRI, PIO, OSI) serving abroad, to come back to India for undertaking health research in identified areas	This Scheme has been designed to provide contractual research positions to the Indian scientists settled abroad who are willing to come back to India on a fulltime basis or for short duration to pursue medical/health research in India and take up health research projects in collaboration with Indian scientists, particularly in areas of national priority	https://www.indiascience andtechnology.gov.in/pro gramme- schemes/research-and- development/programm e-encourage-research- personnel-non-resident- indiannri-persons- indian-origin-pio- overseas
21	Short Term Studentship (STS)	The objective of this program is to provide an opportunity to undergraduate medical students to familiarize themselves with research methodology and techniques by being associated for a short duration with their seniors on ongoing research program or by undertaking independent projects.	https://www.indiascience andtechnology.gov.in/pro gramme- schemes/research-and- development/short- term-studentship-sts

Department of Biotechnology (DBT)



Biotechnology is a frontline area of science with immense potential for the benefit of the human kind. The Department shall devote wholly to achieve excellence in the promotion of biotechnology in the country within the ambit of the Allocation of Business Rules, 1961. The Department shall provide services in the areas of research, infrastructure, generation of human resource, popularization of biotechnology, promotion of industries, creation of centers of excellence, implementation of biosafety guidelines for genetically modified organisms and recombinant DNA products and biotechnology-based programs for societal benefits. Bioinformatics is a major mission to establish an information network for the scientific community, nationally and internationally. The mission is:

1. Realising full potential of biotechnology

2. A well directed effort, significant investment for generation of products, processes and technologies

3. Enhance efficiency and productivity and cost-effectiveness of agriculture, nutritional security, molecular medicine, environmentally sustainable technologies, scientific and technological empowerment of human resource, a strong infrastructure for research and commercialization, enhance the knowledge base, nurturing the lead of potential utility, bringing the bioproducts to the market place

4. Socio-economic development / applicants of biotech for upliftment of women, rural, SC & ST population

5. Promote biotech industry



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S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
١	Agriculture Biotechnology	The scheme involves genomic level research for effectively tackling problems of biotic/abiotic stresses and aims towards enhancement of crop productivity, and for improvement of their nutritional quality.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/agriculture- biotechnology
2	Animal Health	The scheme aims for development of affordable new generation vaccines and diagnostics against a plethora of animal diseases. The emphasis is to suffix "C" to the R & D programmes to make way for the 'commercialization' of the developed leads, products and processes.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/animal-health
3	Animal Production	The programme aims to enhance production and productivity of livestock sector through biotechnological interventions in nutrition, breeding, genetics and byproducts etc; to provide R&D support for generation of new knowledge in the priority areas of livestock production, to develop skill pool to meet R&D requirements of the sector and to achieve excellence in innovation.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/animal- production
4	Basic Research in Modern Biology	The main focus areas include Biochemistry, Cell & Molecular Biology, Structure Biology & Biophysics, Cellular & Molecular Immunology, Microbiology, Plant Molecular Biology, Synthetic Systems & Chemical Biology, and Reproductive & Developmental Biology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/basic-research- modern-biology
5	Bio-systems and Bioprocess Engineering	The scheme aims to find innovative and efficient solutions for the development and improvement of sustainable bioprocesses of commercial interest, taking into account the environmental requirements and constraints involved in large scale production processes.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/bio-systems- and-bioprocess-engineering
6	Bioincubators Nurturing Entrepreneursh ip For Scaling Technologies (Bio-NEST)	This scheme is for nurturing entrepneurship for scaling technologies	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/bioincubators- nurturing-entrepreneurship- scaling-technologies-bio-nest
7	Biotech Parks & Incubators	These Biotech Parks and Incubators across the country are made to translate research into products and services by providing necessary infrastructure support. These Biotechnology Parks offer facilities to SMEs for technology incubation, technology demonstration and pilot plant studies for accelerated commercial development.	https://www.indiascienceandte chnology.gov.in/programme- schemes/startup- support/biotech-parks- incubators

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
8	Biotech Science Clusters	The aim to establish Biotech Science Clusters is to make India a world-class bio- manufacturing hub by creating a technology development and translation network across the country through the establishment of bio clusters, incubators, technology transfer centres etc. Till now Four Bioclusters have been established at Faridabad, Bangalore, Kalyani, and Pune to spur innovative research and development and entrepreneurship activities.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/biotech-science- clusters
9	Biotech Urjit Cluster Scheme	BIOTECH URJIT CLUSTER i.e. "University Research Joint Industry Translational Cluster" in the country aims to synergize resources between institutions, Universities research laboratories, industries and SMEs for technology & product development and building enterprises. This call addresses Indian National research laboratories focusing on life sciences in collaboration with universities, medical schools, technical institutes, industries, incubators, SMEs in the life sciences sector with a proven track-record on research, technology and product development.	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/biotech-urjit- cluster-scheme
10	Biotechnology based Programme for Women	In women sector, large number of women including SHGs benefitted directly through biotech packages for floriculture, horticulture, cultivation of mushrooms, medicinal and aromatic plants, bio-fertilisers, organic farming, vermicomposting, sericulture, aquaculture, animal husbandry, poultry farming and making of bio-crafts.	https://www.indiascienceandte chnology.gov.in/programme- schemes/women- schemes/biotechnology- based-programme-women
11	Biotechnology Career Advancement & Re- orientation Programme (BioCARe)	The programme is for Career Development of employed/ unemployed women Scientists upto 45 years of age for whom it is the first extramural research grant.	https://www.indiascienceandte chnology.gov.in/programme- schemes/women- schemes/biotechnology- career-advancement-re- orientation-programme- biocare
12	Biotechnology Career Advancement and Re- orientation Programme (Bio-CARe) for Women Scientists	Biotechnology Career Advancement and Re- orientation Programme (Bio-CARe) is mainly for Career Development of employed/ unemployed women Scientists upto 55 years of age for whom it is the first extramural research grant. The scheme is open for all areas of Life Sciences.	https://www.indiascienceandte chnology.gov.in/programme- schemes/women- schemes/biotechnology- career-advancement-and-re- orientation-programme-bio- care-women-scientists

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
13	Biotechnology Entrepreneursh ip Student Teams (BEST)	BEST-India is a programme aimed at encouraging young postgraduates and doctoral students in developing biotechnology entrepreneurship by exposing them to issues involved in commercialisation of bioscience.	https://www.indiascienceandte chnology.gov.in/programme- schemes/international/biotech nology-entrepreneurship- student-teams-best
14	Biotechnology Labs in Senior Secondary schools (BLiSS) of NER	DBT has initiated this scheme for establishing "Biotechnology Labs in Senior Secondary schools (BLISS)" in NER. The BLISS program has strengthened the practical teaching within the schools by imparting excellent practical training for their students as per their syllabus in class 11th and 12th.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and- development/biotechnology- labs-senior-secondary- schools-bliss-ner
15	Biotechnology Programme for Societal Development	The aim of Biotechnology based programme for societal development is the socio- economic upliftment of the underprivileged section of the society.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/biotechnology- programme-societal- development
16	BIRAC - NESTA	BIRAC has collaborated with Nesta, a UK based innovation charity organization, for creating a pipeline of innovators for the Longitude Prize, in the area of Antimicrobial Resistance (AMR).	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/birac-nesta
17	BIRAC- Wellcome Trust Partnership	The objective of this initiative is to fund translational research projects to deliver safe and effective healthcare products for India at affordable costs though collaborative research. This scheme is open for all biotechnology entrepreneurs.	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/birac-wellcome- trust-partnership
18	CEFIPRA - BPI FRANCE	This CEFIPRA - BPI FRANCE partnership is for promotion of Advanced Research in India to support high quality bilateral research, encourage and enable Indo-French collaboration between public, private research groups, industry, clinicians and end- users.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/cefipra-bpi- france
19	Clinical/Public Health Research Centres Scheme	DBT/Wellcome Trust India Alliance initiated this scheme with the aim to improve clinical and public health research ecosystems in India to bridge gaps in human resource, supervision, mentorship, equipment, and administration by establishing virtual Clinical/Public Health Research Centres. The CRCs are envisioned as research-oriented centres established with focus on major biomedical research problems and preferably involving multiple institutions.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/clinicalpublic- health-research-centres- scheme

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
20	Contract Research Scheme (CRS)	Contract Research Scheme (CRS) aims at validation of a process or prototype developed by the academia by the industrial partner/LLP	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/contract- research-scheme-crs
21	Coordination with States and Aspirational Districts	This program focusses closely on improving people's ability to participate fully in the burgeoning economy. Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development, and Basic Infrastructure are this programme's core areas of focus.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/coordination- states-and-aspirational- districts
22	DBT - Scientific Infrastructure Access for Harnessing Academia University Research Joint Collaboration (DBT-SAHAJ Infrastructure)	The primary goal of DBT-SAHAJ Infrastructure is to create "national" service facility/ research resource/platform and to provide access to resources that could not be provided by any single researcher's laboratory or scientific department but required for data acquisition, analysis and providing the proof of concept to cater the needs of a larger community.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dbt-scientific- infrastructure-access- harnessing-academia- university-research-joint- collaboration-dbt
23	DBT junior research fellowship (DBT- JRF) Programme	DBT JRF program was initiated in 2004 to provide fellowships for biotech students pursuing research in universities and / or research institutions in the country.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/dbt-junior- research-fellowship-dbt-jrf- programme
25	DBT- Boost to University Interdisciplinar y Life Science Departments for Education and Research Programme (DBT-BUILDER)	The objective is to upgrade the post-graduate teaching and training laboratories in terms of optimal infrastructure such as, renovation of existing laboratory and cold room, modernization of laboratories involved in PG teaching, acquisition of essential equipment, up- gradation of existing facilities, networking & computational facilities including software & databases, scientific & technical books, maintenance & refurbishing of existing and new facilities, appoint new faculty, provide fellowships for students, introduce training programmes regroup research activities along the biotechnology innovation chain, promote academia industry interaction depending upon the strengths and weaknesses of specific universities.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/dbt-boost- university-interdisciplinary-life- science-departments- education-and-research- programme-dbt

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
26	DBT-BMGF (Bill & Melinda Gates Foundation)	MoU has been signed between DBT and Bill & Melinda Gates Foundation to address global health & development needs in developing countries. The projects / initiatives would be jointly funded by DBT & BMGF.	https://www.indiascienceandte chnology.gov.in/programme- schemes/international/dbt- bmgf-bill-melinda-gates- foundation
27	DBT-Crest Award	In keeping with the advancement of global networks for the development of science and the Department's priority toward capacity building in human resources, the DBT Cutting- edge Research Enhancement and Scientific Training Award (DBT-CREST Award) provides fellowships to researchers for advanced scientific training abroad.	https://www.indiascienceandte chnology.gov.in/programme- schemes/international/dbt- crest-award
28	DBT-Wellcome Trust Alliance	Four categories of fellowships are awarded every year, namely (i) 40 Early-career fellowships (with one year post-doctoral experience), (ii) 20 Intermediate fellowships (with 3-6 years of post-doctoral experience), (iii) 10 Senior Fellowships, and (iv) Margdarshi fellowships.	https://www.indiascienceandte chnology.gov.in/programme- schemes/international/dbt- wellcome-trust-alliance
30	Energy Biosciences- Biofuel	The programme supports the R&D toward development of cost effective next generation biofuels like algal biodiesel, cellulosic ethanol, bio butanol and bio hydrogen. While the government is garnering efforts to make India the clean energy world capital, the Department of Biotechnology (DBT) has flagged clean energy and Swachh Bharat— waste to energy, as two of its key missions.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/bioenergy
31	Environmental Biotechnology	The aim of the Biodiversity Conservation and Environmental Biotechnology programme is to solve environmental problems in a sustainable way through the use of biotechnology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/environmental- biotechnology
32	European Union	Department of Biotechnology (DBT) is partnering with EU through the framework of ERA-NET as well as India specific ERA-NET called New Indigo. After successful completion of New Indigo, DBT is partnering with India specific ERA NET called INNO Indigo. India has partnered recently in INFECT-ERA NET as well as Indigo Policy	https://www.indiascienceandte chnology.gov.in/programme- schemes/international/europe an-union

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
33	Genome Engineering Technologies and their applications	This Scheme supports proposals related to creation of core facilities for making state-of- the-art genomic technologies accessible; pre-, post-, and genomic pipelines and platforms; data analysis and informatics; innovation on existing technologies for easy adoption; new applications of existing genomic technologies; training programs and workshops; exchange visits and programs for development of inter-disciplinary human resources.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/genome- engineering-technologies- and-their-applications
34	IND-Coalition for Epidemic Preparedness Innovations (CEPI)	Ind-CEPI Mission aims to strengthen the development of vaccines for the diseases of epidemic potential in India as well as build coordinated preparedness in the Indian public health system and vaccine industry to address existing and emergent infectious threats in India	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/ind-coalition- epidemic-preparedness- innovations-cepi
35	Infectious Disease Biology Programme	The emphasis of the programmes supported is to develop preventive, therapeutic and diagnostic tools for major infectious diseases like Hepatitis, Influenza, Chikungunya, Malaria, Leishmaniasis, HIV/AIDS, Dengue, etc.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/infectious- disease-biology-programme
36	Innovate in India (i3) under National Biopharma Mission	The programme aims to make India a hub for development of affordable & effective biopharmaceutical products and aspires to create an enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the sector. Launched in 2017, in collaboration with World Bank, it is meant for all biopharmaceutical entrepreneurs and will accelerate discovery research to early development for Biopharmaceuticals.	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/innovate-india- i3-under-national-biopharma- mission
37	Make in India & Start-up India	Make-in-India (MII) and Start-up India is a flagship initiative of the Government of India, intended to build a strong eco-system for nurturing innovation and startups in the country that will drive sustainable economic growth and generate large-scale employment opportunities.	https://www.indiascienceandte chnology.gov.in/programme- schemes/startup- support/make-india-start- india
38	Medicinal Plants, Phytopharma and other Bioresources	The objective of this program is to provide research support across the country towards developing products and processes from medicinal and aromatic plants following multi-disciplinary approach. The aim is to develop a herbal drug pipeline.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/medicinal- plants-phytopharma-and- other-bioresources

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
39	Nanobiotechno logy	The objectives of this programme are to advance research in the cutting edge areas of Nano biotechnology, foster innovations and promote translational research in collaboration mode to address various issues in the areas of health, agriculture, food and environment through basic and applied Nano biotechnological research interventions.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/nanobiotechnolo gy
40	Patent Facilitation	The objective of this is to create awareness and understanding among the biologists and biotechnologists relating to patents and the challenges and opportunities in this area. Arranging workshops, seminars, conferences, and so on at all levels along with this it also helps in Introducing patent information as a vital input in the process of promotion of R & D programs in biotechnology and biology.	https://www.indiascienceandte chnology.gov.in/programme- schemes/startup- support/patent-facilitation
41	Promoting Academic Research Conversion to Enterprise (PACE)	The aim of this scheme is to encourage/support academia to develop technology / product (up to PoC stage) of societal/ national importance and its subsequent validation by an industrial partner. The scheme has two components: Academic Innovation Research (AIR) and Contract Research Scheme (CRS)	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/promoting- academic-research- conversion-enterprise-pace
42	Public Health and Nutrition	The major areas covered under this programme are Food Processing, using biotech interventions, Nutrition Biology, Addressal of micro and macro nutrient deficiencies through development of fortified foods with generation of clinical evidence, Health care products/ Nutraceuticals/Dietary food supplements, Probiotics for holistic health, Addressal of Celiac diseases, Addressal of Vitamin B12 deficiency, Nutriepigenomics, Postharvest processing and value addition, Food safety and allerginicity, Shelf life extension of perishable foods, etc.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/food-and- nutrition
43	Ramalingaswa mi Re-entry Fellowship	Ramalingaswami Re-entry Fellowship is to attract high quality Indian brains working abroad to pursue their research interests in life sciences, biotechnology and other related areas in India by providing them an attractive avenue to pursue their R&D interests in Indian institutions	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/ramalingaswami -re-entry-fellowship

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
44	RAPID USAID-TB Diagnostics Programme	BIRAC is supporting new diagnostics for TB in collaboration with US Agency for International Development (USAID) and IKP Knowledge Park. IKP has entered into an agreement with USAID and secured a grant to support 'Innovations in tuberculosis (TB) control in India' .	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/rapid-usaid-tb- diagnostics-programme
45	Scientific Infrastructure Access for Harnessing Academia University Research Joint Collaboration (SAHAJ)	The scheme is intended to provide infrastructure to Research Institutes, Universities, Colleges, Start-ups and Entrepreneurs. Under the scheme, all DBT Autonomous Institutes and DBT supported Infrastructure programmes in other institutions will make available their high end equipment and infrastructure to these academic, industrial and individual entities.	https://www.indiascienceandte chnology.gov.in/programme- schemes/academia-industry- partnerships/scientific- infrastructure-access- harnessing-academia- university-research-joint- collaboration-sahaj
46	Short Term Training Programme for mid-career scientists and UG & PG teachers	This scheme aims to provide financial support for conducting short term training courses for upgrading skills of mid-career scientists and faculty involved in undergraduate and postgraduate teaching and research in life science and biotechnology. These specialised training courses are organised in premier research institutions for duration of 2-4 weeks for 15-20 participants and provide hands on exposure of latest tools and techniques applied in the subject.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/short-term- training-programme-mid- career-scientists-and-ug-pg- teachers
47	Social Innovation Immersion Program (SIIP)	SIIP is BIRAC's social Innovation fellowship/award program aimed at creating a pool of biotech "Social Innovators" who can identify needs & gaps within communities and then can help bridge the gaps either through an innovative product development or services	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/social- innovation-immersion- program-siip
48	Social Innovation Programme For Products: Affordable & Relevant to Societal Health (SPARSH)	The programme aims at promoting the development of innovative solutions to society's most pressing social problems. The scheme tackles major social issues and offer new ideas for widespread change. The scheme aims to invest in ideas and innovations that improve health care of all Indians and encourage affordable product development in the social sector	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/social- innovation-programme- products-affordable-relevant- societal-health-sparsh

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
49	Societal Programme for Rural Development	In rural areas for dissemination and use of biotechnological process and tools and for creation of new employment avenues, training and demonstration, projects were supported in various states. Few major projects were supported in an integrated manner utilising the bio-resources available as 'Bio-village' have been supported. Some of the highlights of these projects are Biological Pest Control, Sericulture, Pisciculture, Health, Fish Culture in Horticulture Ponds.	https://www.indiascienceandte chnology.gov.in/programme- schemes/societal- development/societal- programme-rural- development
50	Star College Scheme	The programme aims to improve the skills of teachers by organising faculty training, improved curriculum and emphasis on practical training to students by providing access to specialised infrastructure and consumables.	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/star- college-scheme
51	Students Innovations for Advancement of Research Explorations (SITARE)	Students Innovations for Translation & Advancement of Research Explorations (SITARE) Scheme is aimed at supporting innovative student projects in the area of biotechnology. The scheme's mandate is to promote and encourage young students for embracing translational research (defined under Section 4) to develop innovative products and technologies addressing unmet needs. The scheme has two components: SITARE-Gandhian Young Technological Innovation Award Grant (SITARE-GYTI) and SITARE-Appreciation Grant	https://www.indiascienceandte chnology.gov.in/programme- schemes/human-resource- and-development/students- innovations-advancement- research-explorations-sitare
52	Visiting Research Professorship (VRP) Scheme	The Scheme was initiated to utilize the expertise of outstanding biotechnology professionals for bringing advancement in the Biotechnology and Life Science related activities in various institutions of research and higher learning in the NER States of India.	https://www.indiascienceandte chnology.gov.in/programme- schemes/research-and- development/visiting- research-professorship-vrp- scheme

Biotechnology Industry Research Assistance Council (BIRAC)



About

Biotechnology Industry Research Assistance Council (BIRAC) is a not-for-profit Section 8, Schedule B, Public Sector Enterprise, set up by Department of Biotechnology (DBT), Government of India as an Interface Agency to strengthen and empower the emerging Biotech enterprise to undertake strategic research and innovation, addressing nationally relevant product development needs.

BIRAC is a industry-academia interface and implements its mandate through a wide range of impact initiatives, be it providing access to risk capital through targeted funding, technology transfer, IP management and handholding schemes that help bring innovation excellence to the biotech firms and make them globally competitive. In its Eight years of existence, BIRAC has initiated several schemes, networks and platforms that help to bridge the existing gaps in the industry-academia Innovation research and facilitate novel, high quality affordable products development through cutting edge technologies. BIRAC has initiated partnerships with several national and global partners to collaborate and deliver the salient features of its mandate.



S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
1	Biotechnology Industry Partnership Programme (BIPP)	BIPP is a government partnership with Industries for support on a cost sharing basis for path-breaking research in frontier futuristic technology areas having major economic potential and making the Indian industry globally competitive. It is focused on IP creation with ownership retained by Indian industry and wherever relevant, by collaborating scientists.	https://birac.nic.in/desc_new.p hp?id=216
2	Small Business Innovation Research Initiative (SBIRI)	The Small Business Innovation Research Initiative (SBIRI) scheme was launched in 2005 to boost Public-Private- Partnership (PPP) efforts in the country. SBIRI was the first of its kind, early stage, innovation focused PPP initiative in the area of Biotechnology. Launching of SBIRI has worked as an enabling platform for the target has facilitated innovation, risk taking by small and medium companies and bringing together the private industry, public institutions and the government under one roof to promote the research and innovation in the Indian Biotech Sector.	https://www.birac.nic.in/desc_n ew.php?id=217
3	Biotechnology Ignition Grant Scheme (BIG)	BIG is flagship programme of BIRAC, which provides the right admixture of fuel and support to young startups and entrepreneurial individuals. BIG is the largest early stage biotech funding programme in india. Funding grant of upto INR 5 Million (USD 70,000 approx) to best in class innovative ideas to build and refine idea to proof-of-concept.	https://www.birac.nic.in/big.php
4	Students Innovations For Advancement Of Research Explorations (Sitare)	Students Innovations for Translation & Advancement of Research Explorations (SITARE) Scheme is aimed at supporting innovative student projects in the area of biotechnology. The scheme's mandate is to promote and encourage young students for embracing translational research (defined under Section 4) to develop innovative products and technologies addressing unmet needs.	https://www.birac.nic.in/desc_n ew.php?id=581
5	Empowering Youth For Undertaking Value Added Innovative Translational Research (Eyuva)	E-YUVA scheme is mandated to promote a culture of applied research and need-oriented (societal or industry) entrepreneurial innovation among young students and researchers. The scheme provides funding support(through fellowship and research grant), technical and business mentoring, exposure to bioincubation model, orientation to entrepreneurial culture etc. to students at various levels including undergraduates, post- graduates and post-doctoral.	https://www.birac.nic.in/e_yuva. php

S.NO.	SCHEME NAME	ABOUT THE SCHEME	WEBSITE
6	Bioincubators Nurturing Entrepreneursh ip For Scaling Technologies	Bio-NEST was launched by BIRAC with a vision that focused on fostering the biotech innovation ecosystem in the country. Unlike start ups in the IT sector, enterprising ideas in the biotech sector need incubation support of a different kind where they need a landing space to test their ideas, run their operations, have access to high end instrumentations and locate in a place where they connect with other start ups and mentors.	https://www.birac.nic.in/biones t.php
7	DBT-BIRAC AMR Mission	Department of Biotechnology (DBT) has collaborated with Biotechnology Industry Research Assistance Council (BIRAC) to seek new innovative approaches that have the potential to transform public health action on a national or global scale by identifying and filling gaps in knowledge on the development of drugs in the area of development of new antibiotics and alternatives to antibiotics to counter AMR.	https://www.birac.nic.in/desc_ new.php?id=853
8	DBT-BIRAC- ATGC	To encourage technological innovation, DBT envisages providing funding opportunities for fundamental research that is explicitly aimed towards application development. To take advantage of research results with potential for commercialization, DBT would enable academic researchers to take their fundamental research to next phase via translational research opportunities that launch their idea towards an end-use under Accelerated Translational Grant for Commercialization (ATGC).	https://www.birac.nic.in/desc_ new.php?id=639



References

- 1. Department of Science and Technology Schemes and Programs https://dst.gov.in/schemes-programmes
- 2. Department of Science and Technology Electronic Project Management System https://onlinedst.gov.in
- 3. Indo-German Science & Technology Centre (IGSTC) https://www.igstc.org/
- 4. India, science Technology and Innovation https://www.indiascienceandtechnology.gov.in/programme-schemes/
- 5. Science and Engineering Research Board www.serbonline.in
- 6. Anusandhan National Research Foundation https://serb.gov.in/page/english/research_grants
- 7. Human Resource Development Group Council of Scientific and Industrial Research https://csirhrdg.res.in/
- 8. Department of Scientific and Industrial Research https://www.dsir.gov.in/onlineapplication-submission
- 9. Ministry of Earth Sciences https://www.moes.gov.in/
- 10. Ministry of Electronics and Information Technology https://www.meity.gov.in/content/scheme-forms-0
- 11. Ministry of New and Renewable Energy https://mnre.gov.in/research-development/
- 12. Ministry of Environment, Forest and Climate Change https://moef.gov.in/moef/about-the-ministry/schemes-andprogrammes/index.html
- 13. Department of Space https://www.isro.gov.in/DOS&ISROHQ.html
- 14. Department of Heavy Industries https://heavyindustries.gov.in/
- 15. Defence Research and Development Organization https://www.drdo.gov.in/drdo/
- 16. Department of Atomic Energy https://dae.gov.in/dae-schemes/
- 17. Department of Biotechnology https://dbtindia.gov.in/
- 18. Biotechnology Industri Research Assistannce Council https://www.birac.nic.in/

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Design Partner

VV worxwide

Worxwide Consulting (formerly Bids and Beyond), founded in 2016, aimed to assist companies in bids, tenders, and RFPs by providing end-to-end proposal support, saving time and boosting bid success as a bid consulting firm. We gradually evolved into a growth consulting firm, expanding support beyond bids/proposals to various growth levers. Eventually, we transformed into a digital growth consulting firm, preparing global businesses for success through digital innovation in proposals, products, and productivity.

Our brand mission revolves around enabling business growth through digital solutions and embracing new-age thinking. Worxwide Company offers a comprehensive range of services under core themes like "Bids and Beyond" (Winning Bids and Sales Transformation) and "Experience and Envision" (User Experience and Customer Experience).



Winning Bids

Worxwide excels in assisting clients in securing successful bids, focusing on optimizing the bid preparation process, leveraging strategic insights, and implementing industry best practices, from meticulous bid documentation to winning strategy implementation.



Sales Transformation

Worxwide emphasizes streamlining sales processes for increased efficiency and productivity. The Sales Automation service empowers businesses with automated tools and technologies throughout the sales cycle, from lead generation to customer relationship management.

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User Experience

Worxwide prioritizes delivering exceptional user experiences, creating intuitive, engaging, and user-friendly interfaces for digital platforms. Combining creativity with functionality ensures positive and seamless interactions for end-users.



Customer Experience

Worxwide offers strategic UI UX design services, enhancing measurable results and elevating customer experiences. CX experts craft cohesive omnichannel strategies, conducting audits, creating journey maps, seamlessly integrating technology, and leveraging Data Analytics with Power BI to analyze insights and enhance touchpoints.



We solve big problems for you seamlessly.

Your extended growth engine.

Growth Practice

Experience Practice

Winning Bids Sales Transformation User Experience Customer Experience





The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government civil through advisory and consultative and society, processes.

Cll is a non-government, not-for-profit, industry-led and industry-managed organization, with around 9,000 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 286 national and regional sectoral industry bodies.

For more than 125 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. Cll charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

As India strategizes for the next 25 years to India@100, Indian industry must scale the competitiveness ladder to drive growth. It must also internalize the tenets of sustainability and climate action and accelerate its globalisation journey for leadership in a changing world. The role played by Indian industry will be central to the country's progress and success as a nation. CII, with the Theme for 2023-24 as 'Towards a Competitive and Sustainable India@100: Growth, Livelihood, Globalisation, Building Trust' has prioritized 6 action themes that will catalyze the journey of the country towards the vision of India@100.

With 65 offices, including 10 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 350 counterpart organizations in 133 countries, CII serves as a reference Indian industry and international point for the business community.

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