



No/Acad/ 2020/879-906

Dated: 04/04/2020

To

The Chairpersons
University Teaching Departments
Indira Gandhi University, Meerpur

Sub: Writing of Research project proposal

Sir/Madam,

All Chairpersons are requested to ask the teachers of their Departments to write and submit the research project proposal for financial assistance to various funding agencies. The list of prospective sponsoring/funding agencies along with relevant details is also attached with this letter for your ready reference.

This will help us to create a vibrant research environment in the University,

-Sd-

Dy.Registrar (Academic)

Endst No/Acad/ 2020/879-906

Dated: 04/04/2020

Copy of the above is forwarded to the following for information and further necessary action.

1. Dean Academic Affairs, Indira Gandhi University, Meerpur
2. PA to VC, for kind information of the Vice Chancellor
3. PA to Registrar, for kind information of the Registrar
4. Incharge, website with a request to upload the notice on University Website

-Sd-

Dy. Registrar (Academic)

Prospective Sponsoring agencies for R&D Projects

Following is a tentative list of prospective sponsoring agencies for sanction of R&D projects. There can be more number of sponsoring agencies and more number of schemes for R&D projects, which the faculty members are requested to individually make efforts and apply. The information given below is not complete and may change. Hence the faculty members are also requested to visit the respective notices/web sites for detailed and updated information.

Naval Research Board (DRDO)

The Board supports basic research that will generate new knowledge potentially useful to the Navy and to train young minds to generate and apply that knowledge for naval purposes.

Submission of project proposal: http://nrbdndo.res.in/submission_proposal.html

For more details: <http://nrbdndo.res.in/>

Aeronautics Research and Development Board (AR&DB) (DRDO)

The Aeronautics R&D Board has instituted a Grants-in-Aid Scheme to nurture the available research talent and to develop facilities higher technological institutes, colleges and other research centres including industry in the country for promoting research, design and development programmes in Aeronautics and Allied Sciences, keeping in view the future needs of the country with respect to aircraft, helicopters, missiles and all other air borne vehicles & their operation. Under this scheme, grants are offered to approve research institutions, universities or colleges, departments or laboratories or individuals attached to reputed industrial firms with R&D facilities both in the Government and non-Government sector. The scheme will be coordinated through a number of specialist panels duly constituted by the Chairman AR&DB to cover the different disciplines viz.

- Aerodynamics
- Aerospace Resources
- Materials & Manufacturing
- Propulsion
- Structures
- Systems & Systems Engineering
- Special Interest Group for Micro Aircraft (SIGMA)

For rules & grants: http://drdo.gov.in/drdo/boards/ardb/rules&grants_intro.htm

Topics of interest: http://drdo.gov.in/drdo/boards/ardb/notice_board.htm

Armaments Research Board (DRDO)

DRDO is promoting innovative/basic research among Academic and Research Institutions across the country through Grant-in-Aid schemes of Research Boards and Dte of ER & IPR. Under these schemes, grants are offered to research organizations / universities / departments/ laboratories to carry out research in basic sciences and engineering, setting up of basic facilities/infrastructures and conduct of conference/seminars/ symposia/ workshops etc.

For Area of interest and formats: <http://drdo.gov.in/drdo/English/index.jsp?pg=armreb.jsp>

Life Sciences Research Board (DRDO)

The Board is striving to enhance health and efficiency of the soldiers operating under different harsh environmental conditions including high altitude, extreme cold, desert and micro environment of different operating systems. The major thrust areas of LSRB are life support system and biomedical technologies for air, land and sea operations, military psychology, cognitive engineering, personnel selection, human adaptation to extreme environments, ergonomics and human factors/engineering for equipment development and man machine interface, nutrition, radioprotection, stress management, combat fatigue, bio-defence against human, animal and plant pathogens, specialized food technologies, vector and malaria control, biotechnology and high altitude agro animal technologies, nuclear, biological and chemical detection, protection and decontamination.

For guidelines and rules: <http://drdo.gov.in/drdo/boards/lsrcb/fplsrcb.htm>

Board of Research in Nuclear Sciences (BRNS) (DAE)

BRNS, Department of Atomic Energy (DAE) supports extramural research and development activities in nuclear and allied sciences, engineering and technology through its nodal funding agency - the Board of Research in Nuclear Sciences (BRNS). BRNS continuously thrives to encourage, enthuse and support scientists and engineers in pursuing excellence in R & D programmes of interest and relevance to DAE.

Format and other details: http://barc.gov.in/brns/brns_research.html

National Board for Higher Mathematics (NBHM) (DAE)

The NBHM has various schemes to provide financial support to institutions and individuals to strengthen the mathematical base/potential through study, exchange or other such programs. NBHM provides assistance for selected research projects on the recommendations of the Research Programmes Committee of NBHM. Applications in prescribed forms obtainable from the office of NBHM have to be submitted well in advance.

Application forms: <http://www.nbhm.dae.gov.in/forms/research.doc>

Brochure: <http://www.nbhm.dae.gov.in/forms/brochure.doc>

Indian Space Research Organisation (ISRO)

ISRO has evolved a programme through which financial support is provided for conducting research and development activities related to Space Science, Space Technology and Space Application to academia in India. This programme of Research Sponsored by ISRO is called RESPOND. In special cases research and development projects proposed by non-academic R & D laboratories can also be supported through this programme. The aim of RESPOND is to encourage quality research in areas of relevance to the Indian space programme.

Forms & Formats: <http://www.isro.org/scripts/srgeneralrules.aspx>

Area of Research: <http://www.isro.org/scripts/srareasofresearch.aspx#>

For More Details: <http://www.isro.org/scripts/srrespond.aspx>

Indian Council of Medical Research (ICMR)

ICMR invites proposals for enhancing research and development activities.

ONLINE SUBMISSION of Extramural Research Projects: <http://icmr.cdacnoida.in/ICMR/>

Thrust Areas of Research: <http://icmr.nic.in/thrust/thrust.htm>

For more details: <http://www.icmr.nic.in/Grants/Grants.html>

Department of Electronics and Information Technology

DEIT encourages collaborative R&D between industry and academics/ R&D institutions for development of products and packages and bridge the gap between R&D and commercialization. DIT has already circulated the details of Multiplier Grants Scheme to Industry associations for circulation amongst its members and to leading academic institutions.

Project Proposal: [http://deity.gov.in/sites/upload_files/dit/files/mgsioproposals\(1\).pdf](http://deity.gov.in/sites/upload_files/dit/files/mgsioproposals(1).pdf)

Terms & Conditions: http://deity.gov.in/sites/upload_files/dit/files/Terms&conditions.pdf

Ministry of Earth Sciences

All projects in the subject area mentioned below can be submitted for funding from Ministry of Earth Sciences. The various subject areas for funding are:

- Atmospheric Science
- Earth System Science Technology
- Geoscience
- Hydrology & Cryosphere
- Ocean Science & Resources

For formats: <http://dod.nic.in/RND/FORMATS.doc>

Guidelines: http://dod.nic.in/RND/new_2_Guidelines.pdf

Terms and Conditions: <http://dod.nic.in/RND/Terms&Condition.pdf>

For More Details: <http://dod.nic.in/RND/rnd.html>

Ministry of Environment & Forests

The Ministry invites research proposals in prescribed format on various topics.

Application Forms & Guidelines:

http://envfor.nic.in/sites/default/files/re_guidelines_f_indd.pdf

For More Details: <http://envfor.nic.in/division/call-research-proposals>

The Ministry of Environment & Forests also invites research proposals for financial support in prescribed format under its NNRMS Programme. The NNRMS Programme supports research projects aimed at optimal utilization of remote sensing techniques along with conventional methods for addressing key environmental and ecological issues such as management of forests, grasslands, faunal resources, wetlands, coastal areas management including conservation of mangroves and coral resources, land degradation, impact of developmental activities on environment.

For More Details: <http://envfor.nic.in/division/call-proposals-under-nnrms-programme>

Ministry of New and Renewable Energy (MNRE)

The Ministry has identified thrust areas in which R&D efforts are required. Ministry considers R&D proposals which are directly related to the activities/ programmes of the Ministry and hold promise for commercialization in near future. The thrust areas mainly covers programmes, such as, Rural Energy; Solar Energy; Energy from Urban & Industrial Wastes; Power Generation- Wind, Biomass, Small Hydro; New Technologies- Chemical Sources (fuel cells), Hydrogen, Ocean & Geothermal Energy; etc.

R & D Formats: <http://www.mnre.gov.in/schemes/r-d/rd-formats/>

New Schemes: <http://www.mnre.gov.in/schemes/r-d/scheme-10/>

For More Details: <http://www.mnre.gov.in/schemes/r-d/solar-pv-3>

Department of Chemicals & Petro-Chemicals

Department of Chemicals & Petro-Chemicals a part of the Ministry of Chemicals and Fertilizers invites proposals for research projects and establishing Center of Excellence in educational institutions.

For New Schemes: <http://chemicals.nic.in/govtschemes.htm>

For More Details: <http://chemicals.nic.in/>

Ministry of Food Processing Industries

Ministry supports research proposals of applied nature having commercial importance resulting in development of innovation products, processes, improvement in manufacturing practices, which leads to enhancement of quality and shelf life of food products thereby development of food processing industries in the country.

Guidelines

&

Formats:

<http://www.mofpi.nic.in/SchemeViewPage.aspx?KYEwmOL+HGpVvrjs+CYNME2/tuH1AhSoew1yuW4ovCBykeENzIXaUKDErydVWL6V0yT9wKiwvyYP5mR3gNk/zpp/uIzW70foHI2JZ8qgdRJ5YbZBWq70BvEDsLxDwud7uq2RIDPV1UZy+axIha0J6VudsZMy/oRaBIuqZVVF7Eir0fkhhKGVlrmPIA7t30eBs6Wz1zJxtZu39jghF941XUa1L5qqoL3hXT/3XT1yQxQ=>

Central/State Government and its organizations/Universities(including deemed universities) are eligible for grant-in-aid of entire cost of laboratory equipments required for labs and 25% of the cost of technical civil works to house the equipments and furniture and the fixtures associated with the equipments

For More Details:

<http://www.mofpi.nic.in/SchemeViewPage.aspx?KYEwmOL+HGpVvrjs+CYNME2/tuH1AhSoew1yuW4ovCBykeENzIXaUKDErydVWL6V0yT9wKiwvyYP5mR3gNk/zpp/uIzW70foHI2JZ8qgdRKr+mI2UXxqt5g8pQGNkquV6g5/+DMKKlIIBtFwPuZDSe7dvV23bHLI091p7y4fVWnuXP8zyxdYHWycDTeQupZF6mozfPd+19IoX9Hyfpaxg61M12PJ2euYpAizBW8eh4LGM5wfFQbtyRTFWMh2wsc1>

Establishment of Centers of Excellence in Frontier Areas of Science and Technology (MHRD)

The Centre of Excellence (CoE) is expected to be a collaborative activity between a team of high quality researchers in the institution and researchers or research-users in several companies or organizations on new and emerging technologies, multi-disciplinary and translational research relevant to national development goals.

Forms & Formats: http://mhrd.gov.in/sites/upload_files/mhrd/files/FAST.pdf

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. Research proposals of applied nature as well as those falling under basic sciences which attempt to solve specific problems being pursued by CSIR laboratories, or in newer and complementary fields, are considered for CSIR support. Priority is given to multi-disciplinary projects which involve inter-organisational co-operation (including that of CSIR laboratories). However, preference is given to schemes which have relevance to research programmes of CSIR laboratories

Forms & Formats: http://csirhrdg.nic.in/res_forms.htm

Guidelines and other details: http://csirhrdg.nic.in/res_grants.htm

Ministry of Mines

Science and Technology Project Proposals are invited from academic institutions for the thrust areas in mining.

Guidelines and formats:

http://mines.nic.in/writereaddata/Filelinks/ad8571cc_merged_document.pdf

Ministry of Water Resources

Ministry of Water Resources (MoWR) provides financial assistance to promote research work in the field of Water Resources Engineering. The assistance is provided by way of grants to academicians / experts in the Universities, IITs, recognised R&D laboratories, Water Resources / Irrigation departments of the Central and State Governments and NGOs. Research proposals of applied nature as well as basic research are considered for MoWR support.

Forms & Guidelines: <http://wrmin.nic.in/writereaddata/linkimages/intro932183917.pdf>

Central Mine Planning & Design Institute Limited (CMPDI)

CMPDI invites research proposals in prescribed format on various topics.

For more details: <http://www.cmpdi.co.in/research.php>

INSPIRE Fellowship (DST)

INSPIRE fellowship aims at enhancing research fellowships for doctoral studies and opening up partnerships with private sector for topping the Government's efforts in nurturing talents for scientific research. This scheme is applicable to Basic and Applied sciences as well as Medicine, Agriculture etc. with provision of multiple entries. The fellowship will be offered to (1) University 1st Ranker in a particular subject at PG level examination in Basic and Applied Science courses as well as (2) INSPIRE scholar, who have secured aggregate marks of 65 % or above at the 2 year MSc or 5 year Integrated MSc/MS

For More details: <http://www.inspire-dst.gov.in/fellowship.html>

INSPIRE Faculty Scheme (DST)

INSPIRE Faculty Scheme opens up an 'Assured Opportunity for Research Career (AORC)' for young researchers in the age group of 27-32 years. It is expected to augment high quality scientific manpower in scientific and educational institutions. It provides attractive opportunities to young achievers for developing independent scientific profiles and intends helping them emerge as S&T leaders in the long term. The Scheme offers contractual research positions. It provides career opportunities, but it is not a guarantee for tenure positions after 5 years.

Eligibility: Indian citizens and people of Indian origin including NRI/PIO status with PhD (in science, mathematics, engineering, pharmacy, medicine, and agriculture related subjects) from any recognized university in the world.

Those who have submitted their PhD Theses and are awaiting award of the degree are also eligible.

The upper age limit at the time of awarding the offer should be 32 years for considering support for a period of 5 years.

Candidates who are employed (in any form i.e. permanent, contractual) with any organization within India will be eligible to apply. However, they will be considered only for the Research Grant component of the INSPIRE Faculty Award scheme.

For more details: http://www.inspire-dst.gov.in/faculty_scheme.html

Fund for Improvement of S&T Infrastructure (FIST) (DST)

Considering the present status of the S&T sector in the universities and related academic institutions who are in dire need for strengthening the existing S&T infrastructure support with adequate funding and associated flexibility, Government of India in the year 2000 announced a major new initiative titled "Fund for Improvement of S&T infrastructure in universities & higher educational institutions (FIST)" to rebuild the Science & Technology infrastructure in the country.

Eligibility: For **University / Academic Institutions**, the support will be considered for the 'Department / School / Center' as a unit. All Science (including Medical & Agriculture) and Engineering Departments/ Centres having strong postgraduate teaching and research programs which have existed for at least 3 years or more in universities and other higher educational institutions are eligible. The Department/ Centre/ School already supported under FIST Program may submit fresh proposal after completion of the ongoing project provided such projects completed in all respects and obtained 'Completion Certificate' whose copy may be attached in the current proposal. Progress of ongoing project of the Department/ Centre/ School will be monitored as per monitoring schedule of the Program and any additional requirements will be considered as a part of that exercise.

For More Details: <http://www.fist-dst.org/index.asp>

Forms and Formats available at: <http://www.fist-dst.org/html-flies/formats.htm>

Advertisement & guidelines for new proposals: <http://www.fist-dst.org/html-flies/advertisement-guidelines.htm>

Nano Mission (DST)

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. In brief, the objectives of the Nano-Mission are:

- Basic Research Promotion
- Infrastructure Development for Nano Science & Technology Research
- Nano Applications and Technology Development Programmes
- Human Resource Development
- International Collaborations

How to apply: The Nano Mission receives proposals for financial support throughout the year. In other words, there is no last date for applying for financial support. Decisions on various funding applications are taken periodically. Currently, financial support for the following R&D activities is available —

- R&D projects from individual scientists or a group of scientists. Normal duration of such projects will be 3 years.
- Establishment of centres of excellence and sophisticated research facilities. Normal duration for such projects will be 5 years.
- Joint Institution-Industry Linked projects for development of products and devices utilizing nanotechnology. In such projects, partial financial contribution by the participating industry is desirable. For the participating industry, DSIR's SIRO recognition is desirable. Normal duration for such projects will be 3-5 years.
- Launching M.Sc./M.Tech. programmes in Nano Science and Technology in government institutions.

Formats & Guidelines:

http://nanomission.gov.in/Formats_new/formats_Guideliness_nano.htm

Guidelines for implementing projects: <http://nanomission.gov.in/formats/guide1.htm>

Online Project Submission portal: <http://nanomission.gov.in/online.htm>

Joint Institute – Industry linked projects: http://nanomission.gov.in/Formats_new/NEW/New-PPD-III_NATDP.doc

Women Scientists Scheme (WOS-A): (DST)

The 'Women Scientists Scheme (WOS-A)' of the Department of Science and Technology is aimed to provide opportunities to women scientists and technologists for pursuing research in basic or applied sciences in frontier areas of science and engineering (like (1) Physical Science; (2) Chemical Science; (3) Mathematical Science; (4) Life sciences; (5) Earth Sciences; (6) Atmospheric Sciences; (7) Engineering Sciences). A special provision has been made under this Scheme to encourage those women scientists who have had breaks in their careers. Persons already in employment need not apply.

For Details & Formats: <http://online-wosa.gov.in:8080/wosa/public/doWelcome.action>

Women Scientists Scheme (WOS-B): (DST)

This scholarship is specially intended to encourage women scientists involved in research and application of innovative solutions for various societal issues. This scholarship would be made available to the aspiring women scientists willing to work for the search, design, adaptation and demonstration of Science and Technological skills and techniques for improving the income generating activity and reducing drudgery of weaker sections of our society in different occupations, capacity building on the societal programs at the grassroots level etc.

The minimum essential qualifications are PG degree equivalent to M.Sc in basic or Applied Science, B Tech in Engineering Science and MBBS or other equivalent professional

qualifications. The desirable qualifications are PhD in Basic or Applied Science, M.Tech in Engineering Science and MD/MS, DM/MCH in Medical Science from recognized Universities. Cut off age for the candidate is 50 years. The candidates should also have working experience and linkages with the relevant organization to carry out research on R&D projects of societal relevance.

Guidelines for WOS-B:

http://www.dst.gov.in/whats_new/whats_new11/Terms_and_Conditions_for_WOS-B.pdf

Department of Science and Technology Fellowship for Women Scientists (DISHA) program:

http://www.dst.gov.in/whats_new/whats_new12/WOS-B-2012.PDF

Women Scientists Scheme (WOS-C): (DST)

This category is mainly focused to provide an opportunity to women scientists for self-employment by utilizing their specialized domain knowledge in areas such as patenting, proof reading, science journalism, technical translation, clinical pathology labs, medical transcription etc. The objective of this scholarship is to create a large pool of trained women workforce with experience in the diverse areas mentioned above and building up a professional network.

For More Details: <http://www.dst.gov.in/scientific-programme/wos-ppts/WOS-C.pdf>

National Science & Technology Management Information System (NSTMIS) (DST)

The National Science & Technology Management Information System (NSTMIS) division of the Department of Science & Technology (DST) is the nodal agency for collection, analysis and dissemination of vital S&T information at the national level.

The Scheme: The division sponsors research projects/studies to interested investigators / organizations under the NSTMIS Scheme. The broader areas where studies could be taken up in the sponsored mode are S&T investment, S&T infrastructure, S&T output, S&T databases, S&T manpower, R&D productivity/efficiency etc.

Some of the areas in which the research proposal/ studies could be submitted are given as below:

- Human Resources in S&T
- R&D Infrastructure/ Resources
- S&T Studies in Higher Education Sector
- Mobility of S&T Professionals
- R&D and Innovation
- IPR Management
- Scientometric Studies in S&T

The pertinent themes / sub-areas to be addressed under these areas for submission of research proposals under the NSTMIS Scheme are listed at the NSTMIS website.

Who can apply: Scientists, Technologists, Statisticians, Economists, Sociologists, Development/ Planning/ Policy Experts, Management Specialists etc. from academic/ research institutions, registered societies, and consultants may submit their proposals in a prescribed format.

Call for research proposals: <http://www.nstmis-dst.org/PDF/CallforResearchProposals.pdf>

For Guidelines: <http://www.nstmis-dst.org/Guideline.aspx>

Formats are available: <http://www.nstmis-dst.org/Format.aspx>

Drugs & Pharmaceutical Research (Collaborative R&D Projects) (DST)

Recognising the profound influence of R&D on the prospects and opportunities for the growth of the Indian Drug Industry, Department of Science and Technology (DST), Government of India mounted the programme on drug development during 1994-95 for promoting collaborative R&D in drugs and pharmaceuticals sector with the following specific objectives:

- To synergise the strengths of publicly funded R&D institutions and Indian Pharmaceutical Industry.
- To create an enabling infrastructure, mechanisms and linkages to facilitate new drug development.
- To stimulate skill development of human resources in R&D for drugs and pharmaceuticals; and
- To enhance the nation's self-reliance in drugs and pharmaceuticals especially in areas critical to national health requirements.

Any Indian company/firm engaged in drug development manufacturing jointly with:

- National laboratory under CSIR, ICMR, etc.
- University department/other academic institution such as IIT, IISc., etc.
- Any other publicly funded R&D Institution

For More Details: <http://www.dst.gov.in/scientific-programme/td-drugs.htm>

Instrumentation Development Programme (DST)

Instrumentation is one of the major areas of Science & Technology which makes a great impact on vital sectors of national activities such as education, scientific research, industry, agriculture, medicine and health etc. The Department of Science & Technology (DST) has been promoting the area of Instrumentation through its Instrumentation Development Programme (IDP).

The programme focuses on strengthening indigenous capability for research, design, development and production of instruments in the country leading to fulfillment of the following objectives: -:

- Indigenous development and production of instruments,
- Continuous updating of the technology of instruments to keep pace with technology improvements taking place globally, and
- Innovations in the area of instrumentation.

Activities supported under IDP: Programmes to support and sustain development and production of indigenous and affordable instruments are evolved and supported under the IDP. The following types of activities are evolved and supported under IDP:

- a) Project support to scientists and technologists
 - a. The Instrument/technology development programmes are supported with mandatory industry participation so as to facilitate easy absorption of technology and commercial production of the developed instrument/technology.
- b) Project Formulation
 - a. The following activities are supported under IDP for evolving well defined co-ordinated Research & Development projects involving Scientists/Technologists; Industries and Experts:
 - i. Cluster of Projects Meetings on identified Themes in Thrust Areas
 - b. Brainstorming Sessions/Discussion Meetings in Specialized Areas of national importance
- c) Creation of National Facilities

For submission of project proposals and financial assistance: <http://www.dst.gov.in/scientific-programme/idp-form.pdf>

For More Details: <http://www.dst.gov.in/scientific-programme/t-d-idp.htm>

Natural Resources Data Management System (NRDMS) (DST)

This programme is a multi-disciplinary and multi-institutional R&D programme of the Department of Science and Technology, aimed at developing methodologies for building and promoting the use of spatial data management and analysis technologies in local area planning. In the context of NRDMS, any natural resource, which is important for local area development, is relevant for study. For developing necessary inputs for local planning strategies, NRDMS is supporting several academic and R & D Institutions with projects specially focusing towards the need of local level planning. Emphasis is being given on spatial data management and analysis technology for natural resources management to carry out R & D related to informatics especially the geo-informatics for finding solutions to local

specific problems related to natural resources and provide necessary information to the planners to make objective decisions.

R&D areas of NRDMS:

- Land & Water Management
- Watershed Management
- Natural Disaster Mitigation
- Panchayat Level Resource
- Energy Planning
- Microwave Remote Sensing
- GIS in Local Level development
- Ground Water Studies
- Software Development by R & D Groups

For more on R& D Programs: <http://nrdms.gov.in/programme.asp>

For Project Guidelines/Formats: http://nrdms.gov.in/downloadable_form.asp

Technology Systems Development Programme (DST)

The Programme has two major objectives:

- Development and integration of technologies in identified areas.
- Promote application of advanced technology for improving the performance, value addition and exportability of various products.

Areas Promoted:

- Glass Technology Upgradation
- Development of Technology for Bio-fuels
- Structure Technology for Distress Diagnostics etc
- Information and Communication Technology Systems For Application in Rural Areas
- Water Purification
- Bio-molecular Electronics and Conducting Polymers

For more details on proposals: <http://www.dst.gov.in/scientific-programme/t-d-joint-techsys.htm>

Science for Equity Empowerment and Development (SEED) (DST)

Science for Equity, Empowerment and Development (SEED) Division has been set up under the Department of Science and Technology, established with the broad objectives of providing opportunities to motivated scientists and field level workers to take up action oriented and location specific projects aiming towards socio-economic upliftment of poor and disadvantaged sections of the society through appropriate technological interventions especially in the rural areas. Under this program efforts have been made to associate concerned National Labs or other specialist S&T institutions with each major program so as

to build-in expert input, utilize national S&T infrastructure and link it up with grassroots S&T interventions/initiatives.

For Ongoing & Future Programmes: <http://www.scienceandsociety-dst.org/Programmes.htm>

Guidelines, Terms and Conditions: <http://www.scienceandsociety-dst.org/downloads.htm>

State Science & Technology Programme (DST)

While continuing the catalytic role in encouraging the State Government's initiatives, the department would launch certain programmes of importance identified through various consultations pro-actively. The department would strive to evolve and support certain joint programmes focusing on multi-sectoral area based approach to rural / regional development in co-operation with multiple State & Central Institutions, NGO's and State S&T Councils. These areas would be so identified where S&T intervention could significantly improve the existing socio-economic conditions. Demonstration and Field trials of socially relevant technologies would specially be encouraged. Interaction between State S&T Councils in similar ecological zone has been initiated and would be promoted further in future to facilitate joint S&T Programme formulation.

DST would welcome proposals having clearly established linkages of S&T to overall development of the state. The area identified should have potential to contribute in socio-economic upliftment of the people of state. DST encourages formulations of proposals through consultative process and interested organisations are welcome to discuss ideas, concepts, proposed activities etc. relevant to state needs.

Guidelines and Format for Submitting of Project Proposals: <http://www.dst.gov.in/scientific-programme/call-for-papers/guidelines.pdf>

For Current Proposal visit: http://www.dst.gov.in/scientific-programme/s-t_scst.htm

Department of Biotechnology (DBT)

DBT invites research proposals in prescribed format on various topics.

Call for Proposals: http://dbtindia.nic.in/uniquepage.asp?id_pk=60

Board of Research in Fusion Sciences & Technology (BRFST)

BRFST invites research proposals in prescribed format on various topics.

Forms & Formats: <http://www.nfp.pssi.in/documents/Docs%20for%20new%20projects.rar>

Research areas & More Details: http://www.nfp.pssi.in/documents/research_areas.html

Indo-US Science & Technology Forum (International)

The Indo-US Science and Technology Forum solicits proposals twice per year for activities, events, and initiatives that promote interactions between the scientific and research communities in India and the US. Proposals are peer reviewed in both the US and India, and awards are announced.

Call for proposals & formats:

<http://www.indousstf.org/fullstory.aspx?storyheadline=Call%20for%20Proposals&prevmytitle=Call%20for%20Proposals§ionid=S33>

Human Frontier Science Program (International)

HFSP is an international program of research support, funding frontier research on the complex mechanisms of living organisms. Research is funded at all levels of biological complexity from biomolecules to the interactions between organisms. Research grants are provided for teams of scientists from different countries who wish to combine their expertise in innovative approaches to questions that could not be answered by individual laboratories.

Information & Guidelines: <http://www.hfsp.org/funding/research-grants/information-and-guidelines>

For More Details: <http://www.hfsp.org/funding/research-grants>

Japan Society for the Promotion of Science (International)

JSPS invites online research proposals in prescribed format on various topics.

For Guidelines & Forms: <http://www.jsps.go.jp/english/e-bilat/call.html>

Wellcome Trust/DBT India Alliance (International)

This scheme supports outstanding researchers of any nationality, either medically qualified or science graduates, who wish to pursue a research career in an academic institution in India. Applicants must have demonstrated their ability to lead an independent research project and group.

For More Details: <http://www.wellcomedbt.org/index.html>

The Leverhulme Trust (International)

The aim of these awards is to provide financial support for innovative and original research projects of high quality and potential, the choice of theme and the design of the research lying entirely with the applicant (the Principal Investigator). The grants provide support for the salaries of research staff engaged on the project, plus associated costs directly related to the research proposed, and the award is paid directly to the institution at which the applicant is employed.

Application Details: http://www.leverhulme.ac.uk/funding/RPG/app_procedure.cfm

For More Details: <http://www.leverhulme.ac.uk/funding/RPG/RPG.cfm>

Indo-French Centre for the Promotion of Advanced Research (IFCPAR) (International)

The primary objective of supporting collaborative research projects between Indian and French scientists is to complement the expertise and strength of high quality research groups in advanced areas of science and technology thereby promoting excellence in science.

For collaborative research projects the following are necessary

1. At least two scientists, one each from India and France as Principal Collaborators
2. Joint Collaborators (2-3) on both sides are welcome, but their contributions to the project may be clearly defined
3. Research project must be on a current topic and can be chosen in any field of science and engineering, including medicine
4. The research topic chosen must complement the strengths and expertise of the research groups.
5. The collaborators must submit the project as per the prescribed format (available under down-load forms)

Forms & formats: <http://www.cefipra.org/section.aspx?catid=824&langid=1>

For more details: <http://www.cefipra.org/home.aspx?langid=1>

UK-India Education and Research Initiative (UKIERI) (International)

UKIERI is now accepting proposals for the following strand activities:

For details & forms: http://www.ukieri.org/third_call_for_bids_2013-14.html

Funding agencies and their Web links

Web Links of various Funding Agencies

S.No	Funding Agencies	Web Link
1.	Aeronautics Research and Development Board (ARDB)	http://drdo.gov.in/drdo/boards/ardb/index.html
2.	Atomic Energy Regulatory Board (AERB)	http://www.aerb.gov.in
3.	Bhabha Atomic Research Centre (BARC)	http://www.barc.gov.in/
4.	Centre for Development of Advanced Computing (CDAC)	http://www.cdac.in/
5.	Centre for Development of Telematics (C- DOT)	http://www.cdote.com/
6.	Coal India Ltd.	https://www.coalindia.in/
7.	Council of Scientific & Industrial Research (CSIR)	http://www.csir.res.in/
8.	Defence Research & Development Organisation (DRDO)	http://www.drdo.nic.in/
9.	Department of Atomic Energy	http://dae.nic.in/
10.	Department of AYUSH	http://indianmedicine.nic.in/
11.	Department of Biotechnology (DBT)	http://www.dbtindia.nic.in/
12.	Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers	http://chemicals.nic.in/
13.	Department of Fertilizers, Ministry of Chemicals & Fertilizers	http://fert.nic.in/
14.	Department of Ocean Development	http://dod.nic.in/
15.	Department of Science & Technology (DST)	http://dst.gov.in/
16.	Deutsche Forschungsgemeinschaft (DFG) German Research Foundation)	http://www.dfg.de/en/
17.	GAIL (India) Ltd.	http://www.gail.nic.in/final_site/index.html
18.	Indian Council of Agricultural Research (ICAR)	http://www.icar.org.in/
19.	Indian Council of Medical Research (ICMR)	http://www.icmr.nic.in/
20.	Indian Council of Social Science Research (ICSSR)	http://www.icssr.org/
21.	Indian National Science Academy (INSA)	http://insaindia.org/
22.	Indian Space Research Organisation (ISRO)	http://www.isro.org/
23.	Indo French Centre for the Promotion of Advanced Research (IFCPAR)	http://www.cefipra.org/
24.	Indo-US Science & Technology	http://ird.iitd.ac.in/funding_agencies

	Forum	
25.	Ministry of Agro & Rural Industries	http://ari.nic.in/
26.	Ministry of Communications & Information Technology	http://deity.gov.in/
27.	Ministry of Defence	http://ird.iitd.ac.in/funding_agencies
28.	Ministry of Environment & Forests (MoEF)	http://mohfw.nic.in/
29.	Ministry of Health & Family Welfare	http://mohfw.nic.in/
30.	Ministry of Micro, Small and Medium Enterprises	http://msme.gov.in/Web/Portal/New-Default.aspx
31.	Ministry of New and Renewable Energy (MNRE)	http://www.mnre.gov.in/
32.	Ministry of Petroleum & Natural Gas	http://petroleum.nic.in/
33.	Ministry of Power	http://powermin.nic.in/
34.	Ministry of Road Transport & Highways	http://morth.nic.in/
35.	Ministry of Rural Development	http://rural.nic.in/netrural/rural/index.aspx
36.	Ministry of Textiles	http://texmin.nic.in/
37.	Ministry of Urban Development	http://moud.gov.in/
38.	Ministry of Water Resources	http://wrmin.nic.in/
39.	National Science Foundation	http://www.nsf.gov/
40.	Naval Research Board (NRB)	http://www.nrbdrdo.res.in/
41.	Northern Indian Textile Research Association (NITRA)	http://www.nitratextile.org/
42.	Oil & Natural Gas Corporation Ltd (ONGC)	http://www.ongcindia.com/
43.	Petroleum Conservation Research Association (PCRA)	http://www.pkra.org/
44.	Science and Engineering Research Board (SERB)	http://www.serb.gov.in/home.php
45.	Tata Institute of Fundamental Research	http://www.tifr.res.in/
46.	Technology Information, Forecasting & Assessment Council (TIFAC)	http://www.tifac.org.in/
47.	UK India Education and Research Initiative (UKIERI)	http://www.ukieri.org/
48.	University Grants Commission	http://www.ugc.ac.in/

WHERE TO APPROACH FOR R&D FUNDS?

(1) University Grants Commission (UGC)

I. Introduction

UGC strives to promote teaching and research in emerging areas in Humanities, Social Sciences, Languages, Literature, Pure Sciences, Engineering & Technology, Pharmacy, Medical, Agricultural Sciences etc.

II Name of scheme(s)

Major and Minor Research Projects

Objective(s)

- To promote excellence in research in higher education by supporting research programmes of University and College teachers in various disciplines.
- Traditionally, universities have been the centers of research. Although, the Government has a network of science and technology laboratories for research and development, the major base of researchers in science and technology remains with the universities. Therefore, university and college teachers need to be supported to meet this requirement.

Contact Address

The Secretary, University Grants Commission ,Bahadur Shah Zafar Marg
New Delhi – 110002 ,Tel. No: (011) 23234019, 23236350 ,Fax. No.: (011) 23239659
Website: www.ugc.ac.in

(2) All India Council for Technical Education (AICTE)

I. Introduction

The All India Council for Technical Education (AICTE) has been performing its regulatory, planning and promotional functions through its Bureaus, namely: Administration; Finance; Planning and Coordination; Under Graduate Studies; Post Graduate Education and Research; Faculty Development; Quality Assurance; and Research and Institutional Development Bureaus; and through its Regional Offices located in various parts of the country.

II. Name of scheme(s)

i) Research & Institutional Development Schemes

a) Modernization & Removal of Obsolescence Scheme (MODROBS)

- To equip technical institutions with modern infra-structural facilities in laboratory(s)/workshop(s)/computing facilities to enhance functional efficiency for teaching, training and research purposes. Creation of new laboratories is not envisaged. Maximum Funding is Rs. 15 lakhs with 2 years duration.
- The aims are contemporary Lab Work, relevant project work, indirect benefits to faculty/students of the institution through training programmes and consultancy work.

b) Research Promotion Schemes (RPS)

RPS aims to create research ambience by promoting research in technical disciplines and innovations in established and emerging technologies; and to generate Masters and Doctoral degree candidates. The three research avenues within RPS are the following:

- Proof of Concept work - Independent research activity which can lead to growth of knowledge/process in an area, which can grow into a major project. Funding for such projects would be limited to a one time grant of Rs. 5-10 lakhs.
- Capacity Building for research – A young faculty (30 years limit) with grant of Rs. 10-12 lakhs, is encouraged to carry out research at Doctoral level in a reputed institution. The funding can be used for both drawing of salary during leave without pay condition and towards purchase of equipment to carry out research in a Novel area.
- Patentable technology development by a group of faculty members, having proven track record, who aim at developing new research facilities, at the parent institution, being motivated chiefly by high-end output such as patentable technologies. Funding to such projects would be limited to a one time grant of Rs. 20 lakhs.

ii) Industry-Institute Interaction Schemes

a) Industry Institute Partnership Cell (IIPC)

To establish institute-industry liaison by encouraging: (1) conduct of industrial training programmes (2) facilitating exchange of resource personnel (3) carry out industrial R&D (4) conduct of industrial visits (5) developing appropriate curricula and (6) undertake consultancy services, etc.

b) Entrepreneurship Development Cells (EDC)

To encourage students to consider self-employment as a career option and provide training in entrepreneurship.

c) National Facilities in Engineering & Technology with Industrial Collaboration (NAFETIC)

To establish national level facilities in the frontier areas of Engineering & Technology through collaboration between industry(s) and institutions for product development, basic research, trouble shooting, consultancy, testing & training purposes.

d) Nationally Coordinated Project (NCP)

To plan, coordinate & execute integrated R&D programmes at national level by a group of institutions. The technical/ financial/ administrative deliverables are to be spelled out clearly by the networking institutions with the lead institution being an IIT/IISc/IIM/NIT.

III. Areas of research support

Engineering and Technology, Architecture, Town Planning, Management, Pharmacy, Hotel Management and Catering Technology, Applied Arts and Crafts etc.

Contact Address:

Adviser-II, RID Bureau, All India Council for Technical Education
 NBCC Building, East Wing, 4th Floor, Pragati Vihar, Bhisham Pitamah Marg, New Delhi –110
 003, Telefax No: (011) 24369632,
 E-mail: rid@aicte.ernet.in, Website: www.aicte.ernet.in

(3) Council of Scientific and Industrial Research (CSIR)

I. Introduction

The major functions of CSIR include promotion, guidance and coordination of scientific and industrial research in India; establishment or development of and assistance to existing special institutions or departments for scientific study of problems affecting particular industries and trades; award of fellowship; utilization of Council's R&D results for industrial development; collection and dissemination of S&T information; and technology generation, absorption and transfer.

The Human Resource Development (HRD) Group of Council of Scientific & Industrial Research (CSIR) has a mandate to develop and nurture S&T manpower at the national level. It also promotes, guides and co-ordinates scientific & industrial research through research grants to Scientists/Professors working in Universities/R&D Institutes of Higher learning.

II. Name of scheme(s) & Objective(s)

1. Research Schemes

To promote research work in the field of S&T including agriculture, engineering and medicine. Multi-disciplinary projects which involve inter-organisational cooperation (including that of CSIR Laboratories) are also considered. Preference is given to schemes which have relevance to research programmes of CSIR laboratories.

2. Sponsored Schemes

The Directors of CSIR laboratories may invite applications for research grants in specific areas of interest to their respective laboratories. They will forward these to the CSIR HRD Group. The scheme enables the CSIR laboratories to interact with university system, so that the CSIR laboratory can take the help of the faculty there to undertake part of the work of its core programme, for which it either does not have the time and or expertise.

3. Emeritus Scientist Scheme

To provide support to superannuated outstanding scientists to pursue research in their respective field of specialization and having relevance to the programmes of CSIR.

4. Research Fellowships/Associateships

- ? Shyama Prasad Mukherjee Fellowship
- ? Senior Research Associateship
- ? Recognition of Excellence
- ? Shanti Swarup Bhatnagar Prize
- ? CSIR Young Scientist Award

5. Other Science and Technology Promotion Programmes

- CSIR Programme on Youth Leadership in Science
- CSIR Diamond Jubilee Research Interns Award Scheme
- Visiting Associateship Scheme
- Partial Financial Assistance for holding National/International Conferences/ symposium/ Seminar/ Workshops in India
- Partial Travel Grants to Research Scholars
- Entrepreneurship Support to Research Scholars
- Faculty Training Programme and Adoption of Schools and Colleges by CSIR Laboratories

Contact Address:

The Head, Human Resource Development Group
Council of Scientific and Industrial Research,
CSIR Complex, Library Avenue, Pusa
New Delhi – 110 012, Tel. Nos: (011) 25748632, 25721585
Fax. No: (011) 25840887, 25860595,
E-mail: csircx@nda.vsnl.net.in,
Website: <http://csirhrdg.res.in>

(4) Defense Research and Development Organisation (DRDO)

I. Introduction

DRDO is dedicatedly engaged in the formulation and execution of programmes of scientific research, design and development, testing and evaluation leading to induction of state-of-art weapons and equipment which would compare and compare favorably with its contemporary systems available elsewhere in the world. It consists of a chain of laboratories/establishments situated all over the country, pursuing assigned scientific goals with delegated powers under the policy direction provided by the headquarters in New Delhi. DRDO also supports a substantial amount of extramural research in academic institutions and other laboratories on defence related problems through various grants -in-aid schemes and other sponsored projects.

II. Name of scheme(s)

1. Extramural Research Scheme

- Research sponsored in academic institutions under the extramural research (ER) scheme focuses on research on phenomena or observations that are not understood, and that lack of understanding is recognized as an obstacle to scientific or technological progress in the broad topic area of relevance to military R&D. The knowledge base so generated is embodied in

High-quality technical manpower and in the new understanding, techniques and design-tools developed through the basic research funded. Such new knowledge can also provide pathways to significant advances in the mission-effectiveness of traditional military roles.

- Collaterally with the expanded knowledge-base created, a primary end-result of the research that is funded under the ER program is a networked group of qualified people whose expertise resulting from the research can be drawn-upon to build an exploitable area of new technology that has potential military applicability.
- The ER scheme also supports the instrumentality of Memoranda of Collaboration (MoC) between DRDO Laboratories & Establishments and academia. These MoC invariably involve more than one DRDO establishment and cover explorations and investigations on a range of topics within a broad subject arena that generically cross-link the research activities of the collaborating Laboratories & Establishments and the research-disciplines of the selected collaborating academic institution. Such institutional cross-linking is organic, not episodic, and is made operational in an MoC through a management structure which includes in its standing arrangements representation of directors of the collaborating DRDO institutions.

Contact Address:

The Director, Directorate of Extramural & Intellectual Property Rights
Defence Research & Development Organisation, West Block 8, Wing 5, 1st Floor, R.K. Puram
New Delhi – 110066, Telefax: 011-26170928 ,
E-Mail: erip_er@drdohq.res.in, Website: www.drdo.com

2. Aeronautics Research & Development Board

Government has set up Aeronautics Research & Development Board to coordinate, fund and sensitize futuristic, scientific technological areas having potential application for aeronautical systems, at academic institutions and national scientific laboratories. For this purpose, Grants-in-Aid of Rs. 5 Crores per year has been earmarked. The objectives are:

- the Aeronautics R&D Board has instituted a Grants-in-Aid Scheme to nurture the available research talent and to develop facilities in IITs, Universities, Higher Technological Institutes, Colleges and other research centers including industry in the country for promoting research, design and development programmes in Aeronautics and Allied Sciences, keeping in view the future needs of the country with respect to aircraft, helicopters, missiles and all other air borne vehicles and their operation.
- besides the projects activities, the Board promotes Centres of Excellence in selected areas like Computational Fluid Dynamics, Systems Design & Engineering and Composite Structures Technology. Some more centers are under consideration.
- the Board also promotes Seminars, Presentation of papers in India & abroad, Writing of books, and promoting airmindedness in School children.

Contact Address

Secretary, AR&DB, Defence Research & Development Organization
332, 'B' Wing, Sena Bhawan, New Delhi – 110 011, Tel. No: (011) 23014034, Fax. No.: (011) 23793004,
E-mail: ardb@drdo.com , Website: www.drdo.com/boards/ardb/default.htm

(5) Department of Atomic Energy (DAE)

I. Introduction

The Department of Atomic Energy supports research programmes in Nuclear Science and Technology through the Board of Research in Nuclear Sciences (BRNS). BRNS support the following schemes.

II. Name of scheme(s) & Objective(s)

1. R&D Project

Fostering research capabilities and manpower development in universities and similar institutions of higher learning and research.

2. Symposium/Conference/Workshop

To promote large scale interactions in various disciplines of science and technology that are of interest to DAE.

3. DAE Young Scientists Research Award

To support young scientist below the age of 35 years in their initial years of settling down in a career of R&D.

4. Dr. K.S. Krishnan Research Associateship

To support talented science and engineering research scholars

5. Raja Ramanna Fellowship

To utilize the services of active retired scientists/engineers and technologists, who have been involved in high quality research in their specialized discipline in the units of the DAE or any National Laboratory or University/Institute

6. Visiting Scientists

To promote close interactions on specialized scientific and technical topics between the scientists and technologists from DAE and Universities/IITs/IISc/ National Labs.

7. Homi Bhabha Chair Professorship

These Chairs are instituted in recognition of sustained record of excellence and creative contribution to research and / or teaching in the area of interest to DAE.

8. DAE Graduate Fellowships

To provide excellent career opportunity to students qualifying for admission to the M.Tech Course in Indian Institute of Technology at Mumbai, New Delhi, Kanpur, Kharagpur, Chennai or Roorkee.

9. DAE Graduate Fellowships for Ph.D.

To provide an opportunity to work on projects of interest to DAE to those students who aspire to attain the highest academic qualification, (ii) 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 (iii) to accelerate the speed to translating R&D into technology products and their applications.

10. DAE-SRC Award

The core objective is to augment support to individual research workers with highly innovative ideas and with proven abilities to pursue advanced research in frontier areas of science and engineering at an accelerated pace.

Contact Address:

The Scientific Secretary / Programme Officer ,BRNS Secretariat
Department of Atomic Energy ,1st Floor, Central Complex,
BARC, Trombay , Mumbai-400 085 . Tel. No: (022) 25505223/ 25593946/25595331/ 25595386
Fax : (022) 25505151/ 25519613,
E-mail: drppc@barc.ernet.in/ trehan@barc.ernet.in/ gnpandey@barc.ernet.in

(6) Department of Biotechnology (DBT)

I. Introduction

The setting up of a separate Department of Biotechnology (DBT), under the Ministry of Science and Technology in 1986 gave a new impetus to the development of the field of modern biology and biotechnology in India. In more than a decade of its existence, the department has promoted and accelerated the pace of development of biotechnology in the country. Through several R&D projects, demonstrations and creation of infrastructural facilities a clear visible impact of this field has been seen. The department has made significant achievements in the growth and application of biotechnology in the broad areas of agriculture, health care, animal sciences, environment, and industry.

II. Name of scheme(s)

- Agriculture
- Bioinformatics
- Biotech Product and Process Development
- Basic Research
- Human Resource Development
- Infrastructure Facilities

- International Cooperation
- Medical Biotechnology
- Bioresources
- Plant Biotechnology
- Societal Developments

III. Areas of research support

- Animal Biotechnology
- Aquaculture and Marine biotechnology
- Basic Research in Biotechnology
- Biofuels
- Bioinformatics
- Biological Control of Plants pests, diseases and weeds
- Bioprospecting and Molecular Taxonomy
- Biotech process engineering and industrial biotechnology
- Biotechnology of Medicinal and Aromatics plants
- Biotechnology of Silkworms and host-plants
- Crop Biotechnology
- Environment & Conservation Biotechnology
- Food Biotechnology
- Medical Biotechnology (Vaccines, Diagnostics, Drug Development, Human Genetics & Genome Analysis, Seri Biotechnology, Stem Cell Biotechnology)
- Microbial Biotechnology
- Plant tissue Culture
- Human Resource Development
- Nano Biotechnology
- Women Biotechnology & Programme for Rural Areas and SC/ST population
- Jai Vigyan National S&T Missions
- Patent Facilitation

Contact Address:

Scientist In-charge, Project Registry Cell , Department of Biotechnology
Block 2, 7th Floor, C.G.O. Complex, Lodi Road ,New Delhi – 110 003

Website: www.dbtindia.gov.in, www.btisnet.gov.in, www.dbtindia.gov.in/organistion/nodal.htm

(7) Department of Coal (DOC)

I. Introduction

The Central Mine Planning and Design Institute Limited (CMPDI) is the nodal agency for coordinating R&D activities in Coal and Lignite sectors. The Ministry of Coal normally supports project of shorter duration (2-4 years). The findings of which, if completed successfully, can be used directly for commercial exploitation and benefit to the industry. However, in exceptional cases, research in newly emerging and front line areas of science and engineering and projects having long term implications can be supported.

II Name of scheme(s)

Science & Technology (S&T)

Development of technology /system and its successful transfer for commercial applications.

III. Areas of research support

- Production, Productivity & Safety
- Coal Beneficiation & Coal Utilization
- Environment & Ecology

Contact Address:

General Manager (S&T) ,Central Mine Planning & Design Institute
Department of Coal ,Gondwana Place, Konke Road

Ranchi – 834 008 ,(Jharkhand) ,Tel. No: (0651) 2231148

Fax. No: (0651) 2231447 ,E-mail: cmpdihq@cmpdi.co.in ,Website: www.scienceandtech.cmpdi.co.in

(8) Department of Ocean Development (DOD)

I. Introduction

The development in Ocean Science & Technology is linked with achievements in other scientific and technological areas. The research efforts should lead to fundamental understanding and ensure predictive capabilities. An important component of the development programme is technology. To be self reliant such

technologies would have to be largely developed, tested and operated indigenously. Several new technologies will have to be commercialized and made cost effective

II. Name of scheme(s)

1. Assistance for Research Projects (ARPs) in Ocean Sciences (MRDF)
2. Manpower Training for Ocean Research & Management (MMDP)

III. Objective(s)

- To encourage research in newly emerging and front-line areas of Marine Geology and Geophysics, Marine Coastal Ecology, Marine Biology, Marine Microbiology, Coastal Marine Culture Systems, Marine Benthos, Beach Placers, Ocean Engineering and Under Water Robotics.
- Subjects considered for support under the programme include physical and chemical oceanography, marine biology, marine geology, marine geophysics, ocean engineering, marine ecology, meteorology, marine instrumentation etc. Besides purely scientific projects, assistance is also extended to projects which have politico-geographic or social dimensions of the Indian Ocean and Antarctica.
- Under the MMDP Scheme, only fellowships & contingencies are provided for.
- To encourage Research Organizations, Institutions, IITs, Universities to undertake projects with industrial tie-ups.
- To generate reliable data and information system.
- To strengthen/create infrastructure facilities in Universities/Institutions/Organizations to generate manpower in the fields of Marine Science and Technology.

IV. Areas of research support

Newly emerging and front-line areas of Marine Geology and Geophysics, Marine Coastal Ecology, Marine Biology, Marine Microbiology, Coastal Marine Culture Systems, Marine Benthos, Beach Placers, Ocean Engineering and Under Water Robotics.

Contact Address:

The Director ,Ocean Research & Manpower Development Programme
Department of Ocean Development ,Block 12, CGO Complex, Lodi Road
New Delhi – 110 003 ,Tel. No.: (011) 24306839, 24362278 ,Fax No.: (011) 24360336,24360779
E-mail: venkat@dod.delhi.nic.in ,Website: www.dod.nic.in

(9) Department of Science and Technology (DST)

I. Introduction

The Department of Science & Technology plays a pivotal role in promotion of Science & Technology in the country. Science & Technology Policy-2003 states that “Special emphasis will be placed on equity in development, so that the benefits of technological growth reach the majority of the population, particularly the disadvantaged sections, leading to an improved quality of life for every citizen of the country.”

The Department has wide ranging activities ranging from promoting high end basic research and development of cutting edge technologies on one hand to service the technological requirements of the common man through development of appropriate skills and technologies on the other.

The Department supports research through a wide variety of schemes specifically carved out to meet the requirements of different sections of the scientific and engineering community.

II. Name of scheme(s):

- Deep Continental Studies (DCS)
- Himalayan Glaciology (HG)
- Indian Climate Research Programme (ICRP)
- Instrument Development Programme (IDP)
- International S&T Cooperation (ISTC)
- Joint Technology Projects under STAC/IS-STAC
- Monsoon and Tropical Climate (MONTCLIM) & Agrometeorology
- Natural Resources Data Management System (NRDMS)
- Pharmaceuticals Research & Development Support Fund (PRDSF) Programme

- Programme Advisory Committee on Earth Sciences (PAC-ES): R&D Projects Scheme
- Science & Engineering Research Council (SERC)
- Science & Society Programmes (SSP)
- Seismology Programme (SP)
- State Science & Technology Programme (SSTP)
- Technology Development Programme (Joint Technology –Technology System Programme)
- Utilisation of Scientific Expertise of Retired Scientists (USERS)

Contact Address:

Department of Science & Technology ,Technology Bhawan,
New Mehrauli Road ,New Delhi – 110 016 ,Telefax No: (011) 26963695
E-mail: venkatesh@nic.in ,Website: www.serc-dst.org

(10) Department of Scientific and Industrial Research (DSIR)

I. Introduction

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. 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 Technology Promotion, Development and Utilization (TPDU) Programmes are directed towards meeting the specific needs of industry and are of particular relevance in the present context. Programmes and activities under the scheme are centered around promoting industrial R&D, development and commercialization of technologies, acquisition, management and export of technologies, promotion of consultancy capabilities, etc.

II. Name of scheme(s)

Technology Promotion, Development and Utilization Programmes & its Components.

Objective(s)

- Promote and support industry efforts towards R&D.
- Encourage R&D system-industry cooperation.
- Support industry for technology development, demonstration and absorption of imported technology.
- Build indigenous capabilities for development and commercialization of contemporary products and processes of high impact.
- Evaluate the status and performance of technology in selected sectors/areas.
- Facilitate effective transfer and management of technology.
- Promote international technology trade including export of technology projects, services and technology intensive products.
- Promote and strengthen consultancy capabilities for domestic use and export requirements. Support and use mechanisms, both national and international, towards transfer of technology, both within and outside the country.
- Generate endogenous capacities for the development and utilization of digital information resources for providing inputs to scientific & industrial research in the country.

These objectives are implemented through the following six component schemes:

- Industrial R&D Promotion Programme
- (i) Technology Development and Demonstration Programme
- (ii) Technopreneur Promotion Programme
- Technology Management Programme
- International Technology Transfer Programme
- Consultancy Promotion Programme
- Technology Information Facilitation Programme

Contact Address:

Department of Scientific & Industrial Research ,Ministry of Science & Technology
Technology Bhavan, New Mehrauli Road ,New Delhi – 110016
Tel. No : (011) 26960629 , Fax : (011) 26516078
E-mail : srv@nic.in, Website : www.dsir.gov.in

(11) Indian Council of Medical Research (ICMR)

I. Introduction

The primary aim of the ICMR is to promote research in the country in the fields of medicine, public health and allied areas. The Council promotes biomedical research in the country through intramural research (through Institutes totally funded by ICMR) and extramural research (through grants -in-aid given to projects in non-ICMR Institutes).

II. Name of the scheme(s)

- Ad-hoc Research Schemes : Open-ended Research (Ad-hoc Projects) on the basis of applications for grants-in-aid received from scientists in non-ICMR Research Institutes located in different parts of the country
- Senior Research Fellowship/Research Associate
- Junior Research Fellowships
- Emeritus Medical Scientist Scheme (for retired medical scientists and teachers, the Council offers the position of Emeritus Scientist to enable them to continue or take up research on specific biomedical topics.)

Other Research Activities:

- i) Short Term Research Studentship (for undergraduate medical students to encourage them to familiarize themselves with research methodologies and techniques)
- ii) National Task Force Projects : which emphasise a time-bound, goal-oriented approach with clearly defined targets, specific time frames, standardized and uniform methodologies, and often a multicentric structure
- iii) Centres for Advanced Research : setting up Centres for Advanced Research in different research areas around existing expertise and infrastructure in selected departments of Medical Colleges, Universities and other non-ICMR Research Institutes
- iv) Guidance for International Collaboration for Research in Biomedical Sciences
- v) ICMR International Fellowships for Biomedical Scientists from Developing Countries
- vi) ICMR International Fellowships for Indian Biomedical Scientists
- vii) ICMR Financial assistance to MD/MS/DM/MCH thesis programme
- viii) Grant-in-aid for organising Seminars/Symposia/Workshops

Contact Address:

Director General, Indian Council of Medical Research , V. Ramalingaswami Bhawan ,Post Box No. 4911,
Ansari Nagar , New Delhi- 110029 ,
Tel.No: 91-11-26588895, 91-11-26588980 ,91-11-26588707, 91-11-26589794, 91-11-26589336 ,Fax: 91-11-26588662 ,E-mail: icmrhqds@sansad.nic.in ,Website: www.icmr.nic.in

(12) India Meteorological Department (IMD)

I. Introduction

IMD was established in 1875. It is the National Meteorological Service of the country and the principal government agency in all matters relating to meteorology, seismology and allied subjects.

II. Name of scheme(s)

Research in meteorology and allied disciplines.

The India Meteorological Department (IMD) entertains research projects in the field of meteorology and atmospheric sciences received from scientists working in universities / institutions and government organizations for their funding under its grants-in-aid programme.

III. Areas of research support

Topics related to advancement of knowledge in the fields of meteorology and atmospheric sciences, with particular reference to the Indian region.

Contact Address :

The Director General of Meteorology
Antarctic & Project Evaluation Cell, DGM's Office
India Meteorological Department (IMD)
Mausam Bhawan, Lodi Road, New Delhi – 110 003
Tel. No: (011) 24618241 to 7 Extn. 4318
Fax: (011) 24699216, 24623220
E-mail: apec@mail.imdmail.gov.in
Website: www.imd.gov.in

(13) Indian Space Research Organisation (ISRO) - Department of Space

I. Introduction

The Indian Space Research Organisation (ISRO) was established in 1969. The Indian space programme has the primary objective of developing space technology and application programmes to meet the developmental needs of the country. Indian Space programme includes development of operational systems in the areas of satellite based remote sensing, telecommunications, broadcasting, meteorology and development of suitable launch vehicles for putting the satellite in various low earth orbits and geostationary orbits.

II. Name of Scheme(s)

1. ISRO Sponsored Research Programme (RESPOND)
2. Space Science Promotion (SSP)

Objective(s)

To conduct research and development activities in the relevant areas of space science, application and technology at the universities and academic institutions in the country. Also, to establish interactions between scientists working at ISRO and academic institutions to carry out joint research and educational activities of interest to the Indian Space Programme.

III. Areas of research support

Space science, application, technology, space communication, earth resources survey, meteorology and satellite geodesy.

Contact Address

RESPOND

Deputy Director, RESPOND
ISRO Headquarters, Antariksh Bhawan
New BEL Road, Bangalore – 560 094
Tel. No: (080) 23416271, Fax. No: (080) 23419190
E-mail: scc@isro.org, Website: www.isro.org

SPACE SCIENCE PROMOTION (SSP)

Programme Director, Space Science Office
ISRO Headquarters, Antariksh Bhawan
New BEL Road, Bangalore – 560094
Tel. No: (080) 23415269, Fax. No: (080) 23415269
E-mail: ananth@isro.org, Website: www.isro.org

(14) Ministry of Communications & Information Technology (MOCIT)

Department of Information Technology

I. Introduction

Department of Information Technology (DIT) since its inception has been giving importance to research and development. Promotion of research & development efforts in electronics and related fields in the country has been one of the major activities of Department of Information Technology.

II. Name of scheme(s)

- | | |
|---|------------------------------------|
| 1. Microelectronics & Nanotech Development Programme | 5. Electronics in Health |
| 2. Technology Development Council | 6. Human Computer Interface - TDIL |
| 3. Convergence, Communication & Strategic Electronics | 7. E- Commerce & Info-Security |
| 4. Components & Material Development Programme | 8. IT for Masses (Telemedicine) |
| | 9. Media Lab Asia |
| | 10. Photonics Development |
| | 11. Industrial Applications |

III. Areas of research support

- | | |
|---|--|
| • Information Technology (Hardware/Software) | • Rural Application |
| • Convergence, Communication & Broadband Techniques | • Health & Biotechnology |
| • Micro-electronics & Photonics | • Materials and Components including Microwaves & Millimeter waves |
| • Industrial Electronics | • Emerging Areas of Information Technology |
| • E-Commerce & Information Security | • Human Computer Interface/Language Technology |
| • Nanotechnology | |
| • Electronic Components & Material | |
| • Strategic Electronics | |

Contact Address

The Secretary , Ministry of Communications & Information Technology
 Department of Information Technology , Block-6, Electronics Niketan, CGO Complex
 Lodi Road, New Delhi – 110003 ,
 Tel. No.: (011) 24364041 ,Fax No. (011) 24363134
 E-mail: secretary@mit.gov.in , Website: www.mit.gov.in

(15) Ministry of Environment and Forests (MOEF)

I. Introduction

The Ministry of Environment and Forests is the nodal agency in the administrative structure of the central government for planning, promotion and coordination of environmental and forestry programmes. The main activities of the Ministry are conservation and survey of flora, fauna, forests and wildlife; prevention and control of pollution, afforestation and regeneration of degraded areas and protection of environment. These tasks are being fulfilled through environmental impact assessment, eco-regeneration, assistance to organizations implementing environmental and forestry programmes; promotion of environmental and forestry research, extension, education and training to augment the requisite manpower; dissemination of environmental information; international cooperation and creation of environmental awareness among all sectors of the country's population.

II. Name of scheme(s) (Under revision)

- | | |
|---|--|
| 1. Environmental Research Programme (ERP) | 6. Wetlands |
| 2. Ecosystems Research Scheme (ERS) | 7. National Natural Resources Management System (NNRMS) |
| 3. Eastern and Western Ghats Research Programme (E&WRP) | 8. Ganga Action Plan/National River Conservation Programme |
| 4. Biosphere Reserves | 9. Research and Consultancy Projects in Wildlife |
| 5. Mangroves and Coral Reefs | |

Contact Address:

Adviser , Research Division , Ministry of Environment and Forests
 Paryavaran Bhavan, Block No. 2 , CGO Complex, Lodi Road
 New Delhi – 110003 , Tel.No: (011) 24362840 , Fax: (011) 24368654
 E-mail: rmehta52@yahoo.com , Website: www.envfor.nic.in

(16) Ministry of Food Processing Industries (MFPI)

I. Introduction

The Ministry of Food Processing Industries (MFPI) was set up in July, 1988 to give an impetus to development of food processing industries in the country. The Ministry is concerned with formulation and implementation of the policies & plans for the food processing industries within the overall national priorities and objectives. The Ministry acts as a catalyst for bringing in greater investment into this sector, guiding and helping the industry, encouraging exports and creating a conducive environment for healthy growth of the food processing industry.

II. Name of scheme(s)

Research & Development in Processed Food Sector

Objective(s)

- Update processing, packaging and storage technologies for all major processed food products so that they meet International Standards.
- Standardization of various factors such as bacteriological standards, preservation standards, additives, pesticide residue etc., of meat and meat products, development of value added products of commercial importance.
- Development of processing technology for the production of intermediate and finished food product/production including design and building of prototype equipment/pilot plants.
- Fortification of cereals/cereal products for enhancing the nutritional level of our population, especially women and children.
- Traditional Foods of various regions of the country.
- Development of new cost effective technologies for preservation and packaging for food products based on traditional foods, common food grains, dairy products etc., for both domestic and export purposes. Development and design of equipment for manufacture of such products, development of new inexpensive packaging techniques and equipments, analysis of existing packaging methods, materials processes, quality control norms studies about improvement in the currently used systems, studies about newer packaging possibilities.
- Ministry may engage reputed research institutions/universities for directed research & development of low cost indigenous technology for preservation/processing, which will result in value addition to various foods

III. Areas of research support

Proposals related to the areas mentioned under the “Objectives” will be considered for support.

Contact Address

The Joint Secretary , Ministry of Food Processing Industries ,Panchsheel Bhawan,
August Kranti Marg , New Delhi – 110 049 , Tel. No: (011) 26492216, 26492174
Fax. No: (011) 26493228 , E-mail: mofpi@hub.nic.in , Website: www.mofpi.nic.in

(17) Ministry of Non-Conventional Energy Sources (MNES)

I. Introduction

The Ministry promotes renewable energy technologies and creates an environment conducive for their commercialization through innovative policy initiatives and strategies. The range of its activities covers renewable energy resource assessment, research and development, demonstration, extension and production in the areas of biomass energy, solar thermal and solar photovoltaics, wind energy and small hydro power. It also promotes and supports studies and research in new technology areas such as tidal energy, geothermal energy, alternate fuels for transportation, hydrogen energy and fuel cells. The programmes of the Ministry are implemented mainly through the state energy development agencies and state electricity boards. Greater thrust has been given to research and development through active involvement of research institutions, universities, industries and non-governmental organizations.

II. Name of scheme(s) (Under revision)

- **Industry/Institution Participation in Research and Development Projects**
To encourage public as well as private industrial sector for research and development in NRSE sector on cost sharing basis.

III. Areas of research support

- New Technologies
- Solar Thermal

- Solar Photovoltaics
- Wind Energy
- Biomass Energy
- Small Hydro
- Others

Contact Address

Director (R&D) , R&D Division ,Ministry of Non-Conventional Energy Sources
 Block No. 14, C.G.O. Complex, Lodi Road ,New Delhi – 110003
 Tel. No: (011) 24361604 , Fax. No: (011) 24367413 ,
 E-mail: shuklaar@nic.in ,Website: www.mnes.nic.in

(18) Ministry of Power, Central Power Research Institute (CPRI)

I. Introduction

Ministry of Power, Government of India has entrusted the Central Power Research Institute to act as the nodal agency to manage the Research Scheme on Power [RSOP] including the funding for the Research programme. Techno-economic evaluation, monitoring and optimal utilization of resources are the major responsibilities of CPRI. This was earlier carried out by CBI&P and is now being managed by CPRI, since April 2001.

II. Name of scheme(s)

▪ Research Scheme on Power (RSOP)

The scheme basically aims to provide fund for carrying out need based research projects in power sector including solving of power system operational problems in the country.

III. Areas of research support

The research areas include but not limited to:

- Power system planning, improvement, studies
- Diagnostic and condition monitoring of power system equipments.
- Reliability enhancement of power station equipment etc.

However, pertinent projects in the power sector on specific case will also be considered.

Contact Address

Joint Director(R&D) , Central Power Research Institute ,Ministry of Power
 P B No.8066 , Bangalore 560 080 ,Tel No: (080) 23605367 ,Fax No: (080) 23601213
 E-mail: babu@powersearch.cpri.res.in , Website: <http://powersearch.cpri.res.in>

(19) Ministry of Water Resources (MOWR)

I. Introduction

Ministry of Water Resources (MOWR) provides financial assistance to promote research work in the field of Water Resources Engineering. The assistance is provided by way of grants to academicians/experts in the Universities, IITs, recognised R&D laboratories, Water Resources/ Irrigation departments of the Central and State Governments and NGOs. Research proposals of applied nature as well as basic research are considered for MOWR support.

II. Name of scheme(s)

▪ Research & Development for Water Resources Management

- To find practical solutions to the country's water resources related problems, to improve available technology and engineering methods and procedures.
- To maintain a lead in the latest technology so as to enable export of expertise from India, in competition with other developed nations, to countries that import such expertise, in order to earn foreign exchange, increase GDP and provide employment opportunities for Indians abroad.
- To review the state of the art in the country in different branches of the subject area by collecting relevant information from national and international organizations and publish

“State of the art Report”. To prepare and maintain a comprehensive documentation, preferably using IT, of R&D done so far at national as well as international level.

- To prepare, co-ordinate and recommend funding of research programmes to be taken up by the institutions in the country on basic and applied research, action research, and other areas related to research in the subject field.
- To review the R&D programme in the subject area: identify topics which need immediate attention and encourage the national institutions to take up research on these topics.
- To disseminate information and stimulate thinking related to the subject field by publishing journals, research news/digests; arranging and conducting seminars/ conferences/ workshops; supporting mass awareness programmes.
- To provide support for the infrastructure development of research institutions working in the water resources sector.
- To encourage indigenous industry to take up technology development in the subject area.
- To promote and co-ordinate effective participation of India in the International programmes related to the water resources.
- To promote educational, training and Human Resources Development programmes in the subject area

III. Areas of research support

INC	Subject Domain
INCH	Management of Floods, Hydraulic Structures (including masonry and concrete structures), River and Estuarine Hydraulics, River Morphology, Ground Water Hydraulics, Instrumentation for Seismic and Geophysical Measurements, Open Channel Flow, Pipe Flow, Hydraulic Machinery, City Water Supply and Ports and Harbours
INCOH	Meteorology, Surface Water Hydrology, Evaporation Control, Ground Water Hydrology and Management, Instrumentation, Real Time Systems, Application of GIS and Remote Sensing
INCID	Irrigation, Drainage, Agronomy, Water Management, Environmental Impact and Socio-Economic Aspect of Water Resources Projects, Plasticulture Development, Geo-textiles
INCGE	Rock Mechanics & Tunneling Technology; Soil Mechanics & Foundation Engineering; and Instrumentation and Measurement Techniques
INCCMS	Construction Materials, Concrete Technology and Structures

Contact Address

Director , R&D Division, PP Wing , Ministry of Water Resources
1st floor, Wing –4, West Block – 1 , R K Puram New Delhi-110066
Tel. No: (011) 26104082 Fax. No: (011) 26104082 ,E-mail: watrnd-mowr@nic.in , Website:
www.wrmin.nic.in

(20) Department of Education (DOE)

The Deputy Education Adviser (T), Division TD, VI,
Department of Education, Ministry of Human Resource Development,
Shastri Bhawan, New Delhi.
Fax: 011-2382365/23011097/2384093 , Tel: 011- 23782296/2381703

(21) Science and Technology Application for Rural Development (STARD)

Science and Society Related Programmes

The Head, Sci.& Society Division, Dept. of Sci. & Technology, Technology Bhavan, New Mehrauli Road, New Delhi – 110 016,
e-mail: sunilag@alpha.nic.in ,web: www.scienceandtechnology-dst-org.
Fax: 26864570, 26863847, 26862418 ,Tel: 011-26567373 Extn. 298

(22) Science & Technology for Weaker Sections (STAWS).

Science and Society Related Programmes

The Head, Sci.& Society Division, Dept. of Sci. & Technology, Technology Bhavan, New Mehrauli Road, New Delhi – 110 016 ,
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Fax:26864570, 26863847, 26862418 ,Tel:011-26567373 extn. 298

(23) Indian National Science Academy (INSA)

The Chairman, Indian National Science Academy, Bahadur Shah Zafar marg, New Delhi – 110002
e-mail: insa@giasd101.vsnl.net .in , insa@delnet.ren.nic.in ,web: insa1@ndf.vsnl.net..in
Fax: 91-11-23235648/23231095 ,Tel: EPBAX No. 23221931 to 23221950

INTERNATIONAL FUNDING AGENCIES

(24) International Foundation for Science

Director, International Foundation for Science, Grev Turegatan 19, S.114 38, STOCKHOLM, SWEDEN , WEB: www.ifs.se, e-mail: . info@ifs.se. , Tel: 46 545 81800

(25) Third World Academy of Sciences (TWAS)

Executive Director, Third World Academy of Sciences (TWAS), c/o the Abdus Salam International Centre for Theoretical Physics, (ICTP), P.O. Box 586 – Via Beirut 6 – 34100 Trieste – Italy.
e-mail: info@twas.org., web: http://www.org/activities.html
Fax:+39 040 224559 ,Tel: +39040 2240387

(26) Third World Network of Scientific Organizations

The Third World Network of Scientific organizations, (TWNSO), c/0 The Abdus Salam International Centre for Theoretical Physics (ICTP). Strada Cpstoera 11- 340 14 Trieste – Italy :
e-mail: info@twnso.org , web: www.twnso. Org ,
Fax: . + 39 040 2240 689 ,Tel: +39 040 2240-683