SPONSORING AGENCIES

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Sponsoring research in India: A boon or bane?

In India, not much funding is allotted for carrying out fundamental research in educational institutions, especially graduate level institutions.

There are very few funding agencies in India such as UGC, CSIR, DST, MoES, MoEF and AICTE.

Despite the knowledge, drive, potential and motivation, the Indian youth miserably fail in research activities, because of inadequate funding.

It is very saddening to note that our country is losing young, energetic and research-oriented students, since they migrate to foreign countries where the universities are supported by well-equipped research laboratories.

Student recruitment, admissions, enculturation, and education are expensive activities that become even more costly under conditions of high turnover.
Sponsoring agencies from Government of India

Ministry of Science & Technology
- Department of Science & Technology (DST)
- Department of Scientific & Industrial Research (CSIR)
- Department of Biotechnology (DBT)
- Department of Ocean Development (DOD)

Ministry of Environment & Forests
- National Biodiversity Authority (NBA)
- Aquaculture Authority of India (AAI)
- Zoological Survey of India (ZSI)
- Botanical Survey of India (BSI)

Ministry of Agriculture
- Department of Agriculture (ICAR)
- Department of Animal Sciences (ICAR)
- Department of Fisheries (ICAR)
- Fisheries Survey of India (FSI)

Universities Grants Commission (UGC)
- National Universities
- State Universities
- Private Universities
Responsible for major policy relating to higher education

Establishes central universities in the country.

Declaration of Education Institutions as ‘Deemed to be University’

Determination and maintenance of standards and release of funds

Establishment of State Universities and colleges

Provide plan grants for their development

The Central Advisory Board of Education (CABE).
Universities
✓ Usually, a university is established under the act of a state legislature. The State Government maintains control of the universities in many respects, although a central agency, the University Grants Commission provides bulk of the funding.

✓ The Central Government has established 20 universities that are funded and controlled by it.

Deemed Universities
✓ There are 63 deemed universities in India.

Institutes of national importance
✓ Institutes of national importance are the crown jewels of higher education and research in India.

✓ These are autonomous bodies outside the control of the University Grants Commission that controls the governance of universities.

✓ These institutions have different funding structures, and their own curricula, academic calendar and compensation system for the faculty.
Funding Pattern of the government

The projects are classified into eight major subject areas:

- Agricultural Sciences
- Biological Sciences
- Chemical Sciences
- Earth Sciences
- Engineering and Technology
- Medical Sciences
- Physical Sciences

The institutions have been classified into 11 categories:

- Universities
- Deemed universities
- Science colleges
- Engineering colleges
- Medical/pharmacy colleges
- Institutes of national importance
- National laboratories
- Government departments/State S&T councils
- Scientific and Industrial Research Organizations
- Research institutions and voluntary organizations
UGC Innovative Programmes “Teaching and Research in Interdisciplinary and Emerging Areas”

**Eligible Target Groups**
The Universities / Institutes / Colleges which are fit to receive financial assistance under Section 2(f) and 12(B) of UGC Act

**Nature of assistance**
on 100% basis
Essential and critical requirements of laboratory equipment, contingency, staff etc.
The limit of the financial assistance will be **Rs.50.00 lakhs for nonrecurring** and recurring items plus staff (for courses only) on actual basis.

**Duration of the programme**
5 years.

**Financial assistance**
Non – Recurring Total (NR) = 34.00
Recurring Total 16.00 + staff

Grand Total 50.00 lakhs + staff (on actual basis)
Overhead 10% (NR & R)

**Procedure for applying for the scheme**
Circular to Vice – chancellors / registrars of all eligible universities / institutes
Categories of proposals will not be considered:
- Department which has already received UGC assistance under SAP, COSIST (now ASIST) and Innovative Programme, including courses in Emerging Areas.
- Proposals for creation / establishment of new Centre / Departments will not be considered under this programme.

Procedure for approval by the UGC

- Short-listing of new proposals
- Expert Evaluation and Assessment/Induction Committee for Final Selection

For Contact: -
Joint Secretary (SAP/ASIST)
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi – 110 002.
Various national and international agencies have identified priority areas for funding of collaborative research.

As a condition of grant support, institutions in receipt of funds are responsible for ensuring that the investigator fully complies with the requirements for the storage, use and transfer of biological materials and any additional provisions to safeguard security that are specified in regulations.

Parent institutions of the investigators are also required to accept responsibility for the management, monitoring and control of research work funded by international grants and for ensuring that permanent/temporary staff and students employed to undertake such work receive appropriate training.

Some of the leading Indian funding agencies are as mentioned below.
Department of Science and Technology (DST)

- Established in May 1971

Main goals
- 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 under the Ministry of Science & Technology.

Responsibilities
- formulation of policies relating to science and technology matters relating to Scientific Advisory Committee of Cabinet (SACC).
- promotion of new areas of S&T with special emphasis on emerging areas
- Coordination and integration of areas of Science and Technology

Major activities
- It undertakes or financially sponsors scientific and technological surveys, research design and development;
- Providing support and grants-in-aid to the scientific research institutions, scientific association or bodies.

- It plays a key role in matters regarding the interagency/interdepartmental coordination for evolving science and technology missions,

- Matters concerning domestic technology particularly the promotion of ventures involving the commercialization of such technology other than Council of Scientific and Industrial Research (CSIR).

- Establishment of new institutions/infrastructure. It assists in harnessing and application of science and technology for weaker sections, women and other disadvantaged sections of the society.
Department of Biotechnology (DBT)

- Since it’s inception, 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 clearly visible impact in this field has been seen.

- The Department has made significant achievements in the broad areas of agriculture, health care, animal sciences, environment and industry.

- An unique feature of the Department has been the deep involvement of the scientific community of the country through a number of technical task forces, advisory committees and individual experts in identification, formulation, implementation and monitoring of various programmes and activities.

- Patenting of innovations, technology transfer to industries and close interaction with them have given a new direction to biotechnology 24 Indian Council of Medical Research.

- (DBT) working 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.
Ministry of Environment and Forests (MoEF)

- The Ministry of Environment and Forests, is classified as a ‘Scientific Ministry’ under the Government of India.
- Since its inception in 1985, the Ministry has funded research by diverse research institutions in several disciplines concerned with environmental protection.
- Some indicative areas include: forest conservation, wildlife protection, biodiversity inventories, R&D in environmental management technologies, climate change, public health impacts of environmental degradation, etc.
- The present Guidelines set forth the Objectives of research support, the Thrust Areas for research support, procedures for inviting/receipt and processing proposals for funding support, norms for funding, conditions of support and dissemination of research findings.

Objectives:
- To generate information and knowledge required for developing strategies, techniques, and methodologies for better environmental management.
Organizations under MoEF

Subordinate offices
- Botanical Survey of India (BSI), Kolkata
- Directorate of fisheries education (DFE), Dehradun
- Forest Survey of India (FSI), Dehradun
- Indira Gandhi National Forest Academy (IGNFA), Dehradun
- National Museum of Natural History (NMNH), New Delhi
- National Zoological Park (NZP), New Delhi
- Zoological Survey of India (ZSI), Kolkata

Autonomous institutions
- Central Pollution Control Board (CPCB), Delhi
- Central Zoo Authority (CZA), New Delhi
- G.B Plant Institute of Himalayan Environment and Development, Almora
- Indian Council for forestry research education (ICFRE), Dehradun
Established in 1969, the Indian Council of Social Science Research aims to boost research activities in social sciences in India. Therefore it provides scholarships in various areas of social sciences to boost research. It is one among them that is granted to bright social scientists, who meet with all eligibility criteria.

Eligibility Criteria for the ICSSR Senior Research Fellowship:

The Senior Fellowships of the ICSSR are granted to social scientists that are professionals in their respective fields of study.

The other eligibility criteria are as follows:

- Must be a Ph.D degree holder
- Must have published research papers of proven quality in journals
- Awardees may also be social workers or journalists or even civil servants who have a proven track record in the relevant subject and have also published research papers.
- There is no age limit for the ICSSR Senior Fellowships
- The research work under the Fellowship is a full time program
- Awardees may also pursue their research activities outside India
- Awardees may also be research scholars from abroad who are interested to carry out research work in India in any branch of social science.
The purpose of Life Sciences Research Board (LSRB) is to expand and deepen the knowledge base of life sciences in the country through strengthening and use of national resources.

The research supported by the LSRB is to enhance the core competence in the fields of knowledge (and their application) germane to development, manufacture and use of biomedical and biotechnological products as also preventive and curative procedures.

Accordingly LSRB supports research proposals in broad topic areas in Life Sciences viz., biological and biomedical sciences, psychology and physiology, bioengineering, specialized high altitude agriculture, food science & technology etc.

Innovative ideas and proposals from young scientists are encouraged.

The boards provide grants-in-aid for collaborative defence-related futuristic frontline research having application in the new world class systems to be developed by DRDO.
Council of Scientific and Industrial Research

- constituted in 1942 by Central Legislative Assembly.

- An autonomous body registered under the Registration of Societies Act of 1860.

✓ Senior Research Associateship

highly qualified Indian scientists, engineers, technologists, and medical personnel returning from foreign countries who are not holding any employment in India

AGE LIMIT forty (40) years.

MINIMUM QUALIFICATIONS Ph.D in any one of the subject area with 2 years experience in teaching.

OPERATION OF AN EMERITUS SCIENTIST SCHEME

Tenure

It will be applicable only upto 65 years of age.

FOREIGN TRAVEL GRANT Rs. 30,000/- or 50% of the air fare grant is admissible once in three years
Defence Research and Development Organisation (DRDO)

✓ The Defence Research and Development Organisation working under the Ministry of Defense

Objectives

❖ Formulation and execution of programmes of scientific research
❖ Design and development, testing and evaluation leading to induction of state-of-art weapons and equipment.
❖ supports a substantial amount of extramural research in academic institutions and other laboratories on defense related problems through various grants-in-aid schemes and other sponsored projects.
❖ The organization encourages and supports basic research in academic institutions through a scheme of extramural research and four Research

Boards devoted to

i. Aeronautics,
ii. Naval Research,
iii. Life Sciences,
iv. and Armaments.
The Indian Council of Agricultural Research (ICAR) is an autonomous organization under the Department of Agricultural Research and Education, Ministry of Agriculture, Government of India.

Formerly known as Imperial Council of Agricultural Research, it was established on 16 July, 1929 as a registered society under the Societies Registration Act, 1860 in pursuance of the report of the Royal Commission on Agriculture.

The ICAR has its headquarters at New Delhi. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country.

With over 90 ICAR institutes and 45 agricultural universities spread across the country this is one of the largest national agricultural systems in the world.
Department for Scientific & Industrial Research

- The Department of Scientific and Industrial Research (DSIR) is a part of the Ministry of Science and Technology.
- The primary endeavor 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,
  - Catalyze 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).
Indian National Science Academy (INSA)

- The Indian National Science Academy encompasses promotion of science in India including its application to national welfare, safeguarding the interests of the scientists, establishing linkages with international bodies to foster collaboration and expressing considered opinion on national issues.

- The Academy also felicitates through properly constituted National Committees, in which other learned academics and societies may be associated, for undertaking scientific work of national and international importance which the Academy may be called upon to perform by the public and by the Government.

- The main objectives of the Indian National Science Academy are promotion of scientific knowledge in India including its practical application to problems of national welfare.
It also aims to coordinate among Scientific Academies, Societies, Institutions, Government Scientific Departments and Services.

It also acts as a body of scientists of eminence for the promotion and safeguarding of the interests of scientists in India through properly constituted National Committees, for undertaking scientific work of national and international importance.

It seeks to promote and maintain liaison between Science and Humanities, while attempting resource mobilization for the promotion of Science.

The Academy also dons advisory role to the government on critical issues in science and technology. Importantly, it serves as a forum for interaction among scientists within and outside the country.
Tamil Nadu State Council for Science and Technology, Chennai

- The Government of Tamil Nadu has established the Tamil Nadu State Council for Science and Technology as an apex Autonomous Body in 1984 to foster development of Science and Technology in Tamil Nadu.
- The State Government provides funds to the Council to meet its revenue expenditure under the State Plan. The Department of Science and Technology of the Government of India also extends financial assistance by way of annual grant to meet the expenditure on professionals and secretarial staff of the Council.

1. **Student Project Scheme**

- The scheme envisages utilisation of tremendous student talent and potential by providing financial and academic support to the final year B.E. / B.E. (Agri) and other students in professional colleges and post graduate science students of University departments and affiliated colleges in Tamil Nadu to carry out projects, which are relevant to the society and to provide solutions to the local problems in Tamil Nadu.
The students may also choose to work in Small Scale Industries / rural voluntary organisations. A certain number of projects will be allocated to every branch of study depending upon the importance of the thrust areas of science and technology.

The scheme was initiated during 1992-93. During the 9th plan 644 projects have been supported. During 2001-02, 234 students projects were sanctioned.

This programme will be continued during 2003-04.

2. Science and Technology Projects

The aim of this programme is to encourage research in development sectors that would contribute to the socio-economic development of the State.

During 2003-04, funds have been provided for 10 new Science and Technology Projects to be initiated.
3. Adoption of Young Student Scientists

✓ The aim is to produce highly talented scientists in the country. This is a gifted scheme benefitting rural people in Tamil Nadu.
✓ In each district 50 bright students studying in 8th standard from various schools will be selected through a written test.
✓ They will stay in college campus and will be trained in all scientific subjects.

4. Young Scientists Fellowship Schemes

✓ Under the Young Scientist Fellowship programme, assistance is given to Young Scientists working in various Research Institutions in Tamil Nadu to undergo "Research Training" in various Research Centres and Universities.
✓ This programme is implemented with partial financial assistance from DST - Government of India on 50:50 basis. During Ninth Plan 52 Young Scientists have been supported.
5. Partial Financial Assistance for Seminars / Symposia and Workshops

- The aim of this programme is to offer partial financial assistance to organisations for conduct of conference / Seminar / Symposia / Workshop in important areas of Science & Technology such as Agriculture, Bio-technology, Veterinary Sciences, Medicine, Environment, Engineering and Technology, Energy etc., which will provide a suitable platform to Scientists and Technologists.

8. Incentive to young scientists - Travel grant to young Scientists fellowship

- The objective of this programme is to encourage young scientists in institutions to know of developments in front areas in science and technology by their contribution at National / International Seminars, with partial financial assistance for Travel.

- The awardees are to share the information acquired with fellow Scientists at a Seminar to be arranged at one of the Institutions.
9. Assistance to S & T Publications and Science Magazines in Tamil – Ariga Arivial, Arivukkan, Thulir etc.

- The aim of this programme is to foster the creative talent of writers by bringing out Science and Technology publications in Tamil which will help to spread Science & Technology among children and masses.

- It is also proposed to continue the provision of financial subsidy in 2003-04 to Organisations for bringing out the Science Magazines in Tamil for Children viz., Ariga Arivial, Arivukkan, etc.

- Besides financial assistance is to be provided for bringing out in Tamil some of the text books to be used at the undergraduate studies in engineering as well as scientific disciplines.
RESEARCH FELLOWSHIPS
CSIR – UGC NET
CSIR – UGC NET
Objective:
This *national level test* is conducted to determine the eligibility of Indian nationals for the award of Junior Research Fellowships (JRF)-NET and eligibility for appointment of Lecturers (NET) in certain subject areas falling under the *Faculty of Science*

Eligibility Criteria

*Educational Qualification:*
M. Sc., or equivalent degree, with minimum 55% marks

*Age Limit:*
The upper age limit for JRF shall be 28 years, which is relaxed upto 5 years in the case of candidates belonging to Schedule Castes/Schedule Tribes, Women, Physically Handicapped and OBC applicants.
Some of the leading Research Institute where you can apply after qualifying JRF
1. IISc Bangalore: www.iisc.ernet.in
2. IIT-Bombay: www.iith.ac.in
3. IIT-Delhi: www.iitd.ac.in
4. IIT-Kharagpur: www.iitk.ac.in
5. IIT-Roorkee: www.iitr.ernet.in
6. AIIMS: www.aiims.edu
7. ICGEB, New Delhi: www.icgeb.res.in
8. Institute of Genomics and Integrative Biology: www.igib.res.in
9. IARI: www.iari.res.in
10. Central Drug Research Institute: www.cdriindia.org
11. ACBR, Delhi University: www.acbrdu.edu
12. JNU: www.jnu.ac.in
13. Delhi University South Campus: www.south.du.ac.in
14. NCPGR, New Delhi: www.ncpgr.nic.in
15. National Institute of Virology: www.unipune.ernet.in
18. Bose Institute: www.boseinst.ernet.in
19. Central Food Technological Research Institute: www.cftri.com
Objective:

• For conducting advanced research or undergoing specialized training in Indian Research Institutes/Laboratories

Criteria for selection:
Scientific contributions and the purpose of the visit

Eligibility details of Award:

• The applicant should be a scientist and hold a regular position in any R & D organization including Universities or Affiliated Colleges in India.

These Fellowships will be awarded on a competitive basis to the scientists for furtherance of their research and/or research capabilities for carrying out collaborative research, undergoing training in specific techniques, or utilizing facilities not available in their own institutions.
Support to INSA Young Scientist Awardees:
Provides opportunity to visit abroad under the Bilateral Exchange Programme with full travel support once within the five years of having received the award.

Countries offering positions available under exchange programme are as follows:

<table>
<thead>
<tr>
<th>The Netherlands</th>
<th>Brazil</th>
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<tbody>
<tr>
<td>Philippines</td>
<td>China</td>
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<tr>
<td>Poland</td>
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<td>Russia</td>
<td>France</td>
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<td>Slovak Republic</td>
<td>Germany</td>
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<td>Republic of Slovenia</td>
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<td>Ukraine</td>
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<td>U.K</td>
<td>South Korea</td>
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<td>Nepal</td>
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</table>
NOMINATION TO INDIAN / INTERNATIONAL ACADEMY
National academy of sciences (NASI)

FNAAS agricultural academy (New Delhi)

FNA Fellow of national academy of sciences (INSA New Delhi)

National Academy of Agricultural Sciences

FA fellow of National Allahabad academy (Allahabad)

F.N.A.Sc. Bangalore Academy

INSA – JSPS – Japan

INSA – DFG – Germany

INSA – RS- England
GRE INTERNATIONAL STUDY PROGRAM
The Graduate Record Examination is a Standardized test that measures verbal, mathematical and analytical skills.

- The GRE Test is developed and administered by the US-based "Educational Testing Service" (ETS) under the direction of the Graduate Record Examination Board, a non-profit organization of graduate business schools worldwide.
GRE test is conducted in two categories:

- General GRE test
- Subject GRE test

General GRE test:

Conducted all-round-the-year. Unlike other exams, you can choose your own date and time for taking the GRE Test.

- The test is administered in the five-days-a-week (Monday through Friday), twice-a-day. September to December is the high season for GRE Test.

Eligibility to appear for GRE exam/test:

- Anyone is eligible to appear in GRE General test. There are no restrictions based on age or qualifications. The test scores are valid for five years, i.e., most universities accept scores up to five years old.
The GRE Subject test

To assess candidate's qualification in a specific field of study

• It is required mainly for Doctoral Study in the US and is also required by some Universities for Masters Level programs

• GRE Subject test is a written test and not a computer test like the General GRE test. It is held thrice a year

The test is available in eight different areas:

Biochemistry, Cell and Molecular Biology
Biology
Chemistry
Computer Science
Literature in English
Mathematics
Physics
Psychology
International fellowships
## EU Grants for Enterprises (2007-2013) – Selected Support Areas

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<th>Programme</th>
<th>Selected support areas</th>
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<td><strong>INNOVATIVE ECONOMY</strong></td>
<td>Innovative investments&lt;br&gt;R&amp;D and adoption of outcomes, R&amp;D infrastructure&lt;br&gt;Capital funds</td>
</tr>
<tr>
<td><strong>INFRASTRUCTURE AND ENVIRONMENT</strong></td>
<td>Renewable energy sources&lt;br&gt;Investment in environment-friendly technologies&lt;br&gt;e.g. pollution control projects, recycling, waste management</td>
</tr>
<tr>
<td><strong>HUMAN CAPITAL</strong></td>
<td>Training programmes for employees and managers&lt;br&gt;Post-graduate studies (incl. MBA, e-learning)&lt;br&gt;Development of human resources in rural areas</td>
</tr>
<tr>
<td><strong>REGIONAL OPERATIONAL PROGRAMMES</strong></td>
<td>SME investments, ICT, infrastructure, innovation in the regions</td>
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<tr>
<td><strong>EASTERN POLAND</strong></td>
<td>Transport and information infrastructure</td>
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<tr>
<td><strong>RURAL DEVELOPMENT PROGRAMME</strong></td>
<td>Improvement in the processing and marketing</td>
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<td>Scope of the investment</td>
<td>Years 2007-2013</td>
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<td>BAT / IPPC</td>
<td>Priority axis 4: Infrastructure and Environment</td>
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<td>4.3 – Support for enterprises concerning implementation of Best Available Techniques (BAT)</td>
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<td>Industrial sewage</td>
<td>4.4 – Support for enterprises concerning water and sewage management</td>
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<td>Air protection</td>
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<tr>
<td>Solid industrial waste</td>
<td>4.2 – Rationalisation of resources and waste management</td>
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<td>Introduction of Environmental Management System</td>
<td>4.1 – Support for Environmental Management Systems</td>
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<tr>
<td>Recycling</td>
<td>4.6 – Support for enterprises concerning post – user and hazardous waste reclamation and disposal</td>
</tr>
</tbody>
</table>
BAT
Types of projects for years 2007-2013

- Change of technology aiming at eliminating harmful influence on environment,
- Change of technology aiming at limiting energy and raw materials usage and eliminating waste production,
- Change of technology aiming at limiting emissions volume of harmful substances and energy,
- Investment in devices which limit harmful emissions to environment („end-of-pipe”).
Air protection
Types of projects for years 2007-2013

- Modernization or expansion of fuels combustion plants and heating systems
- Modernization of machines or equipping fuels combustion plants with devices limiting gas and dust pollution
- Fuels combustion plants’ conversion into more environment friendly solutions
Solid waste from production
Types of projects for years 2007-2013

- Replacement of raw material with material from recycling of waste,
- Limitation of volume of solid waste from production process,
- Limitation of usage of raw material including water and energy
## Scope of support
### Priority Axis IX and X

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<th>Measure</th>
<th>Name</th>
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<td>Highly efficient energy production</td>
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<td>9.2</td>
<td>Effective energy distribution</td>
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<tr>
<td>9.3</td>
<td>Thermo-modernization of public utility premises</td>
</tr>
<tr>
<td>9.4</td>
<td>Production of energy from renewable sources</td>
</tr>
<tr>
<td>9.5</td>
<td>Production of biofuels from renewable sources</td>
</tr>
<tr>
<td>9.6</td>
<td>Distribution networks designed for energy from renewable sources</td>
</tr>
<tr>
<td>10.3</td>
<td>Development of industry for renewable sources of energy</td>
</tr>
</tbody>
</table>
Cogeneration
Types of projects for years 2007-2013

- Building or modernization of electricity and heat cogenerational production plants
- Replacement of current heat production units with highly efficient cogenerational energy production plants
- Preparation of required documentation
Effective energy distribution
Types of projects for years 2007-2013

- Extension or modernization of distribution networks for high, medium and small voltage aiming at limiting losses during transfers and limiting time of shutdowns

- Building of new or modernization of currently existing heat distribution through usage of energy saving solutions and technologies

- Preparation of required documentation
Thermo-modernization of premises
Types of projects for years 2007-2013

- Thermo-modernization of public utility premises including change of equipment of mentioned premises for more energy-saving
- Preparation of required documentation
Production of energy from RES
Types of projects for years 2007-2013

- Construction of renewable energy production units,

- Increase in power supply from units using renewable sources of energy.
Key success factors in EU grant acquisition process

How to prepare a successful project?
Grant acquisition process
Key success factors

- MONITORING – a continuous source identification process
- TIME AND RESOURCES
- PRELIMINARY ANALYSIS
- PROJECT MANAGEMENT – Project Coordinator!
How to organise the grant acquisition process?

1. Initiate
2. Apply
3. Comply

Process management
1. Initiate

Goal:
- Identification of funding sources
- Preliminary verification at Implementing Institutions
- **Decision making (‘yes/no’) concerning the application**

Role of PNO Consultants:
- Present grant opportunities
- Pro-active matching
2. Apply

Goal:
- High-quality applications
- Efficient application process
- Optimal success rate and commitment

Role of PNO Consultants:
- Build (grant) consortia
- Prepare and submit applications
- Organise and manage project support
- Contract negotiations
3. Comply

Goal:
- Accurate administrative processes
- Efficient support tools
- Optimum grant payment

Role of PNO Consultants:
- Project management
- Reporting / Final declaration
- Risk monitoring
Process management

Goal:
- Safeguard quality and performance
- Central management and overview

Role of PNO Consultants:
- Process responsibility
- Regular management reporting
- Signalling bottlenecks, advising
How to find a project with chances to win a EU grant?
EU grants as long-term financing source!

**Strategy focus**
- Long-term approach
- Setting the strategy of using EU grants as long-term financing tool
- Analysing long-term development plans (2007-2013) and looking for financing sources
- Selecting best projects with high chances for EU grants!

**Project focus**
- Short-term approach
- Focus on finding EU grants for a given project
- Detailed analysis of chances of winning EU grant!
Strategy focus – Steps

Step 1
PROJECT ASSESSMENT:
- short-term (1-3 years)
- long-term (2007-2013)

Investments
R&D
Training
Other

Step 2
IDENTIFICATION OF FUNDING SOURCES

APPLICATION DEADLINE

Step 3
Detailed analysis of chosen projects according to the criteria

Step 4
SELECTION OF THE BEST PROJECTS

Applications only for projects with high chances of winning EU grants!
Portals & Info Systems on EU Funding (2)

- The Seventh Framework Programme  

- Life+  

- Marie Curie Actions  

- DG for Enterprise and Industry  

- European Investment Fund  

- JEREMIE  

- eContentplus  
Student Exchange Program

Motivation
- The proposed joint research item is wide research, including ubiquitous computing as well as manufacturing. Therefore, for the study, various domain knowledge might be needed.
- To carry out the joint research item, studying during short term and exchanging e-mail is not enough.
- For the joint research like joint workshops and seminars, long cooperation between laboratories is required.

Goal
- Carrying out a long term or short term joint research by PhD candidates
Student Exchange Program

- **Types of programs**
  - Short term exchange program: During the vacation (2 month), sending PhD candidate to the other laboratory for a joint research
  - Long term exchange program: During the semester (6 month), sending PhD candidate to the other laboratory for a joint research

- **Methods**
  - Short term program: Each of PhD candidates introduces research areas of the each laboratory. After that, they draw a common subject and carry out preliminary research on the topic.
  - Long term program: Joint research team choose one subject among joint research items and carry out the studies of the topic. Based on the result, the team publish a paper in an international journal or implement a prototype system.

- **Deliverables**
  - Short term program: Preliminary report of joint research
  - Long term program: Paper (International Journal) or prototype system
IFS
Supporting science where it counts

Country eligibility for IFS Research Grants

Low Income Countries (LIC), Lower Middle Income Countries (LMIC), Upper Middle Income Countries (UMIC)

Who is eligible to apply?

✓ A citizen of a developing country
✓ A scientist with at least a Master's or equivalent degree/research experience
✓ National research institution or a research-oriented NGO in a developing country

What kind of projects qualify?

- Related to the sustainable utilization, conservation or management of the biological or water resource base conducted in a developing country of a high scientific standard feasible relevant for the country/region

How to Apply for an IFS Grant

- Maximum value of USD 12,000.
- Awarded to an individual researcher, for a specific research project
- Timeframe – 1-3 years
**Funding sources (other than IFS)**

- **SciDev.net links to Grants and Funding sources**
  SciDev Net maintains a list of funding sources for research:

  - [Funding agencies/foundations](#)
  and a list of currently offered grants:

  - [Grants](#)

- **The Academy of Sciences for the Developing World (TWAS)**
  TWAS gives Research Grants in scientific areas which are not covered by the IFS Granting Programme (such as basic sciences).

- **Forestry funding database**
  FAO and other organisations have combined resources to produce a database of funding sources within forestry:

  - [Forestry funding database](#)
DAAD FELLOWSHIP / SCHOLARSHIP PROGRAMMES
Fellowships for Young Researchers and Recent Post Doctoral Scholars

Objective:

Meant for advanced studies and research at universities and research institutes in Germany to enable young scholars, scientists and University teachers to broaden their knowledge in their fields, to give them an opportunity to carry out research in Germany, and to familiarize themselves with current methods of research there.

Target Group:

• Candidates who are working as teachers in Indian universities or recognized institutes of university standard, Indian Institutes of Technology, and scientists at CSIR Labs and institutes, and at research institutes of national importance
**Fellowship Benefits:**

- Monthly stipend, study and research subsidy, contribution to health insurance, German language course, air-fare.

- Fellowships are awarded, initially, for one year preceded by a two-to-six, most commonly four-month German language course in Germany, arranged and funded by DAAD. Upon application and proper documentation, they are extendable up to another 12 months.
Eligibility Criteria:

Degree/Prior Work Experience:

• Candidates must possess a Master's degree with a first class at Master's or Bachelor's level plus at least two years of teaching or research experience

• Age Limit: Candidates should not be more than 32 years of age on 1st October of the year in which the fellowship begins

• Domicile: Candidates must be residing in India at the time of application

• Confirmation of Placement: Candidates must have a recent-dated letter of placement from a German professor; scholars need a written confirmation that states that their research plan is feasible at the selected German University / Institute and that placement for the duration of at least one year to carry out research
Application Procedure:
· These fellowships are announced once a year by the New Delhi office of the DAAD.

· The announcement of the fellowships is made sometime in July/August. Application forms are available from the DAAD New Delhi office or from the website: http://www.daad.de/en/form

· The application should be submitted to the DAAD New Delhi office and NOT to the DAAD Office in Bonn.

· The deadline for submission of applications is 1st October each year.

Subject Fields:
All subject fields, excluding Medicine, Music and the Arts.

Note:
These fellowships are not for obtaining Bachelors’ or Masters’ degrees in Germany!
FULBRIGHT PROGRAM
Congress created the Fulbright Program in 1946 at the end of World War II to increase mutual understanding between the people of the United States and other countries, through the exchange of persons, knowledge and skills.

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Advanced research, graduate study, language study or teaching at the university, secondary or elementary level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Graduate</td>
</tr>
<tr>
<td>Place of Study</td>
<td>Over 140 countries</td>
</tr>
<tr>
<td>Award amount</td>
<td>Travel &amp; educational expenses; language or orientation courses; maintenance for one academic year; supplemental health and accident insurance</td>
</tr>
<tr>
<td>MIT Deadline</td>
<td>September 11</td>
</tr>
<tr>
<td>National Deadline</td>
<td>October 20</td>
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</tbody>
</table>
Eligibility criteria

Hold an undergraduate degree before the beginning day of the grant, but not have been awarded a doctoral degree at the time of application.

• Be in good health; grantees will be required to submit a satisfactory Certificate of Health from a physician.

• Have sufficient proficiency in the written and spoken language of the host country to communicate with the people and to carry out the proposed course of study.

• Preference will be given to students who have received a majority of their high school and undergraduate college education in the U.S.

• Preference will usually be given to candidates who have not resided or studied in the country to which they are applying for more than six months.

• Duty abroad in the Armed Forces is not considered disqualifying. Nor are junior year study abroad programs (such as the Cambridge-MIT Exchange), where the total actual time in residence does not much exceed six months in aggregate, considered disqualifying.
HUMBOLDT FELLOWSHIP
• The Alexander von Humboldt Foundation is a non-profit foundation established by the Federal Republic of Germany for the promotion of international research cooperation. It enables highly qualified scholars not resident in Germany to spend extended periods of research in Germany and promotes the ensuing academic contacts.

Humboldt Research Fellowships for postdoctoral researchers are the instrument with which the Alexander von Humboldt Foundation enables highly-qualified scientists and scholars from abroad who are just embarking on their academic careers and who completed their doctorates less than four years ago to spend extended periods of research (6-24 months) in Germany.

• Candidates choose their own research projects and their host in Germany and prepare their own research plan.
Criteria for Assessment:

The academic quality and feasibility of the research proposal submitted by the candidate

• Academic publications in internationally-reviewed journals and for publishing houses

• Statements on the candidate’s academic achievements and potential contained in the expert references submitted by the candidate

Fellowship specifications

• The fellowship is worth 2,250 EUR per month. This includes a mobility lump sum and a contribution towards health and liability insurance.
Application requirements

• Doctorate or comparable academic degree (Ph.D., C.Sc. or equivalent), completed less than four years prior to the date of application. Candidates who have nearly completed their doctoral degrees are eligible to apply provided that they submit the manuscript of their dissertation or publications containing the results of their dissertation.

• Academic publications reviewed according to international standards and printed in journals and/or by publishing houses.

• Confirmation that research facilities are available and a detailed expert’s report by an academic host at a research institution in Germany.

• Expert references from the doctoral supervisor and other academics qualified to comment on the applicant’s eligibility, preferably including reviewers not working at the applicant’s own institute.

• Language skills: scholars in the humanities or social sciences and physicians must have a good knowledge of German if it is necessary to carry out the project successfully; otherwise a good knowledge of English; scientists and engineers must have a good knowledge of German or English.
Funding agencies for projects in the field of science:

**International Organizations**

European Commission (EC)
ICEF (India - Canadian Environment Facility)
United Nations Food and Agricultural Organization (FAO)
UNESCO

**Indian Government and Governmental Organizations**

*Government of India*

Ministry of Education
Ministry of Environment
Ministry of Human Resource Development
Ministry of Non-conventional Energy Sources
Ministry of Rural Development
Ministry of Science and Technology
Indian Council of Medical Research (ICMR)
Indian Council Of Agricultural Research (ICAR)
Ministry of Earth Sciences (MoES)
Ministry of Environment and Forestry (MoEF)
Department of Biotechnology (DBT)
University Grants Commission (UGC)

Pondicherry Government

District Rural Development Agency (DRDA)

Tamil Nadu Government
Tamil Nadu Family Welfare Board
Tamil Nadu Social Welfare Board
Tamil Nadu State Forest Department
PRESENTATION OF RESEARCH PROPOSAL AT THE MEETING OF THE FUNDING ORGANIZATION

Prof. N. Munuswamy, D. Sc.,
Department of Zoology
University of Madras
Guindy campus, Chennai-600 025.
HOW TO PRESENT STRONG GRANT PROPOSALS TO COMPETE EFFECTIVELY
Before you begin to write your proposal, keep in mind the following points:

- It is necessary to find out in advance what sources of funding are available, through governments, United Nations agencies, some international NGOs or private foundations.
- Most donors look for the degree of local initiative in the project proposal, the utilization of the available resources within the country itself and the plans for the project to be self-supporting once the initial funding has been spent.
- Your project should be practical, not too costly, and have the potential for being repeated in other situations.
- Increasingly, funding agencies are looking for integrated approaches to development projects. This means that you will want to see to what extent your project supports and supplements existing activities, and is designed to overcome identified problems.
- Almost all UN and government agencies, foundations and private voluntary agencies have their own proposal format, that they will want you to follow. If you are not in contact with a local or regional representative, write a letter requesting information as to proper procedures, application format and funding requirements. While format varies, the same information is asked for by all agencies and foundations.
- Find out the budgeting cycle of the agency, whether annual, quarterly or ongoing. Check to see if there is a closing date for application.
Government Agencies

- Research Fellowships & Post-Graduate Research
- Conferences and Events
- Study Grants
- Research Grants
- Solicited Proposals
Proposal Structure

1. Executive Summary
2. Problem/Need Statement
3. Proposal Description
   1. Objectives
   2. Staffing and Administration
   3. Evaluation
   4. Sustainability
4. Budget
5. Information about your Organisation
   6. (A similar structure is recommended by
   7. The Foundation Center, USA)
Research vs. Project Proposals

- A research proposal emphasizes the contribution that the research will make to the field.
- A project proposal emphasizes the impact the activity will have.
- Evaluation is more usually more important in project proposals.
Research Proposals
Parts of a Research Proposal

- Title (or Cover) Page
- Abstract
- Table of Contents
- Introduction
- Background
- Description of Proposed Research
- Description of Relevant Institutional Resources
- List of References
- Personnel
- Budget
<table>
<thead>
<tr>
<th>Title Page</th>
</tr>
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<tbody>
<tr>
<td><strong>The format is often specified by the funding agency</strong></td>
</tr>
<tr>
<td><strong>The principal investigator, department head, and university official usually sign</strong></td>
</tr>
<tr>
<td><strong>Name of organization being submitted to</strong></td>
</tr>
<tr>
<td><strong>Title of the proposal</strong></td>
</tr>
<tr>
<td><strong>Starting date and budget period</strong></td>
</tr>
<tr>
<td><strong>Total funds requested</strong></td>
</tr>
<tr>
<td><strong>Name and address of institution</strong></td>
</tr>
<tr>
<td><strong>The title page should be professional looking, but do not use fancy covers, bindings, etc.</strong></td>
</tr>
</tbody>
</table>
A good title

- The title is important. It should reflect the focus of your project.
- The most important words should come first.
- Avoid words that add nothing to a reader’s understanding such as “Studies on...,” “Investigations..,” or “Research on Some Problems in...”
Table of Contents

1. Very brief proposals with few sections ordinarily do not need a table of contents

2. Long and detailed proposals may require, in addition to a table of contents, a list of illustrations (or figures) and a list of tables.

3. The table of contents should list all major parts and divisions (including the abstract, even though it precedes the table of contents).
The Abstract

- Every proposal should have one.
- In project proposals, this is called the Executive Summary.
- It should be written last.
- The abstract should summarize the project.
- It is the most important part of the proposal.
Introduction

- Start with a capsule statement of what is being proposed.
- You should not assume that your reader is familiar with your subject. It should be comprehensible to an informed layman. It should give enough background to enable him to place your research problem in a context of common knowledge and should show how its solution will advance the field or be important for some other work.
- Do not overstate, but do state very specifically what the importance of your research is.
Need Statement

- Problem gives *insight* to causes of need
- Express *bad effects* if needs not met
- State how *urgent* the project is needed
- Make clear the scale of *demand* for a solution
- Show how project will *address* the problem
Background information

- This section may not be necessary if the proposal is relatively simple and if the introduction can present the relevant background in a few sentences.

- If previous or related work must be discussed in some detail, however, or if the literature of the subject must be reviewed, a background or literature review section is desirable.

- Literature reviews should be selective and critical.
  - Reviewers only want to know pertinent works and your evaluation of them.
  - A list of works with no clear evidence that you have studied them and have opinions about them contributes almost nothing to the proposal.
Description of Proposed Research

• This section of the proposal is the comprehensive explanation of the proposed research.
• It is addressed to other specialists in your field.
• It is the heart of the proposal and the primary concern of technical reviewers.
• The description may need several subsections. The description should include:
  – Aims or Objectives
  – Methodology
  – Results
  – Conclusion
• Be realistic in designing the program of work.
• Research plans should be scaled down to a specific and manageable project.
List of References

- If a list of references is to be included, it is placed at the end of the text proper and before the sections on personnel and budget.

- The style of the bibliographical item itself depends on the disciplinary field.

- Be consistent! Whatever style is chosen should be followed throughout.
**Personnel**

- The personnel section usually consists of two parts:
  - an explanation of the proposed personnel arrangements; and,

- biographical data sheets for each of the main contributors to the project. Specify how many persons at what percentage of time and in what academic categories will be participating in the project.

- If the program is complex and involves people from other departments or colleges, the organization of the staff and the lines of responsibility should be made clear.

- Any student participation, paid or unpaid, should be mentioned, and the nature of the proposed contribution detailed.

- If any persons must be hired for the project, say so, and explain why, unless the need for persons not already available within the University is self-evident.
Budget

- Budgets are developed according to sponsors and university guidelines. This section is an overview of common features.
- Depending on complexity, the budget section may require not only a tabular budget with line items, but may also require a budget summary and explanation or (budget justification or budget notes).
- Typical divisions of a budget are:
  - Personnel;
  - Equipment;
  - Supplies;
  - Travel; and,
  - Indirect costs.
  - Other categories can be added as needed.
- The budget should make clear how the totals for each category of expenses are reached.
Checklist for Proposal Budget Items (1)

A. Salaries and Wages
1. Academic personnel
2. Research assistants
3. Stipends (training grants only)
4. Consultants
5. Interviews
6. Computer programmer
7. Tabulators
8. Secretaries
9. Clerk-typists
10. Editorial assistants
11. Technicians
12. Subjects
13. Hourly personnel
14. Staff benefits
15. Salary increases in proposals that extend into a new year
16. Vacation accrual and/or use

B. Equipment
1. Fixed equipment
2. Movable equipment
3. Office equipment
4. Equipment installation

C. Travel
1. Administrative
2. Field work
3. Professional meetings
4. Travel for consultation
5. Consultants' travel
6. Subsistence
7. Automobile rental
8. Aircraft rental
9. Ship rental

D. Other
1. Space rental
2. Alterations and renovations
3. Purchase of periodicals and books
4. Patient reimbursement
5. Tuition and fees (training grants)
6. Hospitalization
7. Page charges
8. Subcontracts

G. Indirect Costs
Why Proposals are Rejected

- Requirements for equipment or personnel are unrealistic. (10.1)

- It appears that other responsibilities would prevent devotion of sufficient time and attention to this research. (3.0)

- The institutional setting is unfavorable. (2.3)

- Research grants to the investigator, now in force, are adequate in scope and amount to cover the proposed research. (1.5)
Web Sites with Proposal Guides

- The Social Science Research Council. Art of Writing Proposals.  
  http://www.ssrc.org/artprop.html
- James Madison University. Overview of the Grant Writing Process.  
  http://www.jmu.edu/sponsor/tips2.html
- Funding and Proposal Writing for Social Science Faculty Research.  
  http://www.unc.edu/depts/isss/writing.html
- University of Idaho Grant Directory  
  http://radon.chem.uidaho.edu/~pmits/grants
- University of Michigan Proposal Writer's Guide  
  http://www.research.umich.edu/research/proposals/proposal_dev/pwg/pwgpage.html
- AAFRC Trust for Philanthropy  
  http://www.aafrc.org
- Council on Foundations  
  http://cof.org
- Foundation Center Online Proposal Writing Short Course  
  http://www.fdncenter.org/onlib/prop.html
- The Corporation for Public Broadcasting (CPB). Basic Elements of Grant Writing.  
  http://www.cpb.org/grants
- The Frontiers in Bioscience (FBS). Tips for Writing Grant Proposals.  
  http://www.bioscience.org/current/grant.html
Grant Funding Resource Information

- Catalog of Federal Domestic Assistance
  www.cfda.gov

- Federal Register
  http://www.gpoaccess.gov/fr/

- Grants.gov
  www.grants.gov
Grant Funding Resources – Agency Information

- U.S. Fish & Wildlife Service
  [www.fws.gov](http://www.fws.gov) (see “Grants at a Glance”)

- National Oceanic and Atmospheric Administration
  [www.coralreef.noaa.gov/grants.html](http://www.coralreef.noaa.gov/grants.html)

- USDA Natural Resources Conservation Service
Other Types of Grants

Foundation

Corporate
Foundations and Corporations $213 Billion

Where the money comes from:
- 76% Individuals
- 12% Foundations
- 8% Bequests
- 4% Corporations

Where it goes:
- 7% environmental and animal
- 3% science and technology
- 25% education
- 65% other
Budget Your Time

Solid partnerships

Communicate

Innovative project

Define your budget

80% planning the project

20% writing the proposal
Basic Grant Application Components

For a more competitive application be sure to include:

- Detailed methodology/description of activity
- Detailed Budget include how match funds are will be used
- Demonstrated partnerships with local communities and resource agencies
- Relevant Principle investigator experience and expertise
- Description of how information from project will be used to improve management.
- Realistic description timeline with benchmarks for deliverables
Grant Writing Tools – Agency Information

- Updated Agency Websites
- FWS/NCTC Grant Writing for Conservation Course
- EPA Grant Writing Tutorial
- NFWF Pre-proposal Form
- NOAA Coastal Services Center
- NOAA National Marine Fisheries Service
- NOAA Grants Management Division
Weak proposals

- Do not follow directions in the guidance
- Are not proof read, have lots of errors
- Have incorrect or insufficient match
- Lack coordination and had duplication of activities.
- Are submitted after the deadline.
Weak proposals (cont)

- Do not provide adequate description of PI’s relevant past experience or performance.
- Demonstrate that work begins or is completed before the grant is to be awarded.
Remember, Funders Are Partners!

- Build a relationship
- Be courteous
- Respect their time
- Know their interests
- Discuss opportunities
- Follow up
Information About Your Organization

- Brief history and mission
- Organizational structure
- What makes you different?
- Experience and competence to run the project
- Include Endorsement by appropriate and respected individual
Executive Summary

- Short statement on problem(s)

- Description of solution, benefits, time scale, location, and who is involved

- Money needed and future funding

- Brief description of Organisation
External Funding Sources

- State/Territory fish and wildlife agency
- Federal government grants
- Friends associations
- Local businesses
- Universities
- Local conservation organizations
Besides these academic activities involving exchange of students and faculty from various universities abroad, IR is actively involved in assisting in the International accreditation of the VIT university. It helped earlier in achieving the IET & EI accreditation from UK and now currently helping in securing the American Accreditations ABET and AACSB for our Engineering and Management programmes. It is also assisting in monitoring the Asia-Link programme on Energy and Environment with UAS Aachen and Masters programme in Automobile Engineering with UAS Esslingen and ARAI, Pune.