APPENDIX

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 MargNew Delhi – 110002, Tel. No: (011) 23234019, 23236350, Fax. No.: (011) 23239659

Website: [www.ugc.ac.in](http://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 inlaboratory(s)/workshop(s)/computing facilities to enhance functional efficiency forteaching, 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 tract 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, HotelManagement 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](mailto: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 ofinterest to their respective laboratories. They will forward these to the CSIR HRD Group. Thescheme enables the CSIR laboratories to interact with university system, so that the CSIRlaboratory can take the help of the faculty there to undertake part of the work of its coreprogramme, 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) Defence 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 complete and compare favourably 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**

ß 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.

ß Collaterally with the expanded knowledge-based 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.

ß The ER scheme also supports the instrumentality of Memoranda of Collaboration (MoC) between DRDO Laboratories & Establishments and academia. These MoC invariably involve more than on 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 a 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 air mindedness in School children.

**Contact Address**

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