Industrial Research & Development (IRD)

The Industrial Research & Development (IRD) Unit has been set up in the Institute to provide administrative and managerial support for the operation and implementation of Sponsored Research Projects, Consultancy Jobs, and other related R&D activities. Besides, IRD has also been supporting various Schemes to the Faculty members and Students.

IRD SUPPORT TO FACULTY MEMBERS WITHIN THE INSTITUTE

Research Grant for New Faculty Member: IRD provides a one-time grant of Rs. 1 Lakh to each new faculty member who joins the Institute. This assistance is being given to the new faculty so that they can initiate new projects, which may subsequently be submitted to various funding agencies.

Equipment matching grant for New Faculty Member: IRD provides matching equipment grants to the new faculty members for the purchase of other equipment. A faculty member can avail this grant within two years of joining with the sealing of Rs. 30 Lakh or an amount equivalent to the funds sanctioned by the funding agency for the equipment under the project, whichever is lower.

Sponsored Research Enhancement Actions (SREA): Under SREA (1, 2 & 3) schemes, IRD provides support to faculty members to facilitate and enhance sponsored research activities, both in terms of formulating/ writing research project proposals and coordinating research projects.

SREA1: Assistance for formulating/writing of major research project proposals involving multiple faculty members from IIT Delhi or involving multiple Institutes with IIT Delhi as the coordinating Institute. The funds proposed for IIT Delhi should be Rs. 5.0 Cr or more. Funds for hiring a Project Consultant for two months will be provided by IRD during the project preparation stage.

SREA2: For a sponsored research project with a funding of Rs. 2.5 - 5.0 Cr, top-up funds required for hiring one Sr. Project Scientist for the duration of the project will be provided to the Principal Investigator.

SREA3: For a sponsored research project with a funding of Rs. 5.0 Cr or more, top-up funds required for hiring one Principal Project Scientist for the duration of the project will be provided by IRD.

For SERA2 & 3, the support will be implemented for projects started after having a minimum duration of 01 years as on 31.03.2019 or new projects initiated after 31.03.2019. In case the post is not sanctioned in the project available, one scientific post shall be allowed to be upgraded to next level post. The top up funds for such upgraded post shall be borne by IRD (https://ird.iitd.ac.in/sites/default/files/ird_circulars/srea.PDF).

1/4
Faculty Innovation and Research-driven Entrepreneurship (FIRE)
The FIRE program envisions the commercialization of the technologies developed at IIT Delhi through the creation of Faculty-led Enterprises. Technologies and concepts backed by strong scientific evidence that may lead to a commercially viable solution shall be supported under this program.

The program is divided into two major components and operational through FITT
1. Pre-Incubation prototype development stage.
2. Incubation and business mentoring to facilitate commercialization.
A further process for selection & funding available in the link given below:

https://fitt-iitd.in/innovationplatform/faculty-innovation-and-research-driven-entrepreneurshipfire/

Faculty Interdisciplinary Research Project (FIRP)
The FIRP scheme aims to enhance interdisciplinary and collaborative research in the Institute. FIRP Proposal is to be submitted by teams of 2 or more faculty members having expertise in different disciplines working in other departments/centers/schools. Selected projects are given the seed grant of Rs. 10 Lakh for two years. It is expected that the joint research team will submit at least one research project to an external funding agency on the completion of the first year.

Multi-Institution Faculty Interdisciplinary Research Project (MFIRP)
To positively and collectively impact society and the environment, multi-institute faculty interdisciplinary projects (MFIRP) has been initiated in collaboration with institutions across India & other countries. This initiative catalyzes cross-research activities between the two Institutions.

Under this scheme, Rs. 10 Lakh is funded to IITD PI by IRD, and the equivalent amount is funded by a collaborative Institute to their respective project PI. Amounting to total Rs. 20 Lakh per project for two years. It is expected that the joint research team will submit at least one research project to an external funding agency on the completion of the first year.

Currently, the MFIRP has been initiated with the following Institute/University

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<th>S. No.</th>
<th>Collaborating Indian Institutes</th>
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<th>Collaborating Foreign Universities</th>
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<tbody>
<tr>
<td>1</td>
<td>All India Institute of Medical Science (AIIMS)</td>
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<td>Clemson University, USA</td>
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<td>2</td>
<td>National Institute of Immunology (NII)</td>
<td>2</td>
<td>National Yang Ming Chiao Tung University, Taiwan</td>
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<td>3</td>
<td>Indian Council of Agricultural Research (ICAR)</td>
<td>3</td>
<td>University College of London, UK</td>
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<td>4</td>
<td>All India Institute of Ayurveda (AIIA)</td>
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<td>Hebrew University of Jerusalem, Israel</td>
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<td>5</td>
<td>Regional Centre for Biotechnology (RCB)</td>
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<td>6</td>
<td>Ashoka University</td>
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IRD SCHEMES FOR STUDENTS

To enhance research aptitude among undergraduate & graduate students and increase the component of 'learning by research' IRD Student Startup Action & Discover & Learn (1-2-3-4) schemes were launched in the year 2016.

Discover & Learn (1-2-3-4) scheme

‘Learning by research’ is the goal of yet another student scheme titled Discover & Learn (1-2-3-4). A group of 4 students each from 1st, 2nd, 3rd, and 4th year of the undergraduate programme may propose the project under the guidance of a faculty mentor. As the 4th year student will be graduating out, an additional student from the 1st year can be co-opted every year so that the strength of the team remains unchanged. 4th-year student at a particular time will lead the project team.

IRD provides funds up to Rs. 2 Lakh per year to the faculty mentor for the purchase of consumables and contingency. Depending upon the progress and performance, the duration of the project is up to 4 years. The project is evaluated every year. Students and their faculty mentors are expected to participate only in one project at a time.

Student Start-up Action Scheme

IRD encourages young, ignited minds of students to transform knowledge to tangible products at an early stage of their career through the IRD Students Startup Action Programme. “Learning to Transform Knowledge to Products” is the key objective of the scheme. A seed grant is provided by the institute to the selected student through a faculty mentor, providing the student an opportunity to use scientific and technical methodologies to solve the practical problems of the society. A group of students preferably in the final year of the B.Tech., M.Sc., M.Tech. or Dual Degree programme can formulate a proposal. The selected teams will be given a seed grant of Rs. 2 Lakh per year for up to two years.

OPEN HOUSE: Institute has been organizing Open House to exhibit an extensive collection of innovative research and product development projects. The 15th edition of Open House was held successfully on 20th April 2019. Open House targets young school students in the NCR region, and the footfall this year was about 5000, including students, researchers, and industry personnel. Key technologies developed through IRD schemes and sponsored research were showcased.

Summer Undergraduate Research Award (SURA): SURA scheme encourages R&D activities among undergraduate students. The students are encouraged to take the initiative in identifying, analysing problems, and formulating the solutions.

Assistantships/Fellowships to the Ph.D./M.Tech./MSc(R) students: Ph.D./M.Tech./MSc(R) students drawing their assistantships/fellowships from the projects are to support by IRD to fill the gap period in the assistantship/fellowships. These assistantships are provided to the students once the projects
get over, and there is no other project to pay their assistantship. M.Tech/MS(R) students can be supported for a maximum gap period of six months, and Ph.D. students would be supported for a maximum gap period of one year.

**IRD Early-Doc Fellowships:** IRD Early-Doc Fellowships are provided to Ph.D. students after successful completion of the Ph.D. Viva Examination. The main objective is to support the Ph.D. Scholar for completing the manuscript writing related to thesis work. A monthly fellowship of Rs. 40,000/- per month (including HRA) are given to full-time Ph.D. students of IIT Delhi for a maximum period of 3 months w.e.f. the date of his/her Ph.D. Viva.

**Research Excellence Travel Award (RETA):** Highly meritorious Research Scholars (full-time as well as part-time) on IRD/FITT projects are awarded the Research Excellence Travel Award (RETA) amounting to Rs. 1,50,000/- from IRD promotional funds. RETA can be used only for a single conference travel.

**Research Scholar Travel Award (RSTA):** All Research scholars are awarded a travel grant under the "Research Scholar Travel Award" (RSTA) up to a maximum of Rs. 80,000/- from IRD Research Promotion Fund over and above the initial grant of Rs. 20,000/- provided by the Institute.