

राष्ट्रीय प्रौद्योगिकी संस्थान, अगरतला
NATIONAL INSTITUTE OF TECHNOLOGY
AGARTALA

प्रायोजित शोध एवं औद्योगिक परामर्श कार्यालय
Sponsored Research and Industrial Consultancy



Office of the Dean(R&C)

National Institute of Technology Agartala
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Vision

National Institute of Technology, Agartala will transform its students through education, innovation, creativity, research, and entrepreneurship to become professionals and impact the nation and the society to be at the forefront of ever- changing world.

Mission

- i. To impart world class education in all frontiers of science and technology.
- ii. To integrate knowledge and experiences both inside and outside of the classroom by faculty-student interaction, experiential learning and embracing new technology–making every opportunity into a possible learning outcome.
- iii. To train future leaders who will serve the nation, society and the world with the highest standards of personal ethos and integrity coupled with patriotism.
- iv. To empower the nation with high quality research and propel the nation to become the leading country in innovation, creativity and entrepreneurship.

1 Introduction

National Institute of Technology, Agartala (NITA) is a centrally funded institution, in the state of Tripura, India. The Institute got upgraded from the erstwhile, state-run, Tripura Engineering College by the Union Cabinet on 23rd February 2006. This is the 20th National Institute of Technology (NIT) in the country and is the 2nd in the North-Eastern region. The Institute imparts quality education in the field of engineering, management, basic science and humanities.

1.1 Profile of the Institute

The Government of India converted the Tripura Engineering College to National Institute of Technology Agartala on 1st April 2006 vide notification No. F. 20-20/2004/TS III/ dated 10.03.2006 of the Ministry of Human Resources Development (MHRD), Govt. of India. During the conversion, Tripura Engineering College was offering undergraduate degrees in Civil, Mechanical, Electrical, Electronics & Communication and Production Engineering.

After the conversion to NIT, in 2010-11, the Institute started two UG courses Electronics & Instrumentation Engineering and Chemical Engineering. After that, during the Academic Session 2012-13, a Bio-Engineering course at UG level was started. Apart from the UG courses, the Institute now offers a postgraduate degree in MBA, MCA, M. Tech in 23 specializations and MSc in basic science. Besides these academic curricula, the Institute provides an opportunity for research. The research carried out at the departments of the Institute has produced more than 100 PhD scholars. The Institute presently has 13 departments offering UG, PG and PhD courses.

Majority of the admission to this Institute is based on an all India entrance tests and or national counselling. The UG students are admitted to the Institute for the seats that are allocated by central seat allocation board (CSAB) under joint seat allocation Authority (JoSAA), based on the performance of these students, in the joint national entrance examination main (JEE Main). The Institute also invites international students to undergo UG studies under Direct Admission of Students Abroad (DASA) scheme.

For admission to M. Tech courses, students should have a valid GATE score and should appear in the Centralized Counselling for M. Tech./M.Arch./M.Planning (CCMT). Besides the regular intake, to promote higher education among the employed persons, few seats are kept reserved for sponsored candidates from academia and industry. Admission to the MCA course in the Institute is based on the performance of the candidate in the national level entrance test NIT MCA Common Entrance Test (NIMCET). The students for the MSc program are admitted through Centralized Counselling for M.Sc./ M.Sc. (Tech.) programmes in NITs and CFTIs (CCMN) based on the performance in joint admission test for M.Sc. (JAM). The unfilled seats of M. Tech/MSc are filled up locally based on a test and or interview. The regular PhD scholars are admitted through interview after they qualify in the written test. From the academic session 2021-22, admission to MCA programme will be held based on Institute level examination (written or viva or both) for the vacant seats left after the admission through NIMCET. The Institute makes wide publicity about the PhD admission in reputed all India as well as local newspapers. The curricula of UG, PG and PhD courses are strictly governed by the rules and regulations laid down for each course.

The classrooms and the laboratories of the Institute are equipped with modern facilities. The Institute provides computer labs in each department, to provide the students access to the worldwide net to upgrade their knowledge. Besides the computer centres of the departments, there is a central computational facility, mostly for the first year UG students. The computer science and engineering department has a PARAM Shavak super-computer. The state-of-the-art library cum knowledge centre has over fifty thousand textbooks and online e-resources. The Centre for Career Development (CCD) assists to arrange internship and placement for the students of the Institute. Besides the academic curriculum, the Institute encourages its students to participate in extra-curricular activities after the academic hours. The students actively participate in sports and techno-cultural activities.

The faculties of the Institute are highly qualified and have good expertise in their fields. The Institute has established academic tie-ups with IIT Kharagpur, IIT Guwahati, Jadavpur University, IIST(Formerly BESU), NITK Surathkal, NIT Warangal apart from other renowned University / Institute of India and abroad. There is an agreement with IIT Madras, whereby the top 10% of the B.Tech students of engineering departments are allowed to pursue their final year at IIT Madras. After that, depending on their performance, they may be allowed to carry out integrated PhD programs at IIT Madras. The Institute has taken the initiative to go into a similar agreement with reputed national and international Institutes. Apart from this, a continuing education cell in the form of a national-level research centre in areas like Geo-technology, Information Technology and Renewable energy have been established. Industry-Institute Linkage has been revamped for catering to the needs of industrialization of the region at large and the State in particular.

The hostels in the Institute accommodate more than 3000 boys and 500 girls. To take care of the health of the students, the Institute has a medical unit in its campus. Doctors are present, round the

clock, here. To help the students financially, the Institute implements various scholarships of the government of India and various state governments.

The Institute is administered by the Director of the Institute under the direct supervision of Board of Governors (BoG) of the Institute headed by the Chairman. The Institute is governed as per NIT Act 2007. His Excellency, The President of India, is the Visitor of the Institute. The academic policies of the Institute are implemented by the Dean Academic Affairs after the approval by the SENATE of the Institute and ratification by the Board of Governors (BoG). The Planning and Development of the Institute are implemented through Dean (P&D). All the student-related affairs are looked after by the Dean (SW). The works of Research and Consultancy are looked after by the Dean(R&C) while Dean (FW) is In-Charge of all the faculty related works in the Institute. Chairman (AA&IR) looks after all alumni affairs and affairs of Institutional Relations. The Registrar is responsible to the Director for proper implementation of all the policies of the Institute.

2 Research Activities at NIT Agartala

Our campus is witnessing an exponential growth in R&D activities. Apart from a large consultancy work undertaken by our engineering departments, academic research gains its momentum day by day. Papers have been published by our faculty members and research scholars in different refereed journals of international and national repute. Research papers have been presented in various conferences and symposia and symposia held at national/international levels. Seminars, conferences, symposia at national level were organized by various departments of our Institute.

Our Institute has signed MOUs with industries and Institutions in and abroad to promote collaborative research and consultancies. Our faculty members have obtained major project funded by DST, DBT, FIST, ICSSR, ICMR, CSIR, Tribal Research and Cultural Institute, DST-STUTI, DRDO, MGNREGA works for Tripura, Deen Dayal Upadhyaya Grameen Kaushal Yojana (DDU-GKY), Unnat Bharat Abhiyan and ISRO.

Institute actively engaged in performing various consultancies and testing works. Academic departments are performing testing & consultancy job in association with IRCON, MGNREGA works for Tripura, Deen Dayal Upadhyaya Grameen Kaushal Yojana (DDU-GKY), Department of Agriculture, Govt. of Tripura, ERM India Private Ltd. ,PWD, Directorate of School Education, HUMANE SOCIETY INTERNATIONAL INDIA and Department of Rural Development, Government of Tripura etc.

2.1 CONSULTANCY PROJECTS: RULES AND REGULATIONS

2.1.1. Introduction

The NIT Agartala considers consultancy works/projects to be important components of its activities. Appropriate projects provide a much needed service to the industry. It helps in the country's industrial growth and increases the institute's involvement with industry. They enrich the professional experience and knowledge of the faculty members and help them in their teaching and research. The projects provide a first hand knowledge of the current problems of the industry, which is very helpful in turning the curricula to industry's needs. Faculty members get an opportunity to apply their ideas to practical situation. Students working on these projects get practical experience, which helps them in their future careers. Finally consultancy projects provide financial incentives to individuals departments and the Institute as a whole to conduct research to supplement the Institute's financial needs and to provide services to society as a whole.

2. Projects Initiation and Management.

2.1. Consultancy Projects.

- a) Each consultancy project will have a Principal Consultant who will be responsible for
 - i) Formulating the project proposal which may include (a) planning of the work to be done, (b) estimating costs according to guidelines provide in a letter section, and (c) identifying other consultants if necessary.
 - ii) Execution of work.
 - iii) Handling all communications with the clients after the projects has been accepted.
 - iv) Writing of intermediate and final reports according to the project proposal.
 - v) Making recommendation to the Dean of Research & Consultancy (DORC)/ Head of related Department/Centre regarding expenditure from the project funds and disbursement of funds to participants in the consultancy project.
- b) **Appointment of Principal Consultant:** Industries organizations usually approach the institute for consultancy work through a faculty member or a functionary of the institute (i.e., Head, Dean or Director). When a faculty member is approached for work he will be the Principle Consultant. If he does not wish to be the Principle Consultant or if the project is referred to a functionary, Principle Consultant would be identified through appropriate discussions and appointment will be made by the DORC.
- c) The project proposal prepared by the Principal Consultant will be forwarded to the client by Dean Research & Consultancy.
- d) **In extreme emergencies , a consultant may take up an assignment with intimation to the DORC and then seek post-facto approval within 7(seven) days of the assignment.**

- e) The Institute normally requires the cost of the project to be deposit by the client, in full before the work commences. However, based on needs of the client and circumstances, the Institute may permit commencement of work with payment to be made as per agreed upon milestones.

All payments from clients will be received by the Institute and expenditure and disbursement made through normal Institute project rules.

- d) After the initial deposit has been made by the client, Dean Research & Consultancy Office will assign a job number to the project and inform the same to the client. Principal Consultant and the Head of the concerned Department, this completes the process of initiation of a consultancy project. The above job number must be quoted in all subsequent correspondence.

The project file will be closed with the submission of the final project report and disbursement of fees to consultants and others.

2.2 Sponsored Projects

1. Each Sponsored Project will have a Principal investigator who will be responsible for:

- i) Formulating the project proposal, which may include:
 - a) planning of the work to be done.
 - b) estimating costs according to guidelines provided in section 3.2 and
 - c) identifying other consultancy if necessary.
- ii) Execution of work.
- iii) Handling all communications with the clients after the projects being accepted.
- iv) Writing of intermediate and final reports according to the project proposal.
- v) Making recommendations to Dean of Research & Consultancy (DORC) regarding expenditure from the project funds.

2. **Appointment of Principal Investigator:** Sponsored Projects are usually based on a proposal written by a faculty number. In such cases, the Principal Investigator will be identified in the project proposal. In case, the institute is awarded a sponsored project directly or a proposal is submitted at the institute level, the principal investigator would be identified through appropriate discussions and appointment will be made by the DORC .

3. The project proposal prepared by the Principal Investigator will be forwarded to the client by the Dean of Research & Consultancy.

4. In extreme emergencies, a consultant may take up an assignment with intimation to the DORC and then seek approval.
5. The Institute normally requires the cost of the project to be deposited by the sponsoring agency in full before the work commences. However, based on needs of the agency and circumstances, the Institute may permit commencement of work with payment to be made as per agreed upon milestones.

All payments from sponsoring agencies will be received by the institute and expenditure and disbursements made through normal procedures.

6. After the project has been awarded, the Dean (Research & Consultancy) Office will assign a job number to the project and inform the same to the sponsoring agency. Principle Investigator and the Head of the concerned Department. This completes the process of initiation of a consultancy project. The above job number must be quoted in all subsequent correspondence.

The project file will be closed with the submission of the final project report.

3. Regular Rules and Regulations.

3.1 Budget Heads

There will be a separate Institute account for project funds. All funds received for projects will be deposited in this account. Bank account of this fund will be operated by Dean (R&C) and the Registrar.

Besides the funds for ongoing projects, this account will be used to maintain number of funds of the Institute as described below:

1. Institute development fund (IDF): Overheads from the project and the portions of payment made to consultants etc. will be credited to this fund as per details given below. The utilization of this fund will be decided by the Committee comprising of the Director, DORC & HODs. Bank account of this fund will be operated by the Director and the Dean (R&C).

2. Department Promotion Fund (DPF): Each department and centre of the Institute will have a separate fund in which its earning may be deposited. This includes portions of consultancy fees and costs charge to projects for use of the department facilities. This fund will be operated by the Head of the Department/Centre. Bank account of this fund will be operated by the Head of the Department/Centre and Coordinator of the respective department/centre.

3. Professional Development Fund (PDF): Every faculty (and class A technical staff) member may have a separate fund. A faculty may deposit his/her consultancy fees due, to this fund. Other earnings, such as from short term courses may also be deposited in this account. The faculty member will operate this fund (with approval from DORC) and the following expenditures will be permitted.

- Travel of self or other employees for professional work. Consultancy project travel rules will apply.

- Purchase of books, journals and membership fees of professional societies.
- Purchase of consumable for professional work.
- Cost of photocopy binding etc.
- Cost of telephone (deposited charge, rentals and call charges of phone at the office or residences).
- Hiring manpower.
- Purchase of equipment (these will be property of NIT Agartala, but may be used exclusively for the members; professional work) and maintenance charges.
- Hiring of service such as taxis, caterers etc needed for professional work.
- Any other expenses permitted by DORC.
- Bank account of this fund will be operated by the respective consultant.

The following funds are not Dean of Research & Consultancy funds, but funds of the Institute into which transfers will be made from consultancy projects as per details given below:

4. Staff Welfare Fund: A fund of Institute to be utilized by the Chairman, Staff Welfare Committee, or a person nominated by the Director. Bank account of this fund will be operated by the Director and the Registrar.

5. Students Welfare Fund: A fund of the Institute to be utilized by the Dean of Students Affairs or a person nominated by the Director. Bank account of this fund will be operated by the Director and the Dean (SW).

3.2 Costs

Cost of a project will consist of Overheads, Actual expenses- for consultancy projects, payments to employees, external consultants, students.

3.2.1 Institute Overhead Charges

For Consultancy Projects, ten percent (10%) of the total project cost and for Sponsored Projects, fifteen percent (15%) of the total project will be charged as Institute overhead and paid to the Institute Development Fund (IDF). For sponsored projects, if the sponsoring agency is a Govt. agency, then its norms for overheads will be followed.

3.2.2 Actual Expenses

The Actual expenses will cover the following costs related to the project:

- 1) Permanent equipment to be procured.
- 2) Consumable materials to be used.
- 3) Computational charge (at commercial rates).
- 4) Charges to be paid for the use of specific equipment in the department or central facilities.
- 5) Contingency expenses: These will cover
 - a) Cost of supplies, stationary, reproduction.
 - b) Cost of books, journals, membership fees of professional societies.
 - c) Payment for typing and other office work to outside agencies.

- d) Postage and telephone (including phone deposit charge, rentals and call charges of phones at the office or residences).
- e) Entertainment expenses (this is to cover costs incurred in meeting clients in the Institute or during tours).
- f) Costs charged by a department for facilities provided to the project (such as large amounts of photocopying, use of computational and printing facilities etc).

6) Traveling expenses.

- a) Travel may be undertaken for site, meetings outside the institute, participation in Conferences/Workshops/Seminars in India and abroad.
- b) Regular TA/DA rules of the institute will be relaxed in the following manner for travel within India. For travel abroad, Institute rules will apply:
 - i) Rates may be fixed between the sponsor and the consultants when the proposal is made and these need not be as per Institute rules.
 - ii) Where no rates are fixed beforehand.
 - iii) No restrictions will be made on mode of travel due to eligibility, maximum of twice the daily gross salary at the ceiling of the scale of the concerned employee (gross excludes HRA), will be paid.
 - iv) Actual taxi/auto charges incurred, including hiring of taxis on an hourly basis will be allowed. Where no cash memos can be obtained, signature of the driver on a prescribed form will be obtained.
- c) For consultancy project, for each site visit a fee can be charged at a rate specified in the project proposal subject to a maximum specified from time to time by the DORC.

7) Salaries of project employees.

3.2.3 Payment to employees, external and Students in Consultancy Project:

Payment can be done one of the following:

- Consultation fees to faculty and technical staff.
- Honorarium to students.
- Honorarium to overtime to other staffs.
- Payment to students.
- Fees to external consultants.

Any payment due will be divided into two parts: Seventy percent (70%) of the amount will be paid to the person concerned and the remaining thirty percent (30%) will be credited in the following manner:

- Forty (40%) of the amount to the Institute Development Fund (IDF)

- Fifty (50%) to the concerned Department Promotional Fund (DPF). In case more individual department, funds will be specified when the project is initiated.
- 5% to the staff welfare fund.
- 5% to the student welfare fund.

As mentioned in section 3.1 above, a faculty member or a class a technical staff member may deposit part or all of the payment due into his/her Professional Development Fund (PDF).

3.3 Testing Fees in Consultancy Projects.

The Institute will undertake routine and non-routine testing jobs provided facilities are available and such testing does not interfere with any teaching or Research & Consultancy work at standard rates or at the rates estimated by the Faculty who will supervise the testing work. The testing fees charged from the clients will be divided into three parts. First 40% will be deposited in the concerned departments Promotion Fund (DPF). Second 10% will be deposited in the Institute Development Fund (IDF) and third 50% will be distributed to Faculty and Staff who will execute the work.

Accounting procedure at a glance for Testing and Consultancy works.

Sl. No.	Items	Amount (Rs.)	Balance (Rs.)
1.	Total amount	X	X
2.	Service charges	Y	X-Y
2.	Actual expenses	Z	X-Y - Z
3.	Institute Development Fund (IDF)	0.10 (X-Y - Z)	0.90 (X-Y - Z)
4.	DPF	0.40 (X-Y - Z)	0.50 (X-Y - Z)
5.	Payment to Faculty, faculty, Staff, students & external consultants	0.45 (X-Y - Z)	0.05 (X-Y - Z)
6.	Departmental / Institute office Staff	0.05 (X-Y - Z)	0

3.4 External Consultants in Consultancy Projects

The services of external consultants may be utilized to a limited extent in order to provide comprehensive services to clients. Such external candidates will be entitled to a lump sum honorarium/fees. Disbursement norms are detailed in section 3.2.3 above. The honoraria payable to external consultants may not exceed 40% of the total consultancy fee.

3.5 Accounting Procedure at a glance for Consultancy Projects

An example below illustrates the accounting procedure for a consultancy project :

Sl. No.	Items	Amount (Rs.)	Balance (Rs.)
1	Total Amount of the Project	X	X
2.	Service Charges	Y	X-Y
2.	Institute Overhead (IDF)	10% of (X-Y) = 0.1 (X-Y)	0.9 (X-Y)
3.	Actual Expenses	Z	{ 0.9 (X-Y)- Z }
4.	Share to Institute Funds	30% of { 0.9 (X-Y)- Z } = S: 0.3 { 0.9 (X-Y)- Z }	0.7 { 0.9 (X-Y)- Z }
5.	Payment to Faculty, Staff, students & external consultants	65% of { 0.9 (X-Y)- Z } = P: 0.7 { 0.9 (X-Y)- Z }	0.05 (h-y-z)
6.	Departmental / Institute Office Staff	5% of { 0.9 (X-Y)- Z } = D: 0.05 { 0.9 (X-Y)- Z }	0

Distribution of Share to Institute Funds

Sl. No.	Items	Amount (Rs.)	Balance (Rs.)
1	Total Amount to Institute Funds	S	S
2	Share to IDF	40% of S = 0.4 S	0.6 S
3	Share to DPF	50% of S = 0.5 S	0.4 S
4	Share to Staff Welfare Fund	5% of S = 0.05 S	0.05 S
5	Share to Students Welfare Fund	5% of S = 0.05 S	0

C. Payment to Faculty, staff, students and external Consultants

Sl. No.	Items	Amount (Rs.)	Balance (Rs.)
1	Total Amount to Pay	P	P
2	Transfer to PDF of Principal Consultant	A	P – A
3	Payment to technical staff	B	P – A – B
4	Payment to students	C	P – A – B – C
5	Payment to External Consultant	D	P – A – B – C – D
6	Payment to Faculty	P – A – B – C – D	0

3.6 Hiring Norms

Open selection will be held for all project posts of duration having more than one and a half (1.5) years. Otherwise there will be an internal circular within the Institute. If suitable candidates are not available, then open selection will be made. In special situations, on the recommendations of the Principal Consultant/ Investigator short term job contracts for up to 6 months may be given with the approval of the Dean Research and Consultancy (DORC).

All projects appointments will be contractual and the basis of consolidation monthly compensation.

Automatic transfer of contractual appointment of a project staff will be for the duration of the project or three years whichever is less.

The total period of contractual employment with Dean of Administration office in two or more projects in no case exceed five years.

A project employee shall execute a contract agreement on non judicial stamp paper of value Rs. 10/- with the DORC at the time of joining with the explicit provision that contract may be terminated by either side by giving one month's notice or one month's consolidated compensation in lieu of the notice.

Selection shall normally be made as per the guidelines provided by the sponsoring agency and as per Institute requirements and with the approval of the DORC.

All appointment letters shall be issued under the signature of Deputy Registrar/Asst. Registrar (Office of the DORC).

The Principal Consultant/ Investigator shall consider prevailing compensation packages, general qualifications and experience of staff while preparing project proposals.

The Selection Committee for the recruitment of Project staff for each project will be constituted by the DORC as follows:

- | | | |
|------|--|------------|
| i) | DORC or his nominee | - Chairman |
| ii) | Principal Consultant / Investigator (PCI) | - Member |
| iii) | HOD/HOC of the concerned Deptt./
Center to which the PCI belongs | - Member |
| iv) | An expert on the subject (to
be recommended by the Deptt./Center) | - Member |
| v) | An expert to be nominated by the DORC
if the PCI is the HOD/HOC | - Member |

If the DORC is not the Chairman of the Selection Committee, its recommendation shall be submitted to the DORC for consideration and approval. The DORC shall have the power to fix on the recommendations of the selection committee. The monthly-consolidated compensation and the duration of the contractual appointment.

On the completion of each year of service during the contract period suitable enhancement of monthly compensation may be considered by the DORC on the recommendations of the PCI and the HOD/HOC of the concerned Deptt./Center.

The project employees shall be entitled to HRA, if accommodation of the campus is not made available to them. Expenditure towards subsidized in campus accommodation/ HRA and medical facilities shall be charged to the salary head of the respective project.

All projects staff shall work for the project in which he is engaged only unless requested otherwise by the PICs concerned and agreed to by the DORC.

PCIs shall be the sanctioning and controlling authority for all types of leaves with respect to contractual project staff.

Conduct Rules: Project employee shall

- Follow general code of conduct as approved by the DORC.
- Maintain secrecy of the research findings/ technical information and shall not get involved in unauthorized communication of any official document or information.

DORC may, at his discretion, constitute committee(s) to conduct disciplinary proceedings, if necessary against project employees. On the basis of the report suitable disciplinary action may be initiated and punishment will be imposed by the DORC.

Project employees may be allowed to register for the Ph.D Programme as per institute norms if any.

3.7 Leave Provision

Faculty members going out of the town on consultancy work will be treated to be on duty subject to a maximum of 30 days per year, and subject to a maximum of 10 working days per regular semester. Approval for going out on duty on such work will be approved by the DORC.

4. Limitations

It is expected that only those consultancy projects and routine test will be accepted by the Institute which provide challenges befitting professional competence of the faculty members. Sufficient caution also needs to be exercised to ensure that consultancy projects do not interfere with the normal duties of faculty members. Thus, the time spent by a faculty staff member on consultancy works should be limited, on an average to one day a week.

5. Consultancy Committee

To monitor the consultancy works, a Consultancy Committee of the Institution is as follows:

- | | |
|---|--------------------|
| i) Dean (Research & Consultancy) | - Chairman |
| ii) Associate Dean (Research & Consultancy) | - Member-Secretary |
| iii) All HODs/HOCs | - Member |

6. Interpretation of Rules

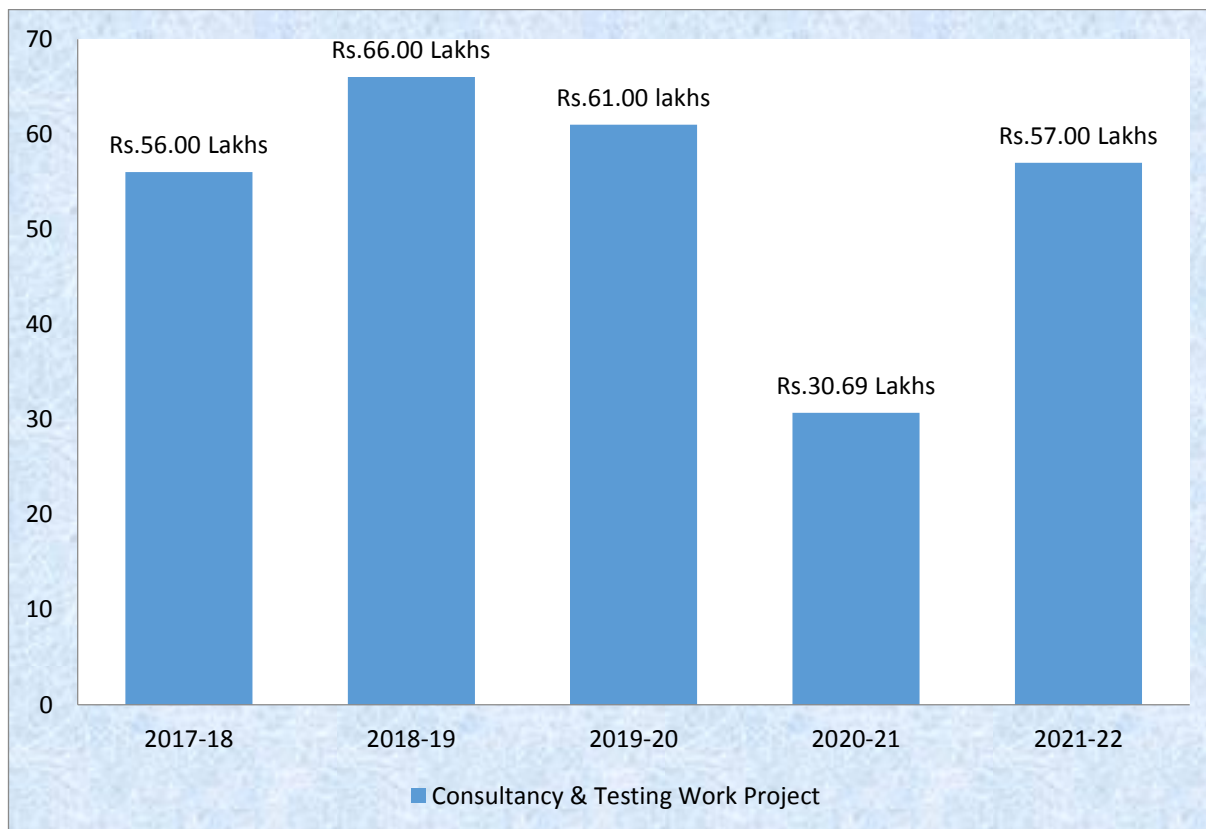
Wherever difficulties arise in interpreting rules or relaxations and changed are required for smooth functioning of consultancy works, the Consultancy Committee and Director will be the competent authority for approval on behalf of the Board of Governors.

Registrar

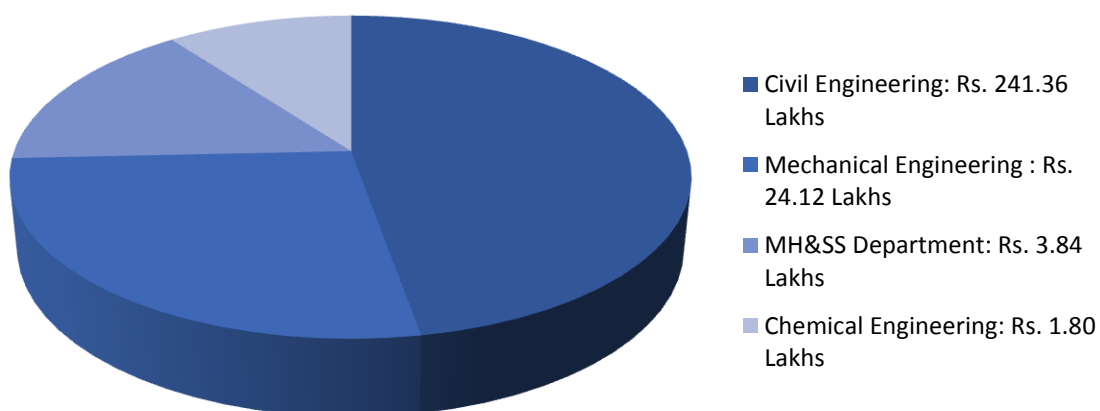
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4.1 Fund Received through Consultancy & Testing Work:



Department Wise Fund Received in Last Five Years (FY 2017-18 to 2021-22)

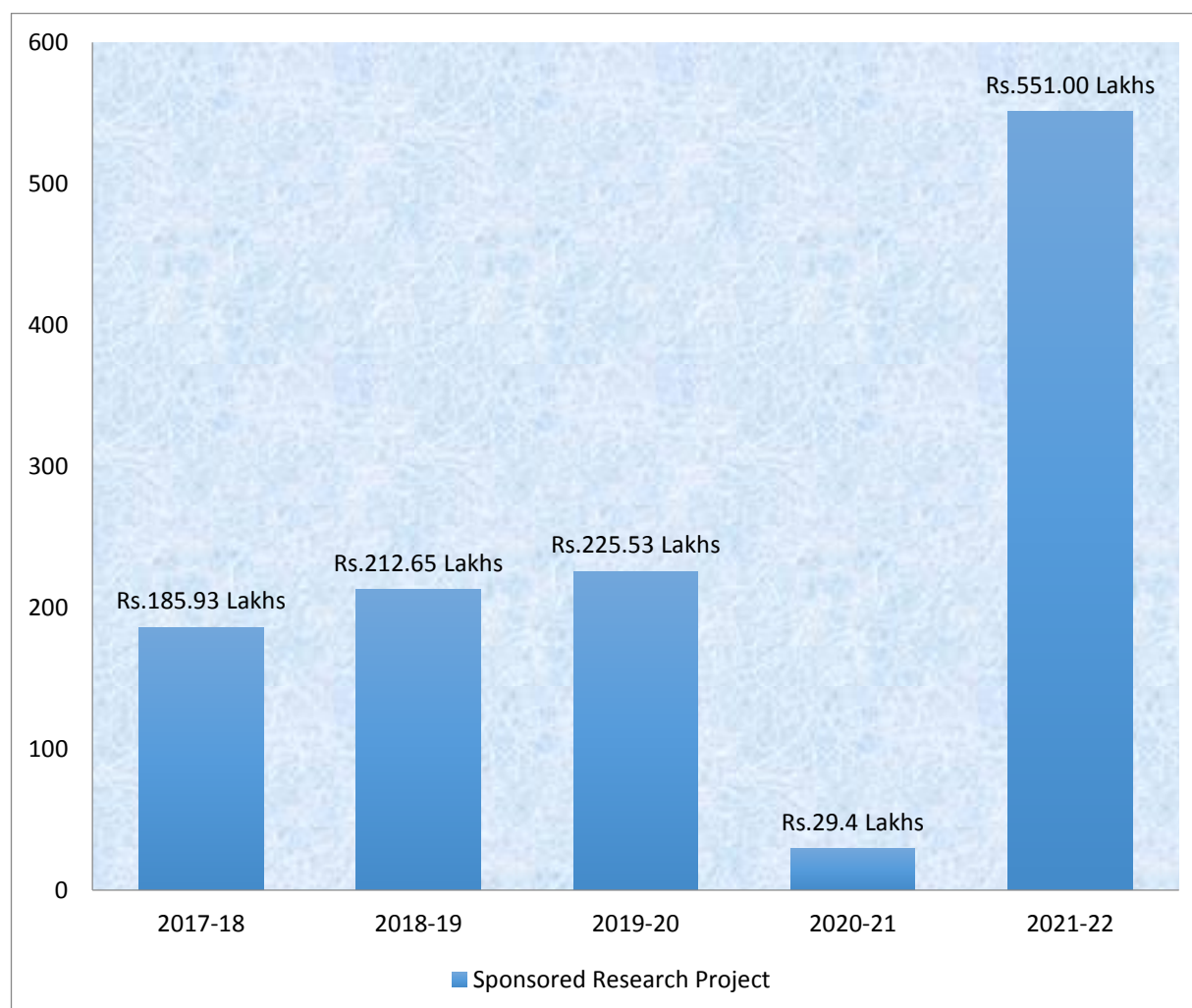


2.2 Sponsored Research Projects

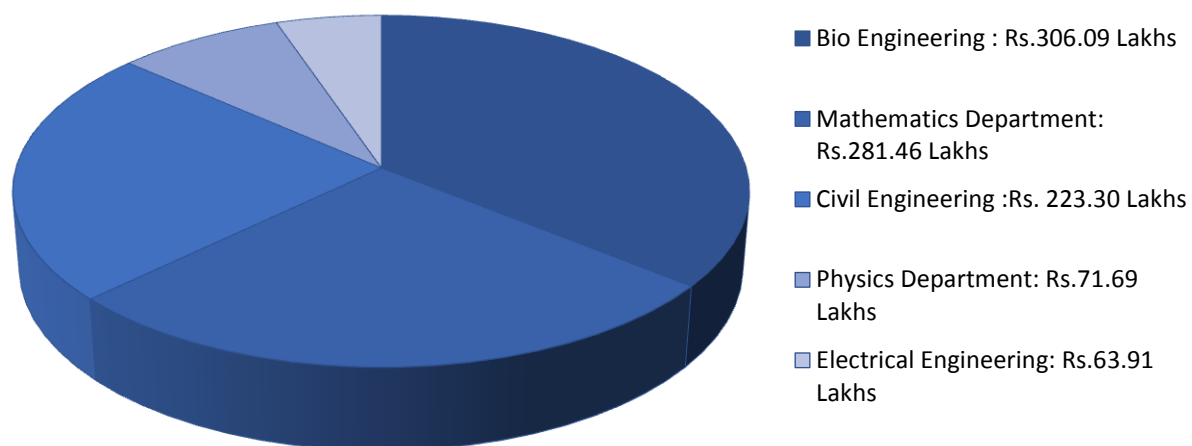
Our Institute has signed MOUs with industries and Institutions in and abroad to promote collaborative research and consultancies. Our faculty members have obtained major project funded by DST, DBT, FIST, ICSSR, ICMR, CSIR, Tribal Research and Cultural Institute, DST-STUTI, DRDO, MGNREGA works for Tripura, Deen Dayal Upadhyaya Grameen Kaushal Yojana (DDU-GKY), Unnat Bharat Abhiyan and ISRO.

Faculties and students are actively involved in various research activities. Our Institute received **Rs.372,02,377** Lakhs in the financial year of 2021-22 under the Sponsored Research Project Grant.

2.3 Sponsored Research Grant (FY. 2017-18 to 2021-22)



Department Wise Fund Sanctioned in Last Five Years FY 2017-18 to 2021-22



2.4 List of Sponsored Projects:

Sponsored Research Project, Year 2021-22

Sl. No	Departments	Title of the Project	PI & Co-PI	Duration of the Project	Sanctioned Amount (Lakhs)	Funding Agency
1	Computer Science and Engineering	New Generation Innovation Network (NGIN) .	PI: Dr. Suman Deb, Assistant Prof. of CSE Department.	5 years	10.00 Lakhs	Directorate of Information on Technology, Tripura
2	Mechanical Engineering	Study of Two Phase Bubble Condensation in Parallel and cross flow orientation.	PI: Dr. Abhik Majumder, Assistant Prof. of ME Dept.	3 years	40.524 Lakhs	SERB
3	Mathematics Department	Solving Multiple Gravity Assist Spacecraft Trajectories Optimization problem by Metaheuristic Algorithms.	PI: Dr. Apu Kumar Saha, Assistant Prof. of Mathematics Department.	3 years	6.6 Lakhs	SERB
4	Mathematics Department	Development of Mathematics Proficiency in North-East India. PI: Dr. Uttam Kumar Bera, Assistant Prof. of Mathematics Dept.	Co-PI: Dr. Baby Bhattacharya, Associate Prof. of Mathematics Department and Dr. Paritosh Bhattacharya, Assistant Prof. of Mathematics Department.	3 years	223.47 Lakhs	SERB-STUTI
5	Bio Engineering	Characterization and popularization of Spirulina biomass cultivation as viable product and commercial exploitation of Spirulina biomass towards product development.	PI: Dr. Tarunkanti Bandyopadhyay, Associate Prof. of Chemical Engineering & HOD of Bio Engineering Department.	3 years	231.54847 Lakhs	DST
6	Chemistry	Development of Metal Nanocomposites for the Enhancement of Efficiency of Solar Cell.	PI: Dr. Mitali Saha, Associate Professor of Chemistry Department.	2 Years	16.86 Lakhs	Central Power Research Institute(CPRI)

7	Civil Engineering	Flood Risk Assessment of Barak Basin in Assam State-A geospatial approach.	PI: Dr. Sushant Biswal, Assistant Prof. of CE Department. Co-PI: Dr. Mrinmoy Majumder, Associate Prof. of CE Dept.	May 2022	Rs.47,015.00	ISRO
8	Civil Engineering	Knowledge Guided GIS based Hydro-geochemical modeling to understand the sources & control of Arsenic (As) contamination in Groundwater of Tripura	PI: Dr. Umesh Mishra, Professor of CE Dept. Co-PI: Dr. Susahant Biswal, Assistant Prof. of CE Department. Dr. Priyanka Choudhury, Assistant Prof. of ECE Department.	May 2022	Rs.4,35,240.00	ISRO
9	Mathematics Department	Long Term Trend in Weather Parameters and Atmospheric Chemistry and its Effect on Tea Cultivation over North-East India.	PI: Dr. Paritosh Bhattacharya, Associate Prof. of Mathematics Dept. Co-PI: Dr. Umesh Mishra, Professor of CE Dept.	Oct 2022	Rs.5,71,975.00	ISRO
10	Civil Engineering	Optimal resource planning in the jurisdiction of Agartala Municipal Corporation (AMC) using Geo Spatial techniques.	PI: Dr. Mrinmoy Majumder, Associate Prof. of CE Dept. Dr. Manish Pal, Professor of CE Dept.	May 2022	Rs.3,90,000.00	ISRO
11	Electronics And Communication Engineering	Applicability of Electromagnetic Metamaterials in Antennas and Microwave Circuits for use in space applications.	Applicability of Electromagnetic Metamaterials in Antennas and Microwave Circuits for use in space applications.	May 2022	Rs.2,00,000.00	ISRO
12	Electronics And Communication Engineering	Development of an Integrated, Miniature and Portable Air Pollution Monitoring System.	PI: Dr. Mitra Barun Sarkar, Assistant Prof of ECE Dept. Co-PI: Dr. Sambhu Nath Pradhan, Associate Prof. of ECE Dept. Dr. Apurba Chakroborty, Assistant Prof. of ECE Dept. Dr. Paritosh Bhattacharya, Associate Prof. of Mathematics Dept.	May 2022	Rs.3,08,619.00	ISRO

			Mr. Biman Debbarma, Assistant Prof. of ECE Dept.			
13	Electronics & Instrumentation Engineering	Finding suitable precursors for Earthquakes for North Eastern Region	PI: Dr. Jayanta Kumar Rakshit, Assistant Prof. of EIE Dept. Co-PI: Dr. Paritosh Bhattacharya, Associate Prof. of Mathematics Department.	December 2022	Rs.2,05,239.00	ISRO
		TOTAL		Rs.551.00 Lakhs		

Sponsored Research Project, Year 2020-21

Sl. No	Department	Title	PI & Co-PI	Duration	Sanctioned Amount (Lakhs)	Funding Agency
1	Civil Engineering	Preparation of state specific Action Plan (SSAP) for water sector of Tripura State. Mou No.022/MoU/CE/PWD(WR)/2019-20, MoU signed on 14.02.2020. Nodal Officer, SSAP,NIT Agartala:	Dr. Mrinmoy Majumder, Associate Prof. of CE Department .	12 Months from the date of release of 1st installment.	29.40 Lakhs	SSAP (State Specific Action Plan)
		TOTAL		Rs.29.40 Lakhs		

Sponsored Research Project, Year 2019-20

Sl. No	Department	Title	PI & Co-PI	Duration	Sanctioned Amount (Lakhs)	Funding Agency
1	Civil Engineering	Sustainable production of algal biomass for production of biofuels :A holistic approval with bioremediation & economical harvesting technique .	PI: Prof. Umesh Mishra, Civil Engg. Dept. Co-PI:Dr. Muthusivaramadian, Asst. Prof. Of Bio Engg Dr.Biswanath Bhunia, Asst. Prof. Of Bio Engg, Dr Selvaraju N, Asst. Prof of Bio Engg IIT Guwahati .	2.5 Year	15.916 Lakhs	DBT
2	Civil Engineering	Developing a methodology for Self-cleansing of urban strom water drainage system a scientific approach for greening smart city	PI: Dr. Ratul Das, Professor of Civil Engineering Dept.	2 years	4.00 Lakhs	ICSSR
3	Chemical Engineering	Removal of methylene blue dye from aqueous medium by biochar adsorbent prepared from bio-sludge of Indian Standard Natural Rubber plant in Tripura.	PI: Dr. Ajay Kumar Manna, Assistant Prof. of Chemical Engg Dept.	2 years	9.45875 Lakhs	DBT
4	Physics	Development of a Low Cost Highly Sensitive and Selective Nitric Oxide (NO) Sensor for Asthma Diagnosis .	PI: Dr. Suvra Prakash Mondal Assistant Prof. Of Physics Dept.	3 years	55.18832 Lakhs	SERB
5	SOM	Skill Development in Tripura: Analysis on problems, challenges and opportunities .	PI: Dr. Anirban Dutta , Assistant Prof. SOM & H&SS Dept. Co-PI: Dr. Mili Kar, Assistant Prof. SOM & H&S Dept.	1 Year	04.5 Lakhs	ICSSR

6	Civil Engineering	Demographic Profile of Scheduled tribes of Tripura(1901-2018)	PI: Dr. Debdulal Tripura, Associate Professor CE Dept.	06 Months	5.00 Lakhs	Tribal Research and Cultural Institute
7	Civil Engineering	Flood Risk Assessment of Barak Basin in Assam State - A geospatial approach	PI: Dr. S.K. Biswal, Assistant Prof. of CE Dept. Co-PI: Dr. Mrinmoy Majumder, Associate Professor CE Dept.	12 months	3.00 Lakhs	ISRO
8	Civil Engineering	Knowledge Guided GIS based Hydro-geochemical modeling to understand the sources & control of Arsenic (As) contamination in Groundwater of Tripura	PI: Dr. Umesh Mishra, Professor of CE Dept. Co- PI: Dr. S.K. Biswal, Assistant Prof. of CE Dept. Dr. Priyanka Choudhury, Assistant Prof. of ECE Dept.	24 months	21.041 Lakhs	ISRO
9	Mathematics Departments	Long Term Trend in Weather Parameters and Atmospheric Chemistry and its Effect on Tea Cultivation over North-East India	PI: Dr. Paritosh Bhattacharya, Associate Prof of Mathematics Dept. Co- PI: Dr. Umesh Mishra, Professor of CE Dept.	36 months	19.804 Lakhs	ISRO
10	Civil Engineering	Optimal resource planning in the jurisdiction of Agartala Municipal Corporation (AMC) using Geo Spatial techniques.	PI: Dr. Mrinmoy Majumder, Associate Professor CE Dept. Co-PI: Dr. Manish Pal, Professor of CE Dept.	24 months	16.36 Lakhs	ISRO
11	Electronics And Communication Engineering	Design and Development of High Data Rate Demodulator.	PI: Dr. Sambhu Nath Pradhan, Associate Professor ECE Dept. CO-PI: Dr. Tamasi Moyra (Panua), Assistant Prof. of ECE Dept. Mr.Anirban Bhattacharjee, Assistant Prof. of ECE Dept., Dr. Abhishek Nag, Assistant Prof. of ECE Dept.	18 months	13.00 Lakhs	ISRO

12	Electronics And Communication Engineering	Applicability of Electromagnetic Metamaterials in Antennas and Microwave Circuits for use in space applications.	PI: Dr.Tamasi Moyra (Panua), Assistant Prof. of ECE Dept. CO-PI: Mr. Anirban Bhattacharjee, Assistant Prof. of ECE Dept.	24 months	24.0352 Lakhs	ISRO
13	Electronics And Communication Engineering	Development of an Integrated, Miniature and Portable Air Pollution Monitoring System	PI: Dr. Mitra Barun Sarkar, Assistant Prof. of ECE Dept. CO-PI: Dr. Sambhu Nath Pradhan, Assistant Prof. of ECE Dept. Dr. Apurba Chakraborty, Assistant Prof. of ECE Dept., Dr. Paritosh Bhattacharya, Assistant Prof. of Mathematics Dept. Mr. Biman Debbarma, Assistant Prof. of ECE Dept.	24 months	24.0352 Lakhs	ISRO
14	Mathematics Departments	Finding suitable precursors for Earthquakes for North Eastern Region	PI: Dr. Jayanta Kumar Rakshit, Assistant Prof. of EIE Dept. CO-PI: Dr. Paritosh Bhattacharya, Associate Prof. of Mathematics Department.	24 months	10.184 Lakhs	ISRO
	TOTAL			Rs. 225.53 Lakhs		

Sponsored Research Project, Year 2018-19

Sl. No.	Department	Title	PI & C0-PI	Duration	Sanctioned Amount (Rs.)	Funding Agency
1	Bio Engineering	Enhancing the productivity of phycobiliproteins (C-PCs) and Cyanocobalamin(Vitamin B ₁₂) in selected cyanobacteria for valorization and development of functional foods.	PI: Dr. Tarun Kanti Bandypadhyay, Assistant Prof. Of Bio Engg. Dept. Co-PI: Dr.Biswanath Bhunia, Assistant Prof. Of Bio Engg. Dept. Co-PI: Dr. Radha Prasanna, Division of Microbiology Indian Agriculture Research Institute , New Delhi. Co-PI: Dr. Abhijit Mondal , Assist. Prof. Chemical Engg. Dept.	3 years	51.29996 Lakhs	DBT
2	Electronics & Instrumentation Engineering	Polarization conversion and rotation using micro-ring resonator and its application to design binary and multi-valued logic circuits in optical domain.	PI: Dr. Jayanta Kumar Rakshit, Asstt. Prof in Electronics & Instrumentation Engineering Dept.	3 years	26.39086 Lakhs	SERB
3	Civil Engineering	Evaluation of a strengthening scheme for hollow compressed earth block wall using fibres, bamboo and steel bars.	PI: Dr. Deb Dulal Tripura, Assoc. Prof.in Civil Engg. Dept	3years	33.4 Lakhs	SERB

4	Chemistry	Spatial distribution of uranium and associated water quality parameters of all districts of Tripura.	PI: Dr. T.K. Mishra , Associate Prof. of Chemistry Department.	2 years	19.06575 Lakhs	BRNS
5	Bio Engineering	Multi-drug delivery with nano-sized carrier particles for combination therapy in tuberculosis.	PI: Dr. Tridib Kumar Bhowmick, Asstt. Prof in Bio Engineering Dept	2 years	15.24 Lakhs	ICMR
6	Computer Science & Engineering	IoT based Traffic Monitoring System for hilly roads of North-East India .	PI: Dr. Ashim Saha Assistant Prof. CSE Dept.	2 years	10.172 Lakhs (1 st year 5.204 Lakhs)	DST
7	Chemical Engineering	Technology development for the production of natural colorant (chlorophyll) from isolated microalgae	PI: Dr. Kalyan Gayen Assistant Prof. Of Chemical Engg Dept., Co-PI Dr. Miraganka Sekhar Manna, Assistant Prof. Of Chemical Engg Dept., Dr. Tridib Kumar Bhowmick, Assistant Prof. Of Bio Engg Dept.,	3 years	32.2272 Lakhs	SERB

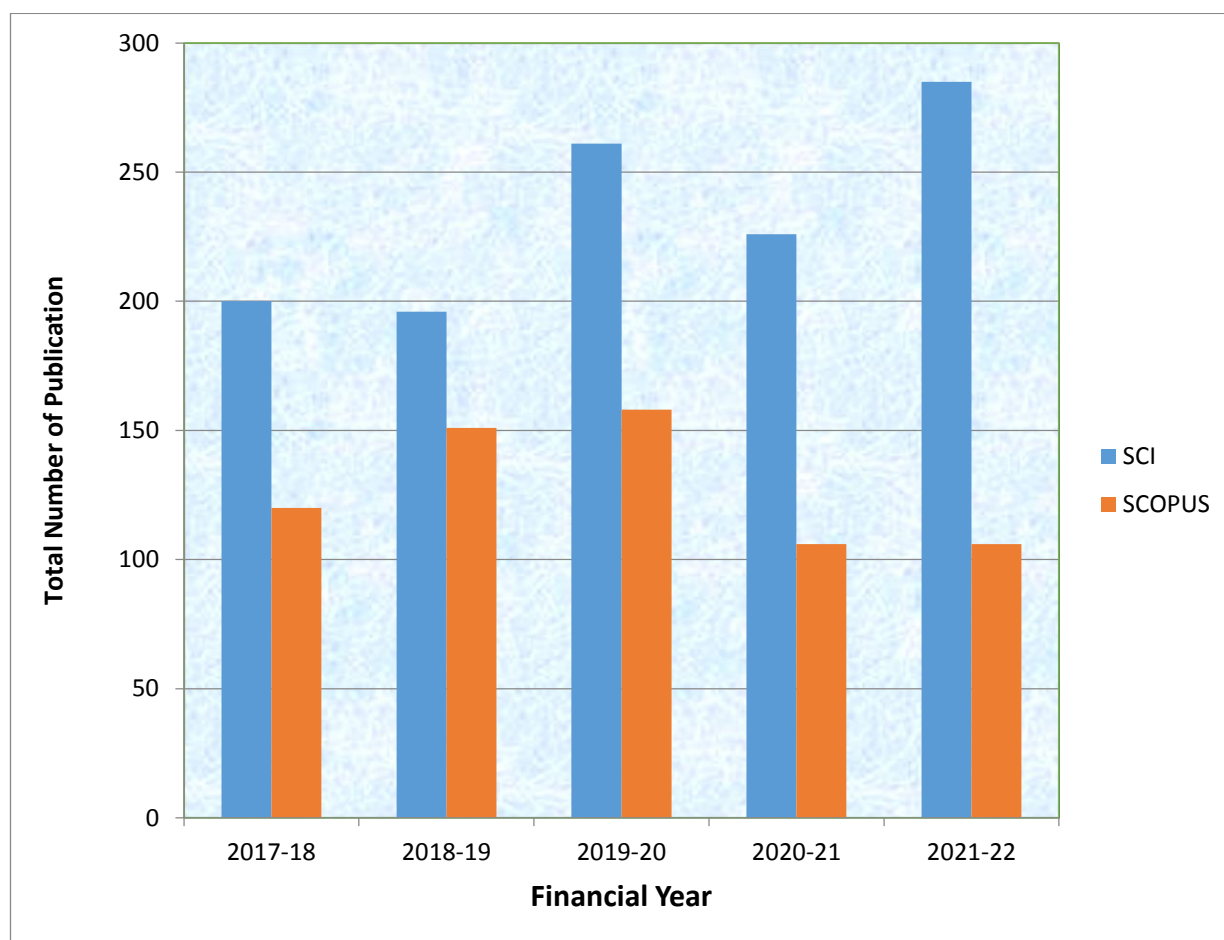
8	Civil Engineering	Mitigating scarcity of stone aggregates in pavement construction using locally available materials & stabilization techniques.	PI: Dr .Partha Pratim Sarkar Associate Prof. Civil Engg. Dept.	3 years	24.85435 Lakhs	DST
	TOTAL			Rs.212.65 Lakhs		

Sponsored Research Project, Year 2017-18

Sl. No	Department	Title	PI & Co-PI	Duration	Sanctioned Amount (Rs.)	Funding Agency
1	Physics	Development of organometallic nano-composites and scientific investigation on their functionalization towards improved adsorptive removal of toxic dyes for application in industrial wastewater treatment.	PI: Dr. Biswajit Saha, Asstt. Prof in Phy. Dept. Co.PI: Dr. Animesh Debnath, Asstt. Prof in CE Dept.	3 years	16.5 Lakhs	CSIR Govt. of India
2	Civil Engineering	Hydraulic model study of flow dynamics & bed morphology evolution of the Gomati river of Tripura at the Pitra-Gang confluence .	PI: Dr. S. K. Biswal, Asst. Prof.in Civil Engg. Dept.	3 years	31.427 Lakhs	SERB DST
3	Mathematics	Design development & demonstration of Solar dryer suitable for drying natural rubber sheets in north east India,	PI: Dr. Subarna Maiti, Dr. Paritosh Bhattacharya (Joint PI), Associate Prof. in Mathematics Dept.	2 Years	21.4 Lakhs	Jointly With CSIR- CSMCRI & NIT Agartala MNRE
4	Computer Science & Engineering	IMPRINT development of a indigenous assistive system and tools for the disabled community in India.	PI: Prof. Rajlakhmi Guha (Co-PI) , IIT Kharagpur. Prof. M. Balakrishnan , IIT Delhi, Prof. Anil Prabhankar , IIT Madras , Co-PI: Dr. Suman Deb , Assistant Prof. Of CSE Dept.	2 Years	5.79941 Lakhs	IMPRINT
5	Civil Engineering	Geoscientific Studies-Geodetic, geological, geomorphological and geotechnical of active landslides	PI: Dr. Sujit Kumar. Pal, Associate. Prof.in Civil Engg. Dept.	2 Years	18.548 Lakhs	DST
6	Civil	Safe road connectivity for Tripura	PI: Dr. Mukti Advani	3 year	20.35 Lakhs	CSIR

	Engineering	Sate of North Region of India	Senior Scientist,CSIR-CRRI,New Delhi Co-PI: Dr.Partha Pratim Sarkar Asst. Prof.in Civil Engg. Dept			Govt.of India
7	Electrical Engineering	Development of Bessel Beam based Fiber Optic Biosensor for Early Detection of Breast Cancer	PI: Dr.Ardhendu Saha, Assoc. Prof.in EE Dept. Co-PI:Dr.Biswanath Bhunia, Asstt. Prof in Bio-Engg. Dept.	3 years	63.90535 Lakhs	SERB
8	Bio Engineering	On field application of Fold scope for rapid collection of microalgae samples.	PI: Dr.Tridib Kumar Bhowmick Asstt. Prof in Bio Engineering Dept. &Dr.Kalyan Gayen, Asstt. Prof in Chemical Engineering Dept.	1 year	8.0 Lakhs	DBT
	TOTAL			Rs. 185.93 Lakhs		

4.2 Research Publication in SCI & SCOPUS Index Journals:



4.3 INTELLECTUAL PROPERTY RIGHT POLICY (2020)

1. IPR, NITA CORE COMMITTEE MEMBERS

1. Dean Research and Consultancy NIT Agartala, Chairman
2. Dr. Baby Bhattacharya, Associate Professor & HOD, Department of Mathematics, Convenor
3. Dr. Mitali Saha, Associate Professor & HOD, Department of Chemistry, Member
4. Dr. Subhadeep Bhattacharjee, Associate Professor & HOD, Department of Electrical Engineering, Member
5. Dr. Suvra Prakash Mondal, Assistant Professor, Department of Physics, Member

2. IPR, NITA INVITEE MEMBERS

1. Dr. Partha Pratim Sarkar, Associate Professor, Department of Civil Engineering
2. Dr. Srimanta Ray, Assistant Professor & HOD, Department of Chemical Engineering
3. Dr. Ashim Saha, Assistant Professor, Department of Computer Science and Engineering
4. Dr. Biswanath Bhunia, Assistant Professor, Department of Bioengineering

3. IPR, STANDING COMMITTEE (IPR SC)

- | | | |
|--|---|-------------------|
| 1. Ex -Officio – Dean(R&C) | - | Chairman |
| 2. Associate Dean(R&C) | - | Member |
| 3. Director's Nominee | - | Member |
| 4. Two members from IPR Cell (to be nominated by the Chairman) | - | Member |
| 5. Chairman Incubation & Start-up Cell, NITA | - | Member-Secretary. |

This IPR Standing Committee will be formed by Dean(R&C), as the Ex-officio Chairman of the Committee. This IPRSC will be responsible for detailed formation of procedure, policy decisions and amendment of IPR policy to facilitate implementation of the IPR policy of NITA.

INTRODUCTION

National Institute of Technology Agartala (hereafter referred to as ‘NITA’) is an academic Institute dedicated to excellence in teaching and research. Its activities, centred on faculty/students/ /project staff/ supporting staff/visitors are based on knowledge and intellectual exercise. In the era of technology domination, where values and perceptions change at brisk pace, National Institutes of Technology, in particular, have to preserve the fundamental spirit of academics on one hand and have to march ahead, on the other, accepting changing realities of business economy based on knowledge generated, protected and disseminated under the intellectual property regime. In the evolving scenario of the world today, with increasing awareness of the ‘knowledge asset’, an Intellectual Property Rights (IPR) Policy is needed not only to preserve the interest of NITA but also to make NITA faculty/students /project staff/ supporting staff/ visitors aware of ‘knowledge asset and its impact on the society’.

OBJECTIVES

The objectives of the policy are as follows:

- a. To create awareness among the students, staff and faculty likewise about the IP.
- b. To provide an encouraging environment for research and development for generation of IP to the faculty, students and other researchers associated with NIT Agartala.
- c. To provide support in every possible way to the inventors of the IP associated with NITA and safeguard the IP developed.
- d. To formulate the regulations and guidelines regarding ownership of the IP and revenue sharing upon commercial exploitation of the IP.
- e. To provide legal support to the inventors against any case of unauthorized use of IP.

DEFINITIONS

1. **“Intellectual property”** is defined as the tangible or intangible results of research, development, teaching, or other intellectual activity and includes patents, copyrights, designs, trademarks, service marks, logos etc. Any additional information regarding these intellectual properties can be obtained from the website of Controller General of Patents, designs and trademarks.

2. **“Copyright”** means the exclusive right granted by law for a certain period of time to an author to reproduce, print, publish and sell copies of his or her creative work. Copyright protection is available for most literary, musical, dramatic, and other types of creative work, including software, teaching materials, multimedia works, proposals, and research reports.
3. **“Creator”** means any employee of the NITA and includes those who are on probation, those who are employed on temporary basis wither in the institute and/ or in projects and those who are research workers, research scholars or students who are responsible for the creation of an Intellectual Property, using the facilities of the Institute.
4. **“Inventor”** is the person/s who has something new with utilization of their creative minds.
5. **“Patent”** means a patent granted under the provision of the Indian Patent Act, 1970.
6. **“Patentee”** means the person for the time being entered on the Register of Patents kept under the Indian Patents Act, 2002 as the generator or proprietor of the patent.
7. **“Revenue”** is any payment received as per an agreement by the Institute usually for legal use of an Intellectual Property through a license.
8. **“Trademark”** is a distinctive word, symbol or picture or a combination of these, which is used by a business entity to discriminate its products and services from those of other business entities.

EVALUATION OF INTELLECTUAL PROPERTY

The evaluation committee comprised of the IPR Standing Committee members along with the HOD of the respective Departments and invitee members having expertise in the relevant fields will be responsible for clarification of the issues/appeals related to IPR patent/copy write application, formulating the procedures of filling and to ensure the compliance of IPR policy of NITA following the legislations covering IPRs in India. Legal Advisor as invitee member may be included by the chairman of the committee as and when required. The Chairman IPRSC will form the evaluation committee on case to case basis.

The function of IPR Evaluation Committee would be the following:

- a) To assess the proposals for filing of IPR .
- b) Finalize the procedures and guidelines for the effective implementation of the IPR policy at NITA.
- c) Track the various IPs filed using MIS facility available at the institute for speedy IP process *if required* and to facilitate IP protection by drafting agreements.

- d) To collaborate with organizations for filing, licensing/assigning of IPR to generate revenue through commercialization. Efforts may be made for the commercialization of the patent through start-up cell of NIT Agartala as far as possible.
- e) To implement the IPR policy in a proactive manner for the shared benefits of both the inventor and institute, identification and reporting of issues related to the violation of IPR policy of the Institute to the Director for necessary action.

INTELLECTUAL PROPERTY OWNERSHIP

- a) NIT Agartala will have the ownership rights on the IP that is developed by the students, faculty, staff, or any external personnel who not related to the institute but uses significant resources (funds or facilities) available with the institute with due recognition to the inventors of the IP and protection of the ownership rights of the inventor(s). NIT Agartala will work towards protection through legal means of all IP related to academic or professional field of the inventor(s) regardless of the medium of expression when the inventor(s) is employed by the Institute and the IP shall be jointly owned by the inventor/creator /originator/author and the Institute. In case the IP was created by the inventor /creator/originator/author - when the Institute accepted terms are different from that stated herein, the terms agreed to shall prevail.
- b) However, in case a payment has been made by the individual to the institute for utilization of facilities, NITA cannot claim the exclusivity in the ownership and hence an agreement on mutual accord can be reached that provides joint ownership rights to the inventor and NITA.
- c) In case when an IP is developed/generated from research projects sponsored by government/ non-government agencies will be owned by the creator(s), the Principal Investigator or Chief Consultant, the Institute and the sponsoring agency. The sponsoring agency will have to bear 50% of the protection cost or forgo the rights to the IP. In case the project was accepted by the Institute under terms different from that stated herein, the terms agreed to shall prevail. IP developed as a part of work that has been funded by external agencies or consultancy, then a joint ownership must be established with proper rights to license the innovation.
- d) In issues of copyrightable material such as Patent software, lectures (video lectures), books, circuit designs, images, etc developed by NITA personnel for use by external agency or industry, the institute shall claim the rights for the ownership of the IP. However, the developers shall be free to use the IP for research and teaching purposes

by reverse license agreement with NITA. Also, NITA reserves the right to use the IP for academic purposes.

- e) In case when IP is related to transfer of biological resource and associated knowledge, inventor(s) has/have to ensure that the provisions under the national laws on biodiversity and traditional knowledge are not violated during the course of securing any IP protection or use of such knowledge. NITA affirms that it abides with the national laws on biodiversity and traditional knowledge.
- f) The inventor/developer/creator/originator of the IP shall hold the ownership rights if the IP is developed beyond the regular assigned work or normal professional duty or employment contract or without any significant use of institute's resources and facilities. In case the IP was created by the inventor/creator/originator/author when the Institute accepted terms are different from that stated herein, the terms agreed to shall prevail.
- g) For thesis and dissertation reports related to academic activity, both student and mentor/supervisor will hold the ownership rights. However, both should give a royalty-free right to NITA to use the reports for academic purposes, as and when required. A declaration for the same must be included in the thesis/dissertation properly signed by the student, mentor or supervisor. Moreover, in case an application has been made for grant of IP and not yet granted, an agreement for thesis/ dissertation confidentiality at the time of thesis/ dissertation submission should also be included.

CONFIDENTIALITY AND RIGHTS

- a) For IP produced at NITA, the inventors interested to protect their intellectual creations under IP law of the land will be required to disclose their IP to the IPR Cell of NITA.
- b) The institute may appoint an advocate/attorney to draft the IPR application as appropriate for the invention if required.
- c) All fees related to the IPR (patent, copy right, Trademark), process (filling, Request for examination etc.), IP databases, IP search, prior art etc may be born from Institute fund (Overhead cost of funded Research Projects).Any legal fees (lawyer, attorney, agent etc.) may be borne by Institute subject to the recommendation of IPRSC and approval/discretion of the authority.
- d) In any case, if the evaluation committee decides against the IP evaluation, all these costs have to be borne by the inventor personally, in that NITA will agree to forgo the ownership to the inventor, provided that substantial institute's resources are not involved in the IP. The

inventors, both NITA and non-NITA personnel, shall maintain confidentiality of the IP during the period when efforts are made for protecting and commercialization of the IP.

- e) Funds provided partially or fully by a third-party to NITA will be as per rules based on the contract between the third party and NITA.

DISCLOSURES AND CONFIDENTIALITY

Following procedure should be followed for disclosure of the IP by the inventors.

- a) For all the IP produced and developed at the institute, i.e. NITA, the inventors have to disclose the IP to Dean (R&C) in a proper format (IP disclosure form) if the inventor choose to protect their intellectual creations under IP law of the land. Along with this disclosure, the inventors would need to assign the rights of the IP to NITA as per IP Ownership Right described earlier in this document. Similarly, the students of the institute are expected to submit their IP disclosure form along with their thesis work (B.Tech, BSMS, MSc, M.Tech or PhD) properly signed and forwarded by their supervisor and followed by head of the department to Dean R&C. It would be the responsibility of the institute to maintain the confidentiality of the IP, once it has been submitted to the committee for evaluation/assessment/filing and possibility of commercialization.
- b) For all the IP generating from the externally funded projects and collaborative project, the IP disclosure shall be done as per the terms and conditions of the contract. In case, where such terms and conditions of the contract is not in place, the institute policy shall prevail.

REVENUE SHARING

- a) Upon commercialization of the intellectual property developed at the institute, the revenue generated from the royalty payments would be shared between the institute and the inventors.
- b) In case of owner/multiple owners of the IP other than the institute, the owners and the Institute shall come to an agreement before filing the IP as to how to share the revenue. In case of multiple originators of an IP, if the inventors/originators fail to arrive at a consensus, the IPR Cell will analyze all available information and make a recommendation about the revenue sharing to the Director, NITA. The decision of the Director, NITA shall be final and binding .
- c) NITA reserves the right to determine the share of the different stakeholders involved in IP creation and dissemination from time to time. Revenue share of the inventor(s) shall continue even after their association with NITA ends.

POLICY FOR IP LICENSING AND ASSIGNING FOR START- UP VENTURES WITH INVOLVEMENT OF INVENTOR(S) FROM NITA

In order to encourage commercialization of IP registered and owned by NITA, inventor(s) of such IPs shall be encouraged to promote a start up company (**following the guidelines established by NITA**) for developing a business proposition leveraging the IP under consideration. For this purpose, the start up can also be accommodated at the **Technology Business Incubator Unit (TBIU)** / Innovation Park/ Research Park at NITA, if so desired by the Inventor(s), after critical appraisal of the Business Plan following the applicable procedures, if any framed by NITA.

The start ups in the specified instances shall be licensed IPs owned by NITA on a limited exclusivity basis initially for a period of 3 years. The licensing fee may be decided depending on the nature of funding available for such a venture including the possibility of making the know how/technology available, even without any license fee in a particular case. However, all such licensing should be accompanied by an appropriate agreement and a monitoring mechanism. During the limited exclusivity period, the start up shall have ‘no rights to give sub license’ to any third party.

Once the start up venture establishes the commercial viability within the said exclusivity period, the license agreement shall be revised and modified into exclusive over an extended period mutually decided for a royalty consideration by the parties. In case the start up fails to achieve commercial breakthrough within the allotted period, the exclusivity of the license to the start up shall be forfeited.

Further, as any entity set up under the TBIU is an independent commercial entity, NITA would not have any rights to IP/Know how developed within the entity unless covered by an explicit agreement.

CONFLICT OF INTERST, DISPUTES AND JURISDICTION

- a) It is the responsibility of the inventors to disclose any conflict of interest or potential conflict of interest to the evaluation committee prior to applying for examination/ consideration. In case of any dispute, the aggrieved party may contact the Director NITA. In all circumstances, the decision taken by the Director NITA would be final and abiding by all.
- b) The inventor(s) may appeal to the Director NITA on the occurrence of any disputes between NITA and the inventors regarding the implementation of the IPR policy. The Director’s decision would be

final and binding on both institute and inventor. All the agreements or contracts signed by NITA will be under the jurisdiction of Courts at Agartala only.

ANNEXURE -I

Intellectual property disclosure form

Title of the Invention

Name and Affiliation of Inventor(s)

.....

.....

Brief description of the invention

Describe the invention so that the other faculty who are knowledgeable in the field can evaluate the technical and commercial merits of the invention.

- a) How does this invention relate to new processes, machines, compositions of matter?
- b) How is the present invention an improvement over existing comparable invention?
- c) Has the invention been tested experimentally? Are experimental data available?
- d) Has invention been patented or protected under confidentiality agreement?

(Please attach sketches, drawing, photographs and other materials that illustrate the description).

Commercial Potential

- a) What are the possible uses / application areas and / or product you feel may embody aspects of your invention?
- b) Who is the possible end –users of the product?

Prior disclosure and possible Intent

- a) Has the invention been disclosed to industry representatives or third parties? if yes, Name companies and specific individuals and their titles.
- b) Has any commercial interest been shown in it and of what nature?

.....

UNDERTAKING

I /We the undersigned, hereby certify that the Work _____ has been undertaken by the undersigned at NITA, making use of significant use of NITA resources.

I/ We hereby agree to abide by the provision of the intellectual property policy of the Institute.

Signed this _____ day of _____ (Month), _____
(Year)_____

Name:

Address:

4.4 PATENT STATUS OF NIT AGARTALA

