Research & Development Policy

Research is the backbone of academics. It simplifies concept building and transforms new ideas into innovations in pursuance of a new era of passion for researches. Each finding gives immense pleasure and multiplies enthusiasm towards achieving target.

The Research and Development Cell aims to nurture research culture in the institute by promoting research in newly emerging and challenging areas of Engineering, Technology, Science and Humanities. This enhances the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc.

Objective:

To create a platform for obtaining sponsored projects

To promote quality research publications

To provide consultancy services to the society / industry

To promote innovation and patents

To promote interdisciplinary research

Research Committee:

A central research committee is formed to monitor and promote research projects, publications, consultancy, activities related to research promotion and the issues related to research and development.

I.   **Financial aid and support for pursuing PhD**

1. Deputation under the Quality Improvement Program (QIP) for doing Ph.D. For this, Faculty member must have put in at-least 3 years of service at ANITS are eligible to apply for QIP.

2. A Faculty member who gets admission in any I.I.T/I.I.Sc/NIT for PhD will be considered for grant of study leave and financial support during the leave period. The quantum of financial support will be decided by the Staff Development

Council (SDC). Extending this type of support is subject to the concerned faculty member giving an assurance in a manner to be decided by the SDC that he/she will serve the ANITS after completion of the PhD, Program for some specified period to be determined by the SDC based on the length of the study leave period and the quantum of financial support extended.

3. Any faculty member who wishes to do PhD on Part-time basis while continuing to work in the institute, will be considered by the SDC for support **in one or more** of the following ways:

   a) Re-imbursement of registration fee paid to the university and the expenses towards preparation of the thesis, subject to a ceiling of Rs. 15,000/-

   b) Relieving him/her of some/all of the administrative responsibilities, if any, and arranging the time-table in such a way that his/'her normal teaching load (Theory & Practical) is taken care of in 3/4 days of the week, so that he/she can be given 'off' for ½ days in a week for concentrating on the PhD work.

   c) Giving study leave with full salary for a period of up to a maximum of 4 months either at a stretch or in a few spells of 15 days each time for devoting his/her time for doctoral work.

NOTE: The total number of 'off' days under (b) and (c) above, excluding Sundays and other holidays, shall not exceed 120 days for any individual faculty member.

1. Support as in (b) and (c) will be given only to faculty members whose PhD work is in a relatively advanced stage and it will be reviewed periodically by the SDC. Extension of support is dependent upon satisfactory progress in the research work as perceived by the SDC and certified by the Research Committee/ Thesis Supervisor.

2. Candidates getting support under (2) above, will be eligible for 3 increments when Ph.D. degree is awarded to them.

II. **Faculty encouragement for research paper publications:**

Faculty will be awarded Rs. 5000/- in Scopus Indexed and Science Citation Indexed journals and Rs. 3000/- for UGC approved journals.

The research papers in Regional / National / International Conference / Seminars /

Workshops (conducted by IISc, IIT, NITS, IIITS, Universities) will be paid by the registration fee (subject to a ceiling of Rs. 5000/-) and also to-and from sleeper class railway fare, provided they are held within the country. For the paper publications in conference outside India the financial assistance shall be based on recommendation of research committee and approved by Management.

i) Deputation to Refresher Courses, Workshops &Seminars:

To enable the faculty of ANITS to keep themselves abreast of the latest developments in their fields of specialization, which is absolutely essential in these days of rapid changes in technology, they will be deputed, at regular intervals, to attend short term refresher courses, workshops, and seminars etc. being organized by various I.I.Ts., I.I.Sc., N.I.Ts., Universities and other reputed institutions. Faculty members so deputed, will be treated as 'on duty' for the duration of the course and the to-and –fro travel time. Further, the registration fee for the course will be borne by the ANITS and the faculty will be Paid to-and-fro II class (Sleeper) fare for the travel. Deputation of faculty members for such refresher courses will be decided by the Principal based on the recommendation of the Head of the Department concerned.

ii)Faculty Members Presenting Research Papers:

Faculty members presenting their research papers in Regional/ National/ International Conferences/Seminars/Workshops will be paid the registration fee (subject to a ceiling of Rs. 3000/-) and also to-and-fro sleeper class railway fare, provided **the International Conference is held within the country.** Further, they are treated as "on duty" for the duration of the conference and the to-and-fro travel time.

III.   Sponsored research projects

The faculty shall apply for funding support from the Govt / Industries, to do Sponsored/ Collaborative research based on the call for proposals from the agencies. The Principal Investigator (PI) / Principal Co-investigator shall forward the proposals to Principal through proper channel. The PI shall then submit the application along with supporting documents based on the approval to the Funding Agencies after the approval of central research

committee. A Junior research fellow / senior research fellow can be appointed based on the interview performance and the panel consists of PI, HoD, internal and external expert, Principal and management members. The progress of the project is reviewed once in six months. The PIs shall prepare the Project Completion Report, Utilization Certificate and Publications / patent list to the Sponsoring agency through the HoD and Principal.

IV. **Consultancy activities**

To provide service to the society and industry, consultancy is offered by the faculty in their expertise domain. Based on the request from the clients, the faculty expert offering shall place a requisition to the Principal through proper channel. The quotation / work order will be raised and on the interests of client and faculty, the work will be carried out. The financial gain, if any will be shared between Institute (20%), Faculty (70%) and administration charges (10%). The reports and the progress will be reviewed in a committee formed on timely basis.

V. **Innovation and Patents:**

The Institute has entrepreneurship development cell presently named as Institute Innovation Council (IIC) to develop entrepreneurship and innovation skills among faculty and students, IIC at ANITS is a unique model based on to promote innovation and incubation of ideas among student and faculty fraternity. IIC helps to build the entrepreneurship ecosystem in the institute and it would be a platform to bring the budding technical ideas of young upcoming engineering graduates into reality. IIC will be conducting various activities like interactive sessions of renowned entrepreneurs with students, being a facilitator in filing patents of novel ideas of the institute fraternity. In the future, the center is striving hard to be a center of excellence for startups. The institute shall provide support required for filing the patents and also for completing the ground work required to get the patents registered and licensed. The institute shall provide required support to the faculty for filing IPRs and copyrights when it has been proved by the faculty that such a filing is necessary to protect the value of the research done. The institute shall provide support for organizing the programmes related to innovation and incubation.
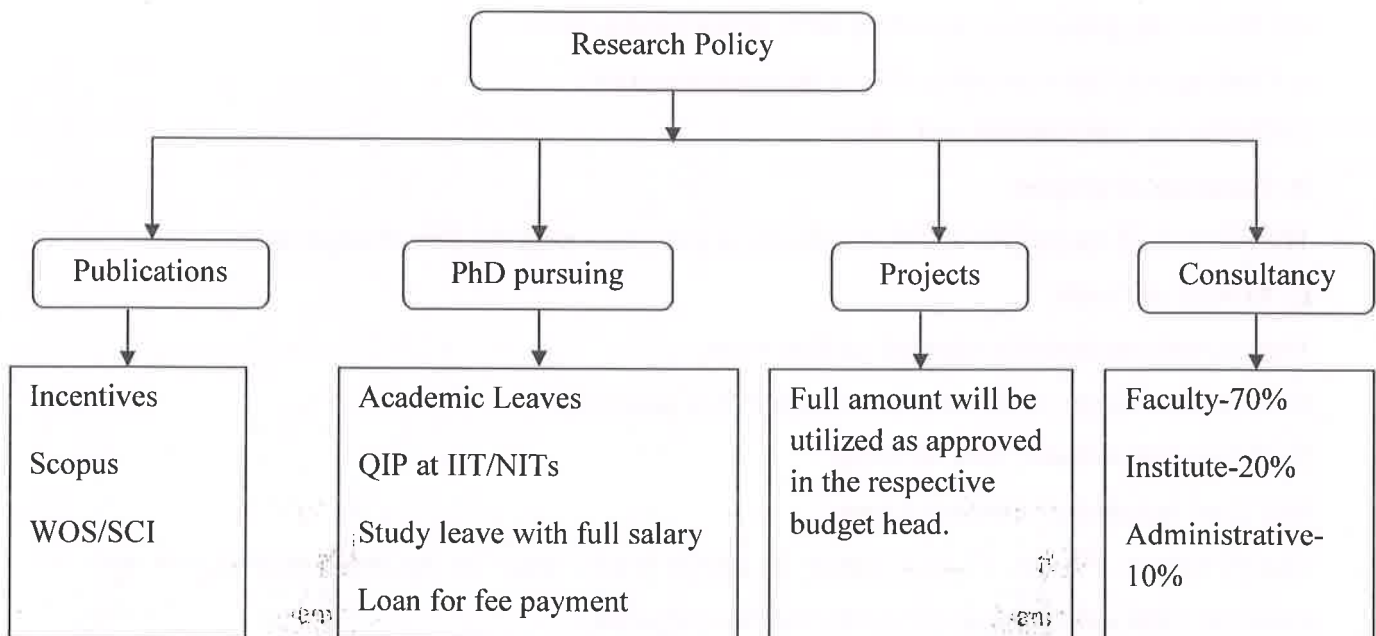
VI. Interdisciplinary research

To promote interdisciplinary research, the institute has research centers involving more than two departments.

1) Center for sustainable development (Renewable Energy, Environmental Sciences)-

2) Center for IoT / advanced computing (ECE, CSE, IT)

3) Center for Humanities and man-kind, direct issues related to society (English, Sciences and Engg)

4) Center of robotics and intelligence systems (CSE, IT, ME, ECE and EEE)

5) Center for Material Science and Technology (Chemical, Chemistry, Physics, Mech, Civil)

VII. Code of ethics and plagiarism:

All department research coordinators have online access to Plagcheck Plagiarism check software All Post Graduate Students thesis should include the copy of Plagiarism check report. If plagiarism is detected in the Publications / Thesis of any other faculty / student he/she shall be liable for disciplinary action.

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│Publications│ │PhD pursuing│          │ Projects  │   │Consultancy│
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Publications	PhD pursuing	Projects	Consultancy
Incentives Scopus WOS/SCI	Academic Leaves QIP at IIT/NITs Study leave with full salary Loan for fee payment	Full amount will be utilized as approved in the respective budget head.	Faculty-70% Institute-20% Administrative-10%

Guidelines for Research Project /Seed money proposals

A. Objective:

ANITS aims to provide the financial assistance / seed money for the start up of research projects in the fields of Engineering, Science and Humanities.

B. Eligibility:

1. All faculty preferably Assistant and Associate professors can avail the research grant.
2. The eligible faculty can submit the proposal during 1st week of July of every year.
3. The approval of the project will be considered based on the recommendations of the research committee duly constituted.
4. The research proposal should contain one Principal Investigator and One or two Co – Principal Investigators from different departments.

C. Nature of Assistance:

Research grant (max. of Rs. 2,00,000/-) can be granted based on the research proposal.

(i) Non-recurring grant (not exceeding 75% of the total grant):

a) Equipments (Purchase of computers, laptops, printers not accepted)

b) Books and Journals (not exceeding 10% of the non-recurring grant)

(ii) Recurring grant (not exceeding 50% of the total grant):

a) Contingency (not exceeding 10% of the recurring grant)

b) Chemicals, consumables and others

D. Duration of project:

The duration of the project will be maximum of two years from the date of sanction.

E. Release of funds:

The amount sanctioned is released on time basis.

(i) First installment: 100% non-recurring and 50% recurring.

(ii) Second installment: 30% recurring

(iii) Third installment: Balance amount.

Sanctioning of 2nd and 3rd installments is usually made based on the half-yearly reports and extent of work and the recommendations of the committee.

F: General:

(i) All the assets in the form of equipment and other items purchased are the sole proprietary of the college and the centre.

(ii) Project is not transferrable in any circumstance.

(iii) No extension in tenure is permissible in any circumstances.

(iv) If, the investigators fail to complete the project, he / she have to refund the entire amount released with interest.

(v) The final report should be submitted along with the bills enclosed for auditing.

(vi) Applications are to be forwarded through the proper channel.

Project Summary :

(The project summary should contain rationale of the research, its scientific objectives, what hypothesis/model to be tested, the main experiments to be carried out, and an estimate of the significance to the field of research if the objective is reached in terms of fundamental understanding and or application.) Max Words : 300

Keywords (Max. 6) :

Objective (in bullets) :

(These should be very specific, to be given in bullet points for the work to be carried out (not more than 6 bullet points). These will serve as evaluation criteria at monitoring stage.) Max Words: 150

Expected output and outcome of the proposal :

(The products, services or facilities that would result from the project activities; and the benefits that may happen from the project activities such as Research publications may be highlighted.) Max Words: 150

Other Technical Details

1. Origin of the Proposal: (Maximum 1 page) (Scientific rationale for doing this work should be elaborated)

2. Review of status of Research and Development in the subject

2.1 International / National Status: (Maximum 1 pages) (Researchers working in the area

worldwide and their contributions must be properly highlighted with recent references and reviews. A correct and faithful description of the international research status must be given)

2.2 Importance of the proposed project in the context of current status (Maximum ½ page) (Highlight what is the new area or gap which will be solved in the project in relating to what is already known. This is a very important section to project the novelty content of the proposal)

2.4 If the project is location specific, basis for selection of location be highlighted:

3. Work Plan:

3.1 Methodology: (Maximum of 2 pages) (It should contain all the details of how each of the objectives will be addressed. This section must be detailed and have clear plans, not vague and generalized statements. It should have several schemes, tables, figures, equations etc. in addition to text, explanation and justification of why the project research plan will work)

3.2 Time Schedule of activities giving milestones through BAR diagram. (Maximum 1 page)

3.3 Suggested Plan of action for utilization of research outcome expected from the project. (Maximum ½ page)

3.4 Environmental impact assessment and risk analysis. (Maximum ½ page)

4. Expertise:

4.1 Expertise available with the investigators in executing the project: (Maximum 1 page) (Professional expertise existing with each of the investigators in terms of publications, Patents and preliminary results, to execute every component of the proposal should be highlighted)

4.2 Summary of roles/responsibilities for all Investigators: (If the proposal contains more than one Investigator, it is important to clearly mention the role of each Investigator in implementing the objectives of the proposal.)

S. No.	Name of the Investigators	Roles/Responsibilities
1.		
2.		
3.		

4.3 Key publications published by the Investigators pertaining to the theme of the proposal during the last 5 years

4.4 Bibliography

5. List of Projects submitted/implemented by the Investigators (All the Investigators should list out details of the Projects submitted, implementing and completed by them. The list should start with the Projects implemented by the Principal Investigator, followed by Co-PI1, Co-PI 2 etc.)

5.1 Details of Projects submitted to various funding agencies:

S. No   Title Cost in Lakh   Month of submission   Role as PI/CoPI   Agency Status

5.2 Details of Projects under implementation

S. No   Title Cost in Lakh   Duration   Role as PI/Co-PI Agency

5.3 Details of Projects completed during the last 5 years

S. No   Title   Cost in Lakh   Duration   Role as PI/Co-PI Agency

6. List of facilities being extended by parent institution(s) for the project implementation.

6.1 Infrastructural Facilities in the college such as workshop, water , electricity power, transport, computational facility, library etc., Please Specify

6.2 Equipment available with the Institute/ Group/ Department/Other Institutes for the project:

Equipment available with Generic Name of Equipment Model, Make & year of purchase Remarks including accessories available and current usage of equipment PI & his group PI's Department Other Institute(s) in the region

7. Name and address of experts/ institution interested in the subject / outcome of the project.

BUDGET SUMMARY

	Year –I (Amount in Rs)	Year –I (Amount in Rs)	Total
Non -Recurring			
Equipment			
Others (Specify)			
Recurring			
Consumables			
Travel			

Contingency			
Manpower			
Overheads			
Others (Specify)			
Total			

Equipment:

Year	Description	Amount	Justification
Year -1			
Year -II			

Consumables

Year	Description	Amount	Justification
Year -1			
Year -II			

Travel:

Year	Description	Amount	Justification
Year -1			
Year -II			

Contingency:

Year	Description	Amount	Justification
Year -1			
Year -II			

Manpower :

Year	Description	Amount	Justification
Year -1			
Year -II			

Overheads:

Year	Description	Amount	Justification
Year -1			
Year -II			

Other Costs:

Year	Description	Amount	Justification
Year -1			
Year -II			