

Research Promotion Policies

Research is the gateway to link an institution with the society. The outcome of research is applied for the welfare of the living system. It is an intellectual capital to the institution for its sustainability. The responsibility of Institute is to tap the talents of the teachers, facilitators, scholars and students. The Institute encourages implementing research culture to harvest the quality research. The output of the research replicated in class room teaching, discloses the insight of learning and helps students to face the existing real life problems with panoramic positive attitude.

1. Research Committee to monitor and address Issues:

The Board of Research is a statutory body to regulate the programmes for research degrees like M.Phil., and Ph.D. as per the UGC regulations. It is headed by the Vice Chancellor with various Heads of departments, senior professors and experts from other universities and the industries as its members. The institute also has a research committee at the department level to facilitate research culture in the institute.

The performance of Board of Research is based on all the duties and functions related to research as specified by the provisions of the UGC.

Framing of the regulations for research programmes, admission norms, monitoring the minimum standards and imparting the quality and standards in the research programmes are the prime responsibilities of the BOR.

Some of the recommendations of the BOR are

- Minimum standards and regulations for M.Phil / Ph. D. guideship
- Registration of candidates for M.Phil / Ph.D. programmes
- Speedy evaluation of M.Phil / Ph.D. theses

All of them have been implemented.

The BOR recently insisted that a minimum of two papers should be published in reputed journals prior to submitting the Ph.D. synopsis. This has brought out good response from research scholars. The BOR also has made Pre-Ph.D. presentation, (ii) Submission of six month progress reports, (iii) Review meetings and (iv) three Advisory Committee meetings, mandatory for the submission of synopsis.

The impact of these recommendations can be seen in the quality of the research output. Publications in international journals with impact factor and scopus indexed have increased. Evaluation process has also been strengthened

2. Proactive mechanisms adopted by the institute to facilitate the smooth implementation of research schemes/projects.

Advance funding for sanctioned project

- Providing seed money
- Simplification of the procedures related to sanction/purchases to be made by the investigators
- Autonomy to the principal investigators/coordinators for utilizing overhead charges
- Timely release of grants
- Timely auditing
- Submission of utilization certificate to the funding authorities

The Institute assists the faculty members and research scholars in the smooth implementation of projects.

The institute provides seed funding and partial funding for innovative student projects. The finance section helps in timely release of funds. A purchase committee is formed for the purchase of equipments in the projects sanctioned. The committee finalizes the purchase related to the project as well as the general purchases made by the Institute. The finance office facilitates the faculty in submitting the utilization certificate to the funding agencies within the stipulated time.

3. Interdisciplinary research promotion between different departments

- (i) Joint proposals by the departments are encouraged.
- (ii) Science and Humanities Departments, Circuit branches and non circuit branches of Engineering departments join to carry out interdisciplinary/collaborate research on related subjects.
- (iii) MoUs with National/ International Institutes facilitate the faculty of the departments concerned to carry out joint research programmes using the advanced facilities in the host labs/centres to improve the quality of their research and publications.

4. Research promotion through conducting workshops/ training programmes/ sensitization programmes

The Institute departments and Centre for Staff Development have conducted several programmes to stimulate research culture on the campus as listed in Table 3.1 and Table 3.2.

5. Visit of eminent researchers as adjunct professors.

The visit of eminent scientists/ professors of various disciplines to the institute and their interactions with faculty, research scholars and students have been helpful in creating awareness on thrust areas of research and advanced research techniques. It also helps the students and Ph.D. scholars to get exposed to international standards. These activities have helped the research scholars publish articles in standard journals in collaboration with faculty.

6. Awarding post Doctoral Fellowships/ Research Associateships

Institute encourages the scholars to register for Post Doctoral Fellowships and Research Associateships.

7. Financial provisions made in the Institute budget for supporting student's research projects

From the funds of the Institute, core labs and computer labs have been established in various departments for the use of the Ph.D. scholars. These labs have internet connectivity. INFLIBNET which promotes sharing of Ph.D. thesis can be accessed by the students, through this connectivity. Field trips are arranged for students to visit Institutions of Higher Learning, Industries and National Laboratories.

The institute supports students project funding through grants from funding agencies. Funds are also made available from TBI and MSME incubator schemes. The Institute has also funded student projects for various competitions.

8. Patents

The Institute encourages the faculty to file for patents as shown in Table 3.6.

9. Efforts to improve infrastructure requirements to facilitate research and strategies evolved to meet the needs of researches in emerging disciplines.

The Institute encourages the faculty to tap funds through National/International agencies for infrastructure facilities. The Institute also mobilizes funds and allocates funds for

each department under non recurring head for the purchase of equipment, furniture and other aspects needed for the strengthening the infrastructure of research laboratories.

**Applications for establishing Centre of Excellence have been submitted to MHRD for a grant of Rs. 4 crores (for each centre) in the following areas.

- Disaster Management
- Solar Energy
- Biomedical Engineering
- Super capacitors

The above centers, if approved, will provide great impetus for research in the above thrust/emerging areas. Seed money for research scholars have been provided in the above proposals. An amount of Rs.100 lakhs was sanctioned from Institute funds for establishing Sophisticated Analytical Instrumentation Facility (SAIF) with highly sophisticated spectrophotometers for material characterization. This facility helps research of SPU and other academic institutions. Through Technology Business Incubator, machines have been purchased from grants sanctioned through DST for Rs 150 lakhs in the area of advanced manufacturing technology including CATIA software. Infrastructures in many laboratories have been strengthened with new equipments from institute funds to meet the requirements of UG/PG/Research scholars. Thus the Institute, within a short period of existence, took efforts to improve the infrastructure for research.*

10. Information Resource center to cater to the needs of researchers.

The Institute has an information resource centre in the Institute UG and PG Library, which helps in guiding the students for getting the resources. The following are the information source facilities available in our library.

- INFLIBNET Consortium Link
- DELNET
- Online Public Access Catalog
- Open source On line database
- Current awareness services
- Research Alert
- NPTEL course materials
- Facility to access other libraries in Chennai

11. Establishment of Institute Science Instrumentation Center

The institute has established a Sophisticated Analytical Instrumentation Facility (SAIF) housed with highly sophisticated spectrophotometers such as Fourier Transform Infrared Spectrophotometer with attenuated total reflectance technique, Ultraviolet visible spectrophotometer with DRS/ DTS technique and Photo Luminescence spectrophotometer and other scientific instruments. SAIF provides a dynamic thrust to current research and developmental activities of the institute. This facility is also extended to other research institutions and nearby industries. The SAIF-SPU is undertaking consultancy services required for faculty's research, and project related works. The SAIF-SPU has proposed to conduct workshops at different levels. The beneficiaries include teachers, Research scholars, PG students and technicians of our institute and other institutions. Fund allotted for SAIF SPU is Rupees 100 Lakhs.

12. Provision of residential facilities (with computer and internet facility) for research scholars, post-doctoral fellows, research associates.

The Institute provides residential facilities with internet facilities in the boys' and girls' hostels and the guest house for research scholars.

13. Specialized research center/work station on – campus and off-campus to address the special challenges of research programmes.

The Institute has the following specialized research centers on campus.

- (i) Center for Disaster Management
- (ii) Center for Advanced Materials
- (iii) Center for Nanoscience and Nanotechnology

14. Centers to motivate and guide researchers to explore the avenues of various research areas and funding supports

The institute has started three Centres which motivate students, faculty and research scholars to undertake innovative research in thrust areas. They also enable to identify funding agencies. Technical programmes have been arranged by these centres for exchange of latest knowledge and interaction with experts.

15. Promotion of interdisciplinary research.

The Institute promotes interdisciplinary research at Ph.D. level. Has the Institute instituted any research awards? If yes, list the awards. Yes, The Institute has instituted Sir

C.V.Raman Scientist Award to be given every year from 2015 onwards. The award aims to promote innovative scientific research in reputed academic institutions / Universities / Research institutions within India by encouraging and rewarding innovations which have positive impact on our Society. St. Peter's Institute proposes to award scientists / academicians for their excellence in original innovative work in Science and Technology. The award carries a cash prize and a citation.

16. Incentives.

The Board of Management of the Institute places on record their contributions in the form of appreciation and certificate. The faculty members who are hardworking are given due representation in various committees.