

#### **Stindu** College of Engineering & Technology UGC Autonomous Institution Recognized under 2(f) & 12(B) of UGC Act 1956, NAAC, Approved by AICTE &

Permanently Affiliated to JNTUH



Estd.2001



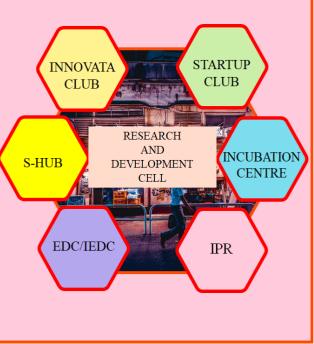
# POLICY DOCCUMENT ON PROMOTION OF RESEARCH

### SRI INDU COLLEGE OF ENGINEERING AND TECHNOLOGY

#### RESEARCH AND DEVELOPMENT CELL

#### Scope

SICET motivates R & D activities among faculty members and students to increase the core value and competencies. Because academic research is the back bone of our institution. Research and Development verv essential for innovative is experimentation of the knowledge acquired from the theoretical study. The growth of the academic institution is measured by the research oriented faculties that are working in the institution. As researchers, they need to understand the past and recent developments in their subject areas. Research & Development(R&D) activities exhibits a very high correlation between quality teachinglearning and adopting with the skill based approach.



#### <u>AIM</u>

Research and Development Cell of the college is established to endorse, Synchronize and Implement Research and Development Programs and also to create upright infrastructural facilities and conducive environment to inculcate research culture.

#### **OBJECTIVES**

- To boost up the research ability of the institute by encouraging the staff members to publish their research paper in reputed conferences and referred journals.
- To nurture research skills among the faculty and students.
- To be in touch with the industrial needs that results in new or improved products, processes, systems or services that can increase the company's productivity and also for benefit for the common people.
- To nurture creativity towards research among students and faculty.
- Find the budgetary obligations and assets for funding the research.

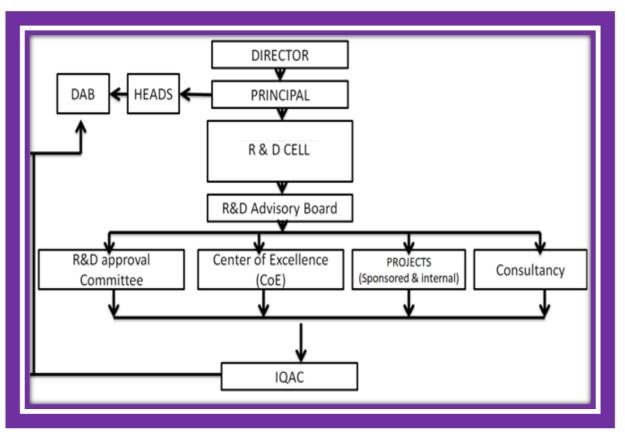
#### **BENEFITS**

- To achieve excellence in R&D, Technology Innovation and Business start-ups.
- To promotes interdisciplinary culture, ethical conduct of research and compliance among students and teaching community.
- To create foster knowledge and technology transfer by engaging with government agencies, research institutions and industries.

• To produce exceptional scientific results, manage projects and grants, thus enabling an environment by addressing global challenges and encouraging economic progress in the region for the society.

#### **OUTCOMES**

- Enhanced Quality of UG and PG Projects
- More number of research proposals, Publications and Patents
- Awareness in students about Recent Advances and developments in Technology
- Student participation in National Level Innovation activities like BAJA, SUPRA, ROBOCON, ISIE Bhopal etc.
- Interaction with Industries and research Institutes
- Improve the placement of students.



#### **R & D CELL STRUCTURE**

#### Roles and Responsibilities of R & D Cell

#### The Role of R & D Cell:

- 1. To enhance the Research Ecosystem of the college
- 2. To promote Academic Research in the college with Faculty and students
- 3. To preserve the Code of ethics of the college while publishing
- 4. To help the faculty in applying for funds in the form of Sponsored research / Grants from government and non-government agencies
- 5. To pave path for the teachers, students and researchers to collaborate for research **Responsibilities of R & D Cell:**
- 1. To help faculty, researchers and students to

- 2. Know research methodology
- 3. Methodology to develop projects
- 4. Process of converting projects into prototype and in turn into products
- 5. Enhancing their knowledge on Intellectual property rights and Patents
- 6. Preserve code of ethics while publishing papers / thesis
- 7. Conduct skill development courses that enhancing the capability of students and faculty

#### **Research Promotion Policy**

The college has a Research Board that facilitates and monitors research activities. The total R&D is organised into six categories:

- I. Academic Research
- II. Sponsored Research
- III. Extension and Extramural
- IV. Excellent Centres
- V. Consultancy
- VI. IPR & IIE

#### I. ACADEMIC RESEARCH POLICY

- a) All eligible faculty can register for doctoral program within one year.
- b) Faculty of each department shall conduct research in focused areas of research identified by central government in addition to research areas preferred by the faculty.
- c) Faculty publication in either WEB of science or SCOPUS indexed journals are appreciated with appropriate incentives.
- d) All publications and research papers of faculty have to go through plagi- check.
- e) As per the API norms the institute fixed the number of articles to be published by faculty of different cadres.
- f) Term papers of B. Tech and M. Tech projects shall be research focussed. Every project shall lead to at least one research publication in a journal indexed in SCOPUS or WEB of SCIENCE.
- g) Faculty are given the option to pursue research work leading to a Ph.D degree in reputed institutions under Quality Improvement Programme(QIP)

#### II. SPONSORED AND INTERNAL RESEARCH RELATED POLICIES:

- a) Every doctorate shall apply for a minimum of one government funded project.
- b) Every faculty shall apply for internal project with an aim to apply for external funding. The required seed money for internal projects is provided.
- c) The institution shall provide the basic infrastructure required to conduct either internal funded or external funded research.

- d) All departments shall strive for recognition by National/International agencies through schemes/funding such as DST-FIST, SAP, CAS etc.,
- e) Faculty are encouraged to identify inter-disciplinary research in their chosen field of research.
- f) The faculty of all the departments shall tie-up with industries and corporate bodies to undertake funded research in emerging areas and industry relevant areas.
- g) The institute shall create special research groups to concentrate research in government listed areas.
- h) All innovative projects of faculty are earmarked for filing patents on successful completion, suitable recognition and remuneration is given to those faculties with patents.
- i) Norms are fixed to pay expenses towards procurement of equipment to those faculty working on funded projects.
- j) Meritorious research work by faculty is awarded with monetary incentives.
- k) All research conducted shall be covered by IPR and copyright protected.

#### iii. EXTENSION AND EXTRAMURAL RESEARCH AND ACTIVITIES

- a) Eminent and enterprising professionals from the industry are invited to take up joint resource projects with the faculty.
- b) The faculty of all the departments are encouraged to select society specific problems and conduct research and provide feasible solutions. Such research topics could include problems related to chronic diseases, women and child welfare and protection and health care and environmental studies etc.,
- c) The institution shall organise educational programmes relevant to a community, society outside organisation.
- d) The faculty shall visit at least one village in the neighbourhood, investigate the problems, find solutions and implement the same using technology expertise.
- e) Students are encouraged to participate in the extension and outreach programmes organised by the institute.
- f) The institute shall conduct outreach programmes related to aging, life course development that lead to national integration, intervention programmes that lead to reduction in social isolation of the people and elderly people, improving the quality of care provided by nurses in nursing homes, engaging elder persons in environmental volunteering. Outreach programmes in the field of chronic pain, child related abuse, neglect, preventive interventions, transactional research, stress and coping etc.,

#### **iv. EXCELLENCY CENTRES:**

a) The institution shall develop Centre of Excellence in the frontier areas of research which shall be open to faculty, students and industry persons to conduct research.

#### V.CONSULTANCY: 1.INTRODUCTION

Consultancy is well recognized as an effective way to disseminate knowledge and make an early and direct impact on society. However, the balance between consultancy and the traditional roles of the academic staff needs to be managed and the interests of the institution must be protected. This Policy provides provisions for conducting consultancy to ensure that consultancies undertaken by staff are consistent with the institution's strategic and operational objectives and the costs are sustainable.

#### **2. THE POLICY**

All Research and Non-research consultancies as described in this Policy are governed by the following guiding principles:

- (a) There should be demonstrable benefit to the institute from the consultancy through income, enhanced reputation, and/or expanding the expertise of the staff member.
- (b) The Consultancy must not be in conflict with institution's policies including those governing employment; such as the Code of Conduct Policy.
- (c) The Consultancy must not be in conflict with the functions, objectives or interests of the University or damage the University's reputation.

#### **3. CONFLICT OF INTEREST**

Engagement in consultancies must not create a conflict of interest, perceived or actual. Any conflict of interest, actual or perceived must be reported to the relevant authority for resolution. A conflict of interest may arise where an employee engages in consultancies at the expense of the institution's interests or the interests of other employees or students.

An example of a potential conflict of interest includes, but is not limited to:

- financial or non-financial interests;
- teaching or course work for another institution;
- work performed for a supplier of goods or services to the institution; or
- work undertaken with an organisation to which the institution supplies goods or services.

## VI. INNOVATIONS, INCUBATIONS, ENTREPRENEUR DEVELOPMENT, PATENTS, IPRS AND COPY RIGHTS:

- a. The institution shall create an innovation culture by organising various kinds of programs such as ideation programs, collection of innovations from research undertaken in respect of academic, extension, extramural and outreach.
- b. Every major invention achieved out of conducting research shall be innovated and the same shall be incubated in the incubation centre which will be augmented from time to time.
- c. Students shall be allowed to select an incubated product and use the same to be developed in large scale through separately established startup. All the training required for the students to become entrepreneurs shall be imparted
- d. The University shall incorporate an incubation centre that has all the facilities for incubating the innovations
- e. Every innovation shall lead to filing a Patent
- f. 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.
- g. 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.

#### **USEFUL LINKS**

- 1. Open AccessTheses and Dissertations
- 2. <u>Shodhganga</u>
- 3. Shodhgangotri
- 4. Google Scholar
- 5. IEEE Xplore
- 6. PubMed
- 7. Springer Link
- 8. www.ugc.ac.in/journallist/
- 9. https://www.scopus.com/