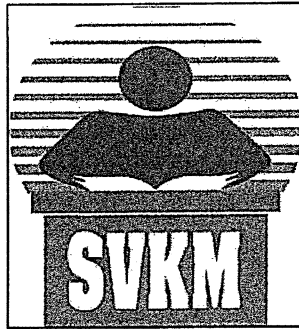# Research and Development Policy

SHRI VILE PARLE KELAVANI MANDAL'S

INSTITUTE OF TECHNOLOGY, DHULE

Survey No. 499, Plot No. 02, Behind Gurudwara, Mumbai-Agra National
Highway, Dhule-424001, Maharashtra, India.
Office Phone: 02562-297801 / 297601, Fax : 02562-297801, Mail:
IOTDhule@svkm.ac.in

About SVKM

Shri Vile Parle Kelavani Mandal is a Public Charitable Trust registered under the Society's Registration Act and Bombay Public Trust Act. From its humble beginnings in 1934, when it took over the Rashtriya Shala, a school established in 1921 in the wake of the National Movement, the Mandal today has grown into a big educational complex imparting high-level education to more than 35,000 students.

After beginning its journey in the early 1930s SVKM has blossomed into an educational colossus that has attained national recognition in multiple streams of higher education. With a strong guiding philosophy of providing education to all levels of the student community along with creating a feeling of bonding and commitment amongst academic and nonacademic employees. SVKM has mastered the art of being able to transform itself into a close knit family and at the same time help its students to attain all-round development, be employable and achieve success.

About SVKM's IoT, Dhule

SVKM's Dhule Campus Dhule is largely emerging as one of the biggest future hubs of technology and Education. It has gained a strategic advantage for being on the junction of three National Highways viz. NH-3, NH-6, and NH-211. Dhule is aiming to develop into an industrial town which may provide next generation technologies across infrastructure sectors. Our president has a dream to make Dhule city known for its quality education institutes. SVKM has taken an inititative to develop state of the art engineering and pharmacy institute that will impart quality education in Dhule Spread over 33 acres of land on the outskirts of Dhule, it will house colleges as SVKM's Institute of Technology.

2
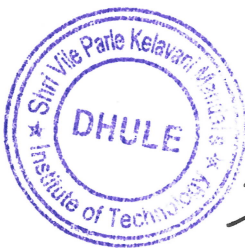
Preamble

Elementary engineering research involves the exploration and methodical conceptual structuring of knowledge. Engineers develop, design, produce or construct and use devices, structures, machines, and systems of economic and societal value. Virtually all engineering research is driven by the expected value of an application. However, not all potential applications can be anticipated, and sometimes the expected application may not be as important as the one that appears by chance. The time between research and production can be a few years, as in the development and application of a laser or in the progression from the integrated circuit to the microprocessor, or it can even take decades, as in the case of the development of television.

Engineering, unlike science, is concerned not only with knowledge of natural phenomena but also with how knowledge can serve the needs and desires of humanity. Variables such as cost, user compatibility, deliverability, safety, and adaptability to various external operating conditions and environments must be considered in the design, development, operational support, and maintenance of products and services that are created by engineers. Therefore, engineering entails the combination of expertise, procedures, processes, and know-how from multiple fields. In addition, almost all university research in science and engineering is carried out as part of the advanced training of students. For **most engineering students**, the goal of a career in industry motivates their pursuit of advanced studies, and this will increasingly be the case in the future. For this reason, engineering students' perspectives on research tend to be predisposed to application in the practice of engineering.

Basic sciences and mathematics have advanced rapidly in recent decades with the development of computers capable of dealing with increasingly complex problems. At the same time, the art, experimentation, and application of engineering have adopted increasingly advanced analytical and experimental methods across the spectrum of engineering fields and industrial sectors. It has been observed that certain theoretical and experimental practices are common to both scientific and engineering research. In fact, in some fields of engineering, such as electronic materials, the analytical and experimental methods and instruments used may not be distinguished from those in the basic science fields of solid-state physics and chemistry.

The main objectives of research work are to inform action, to gather evidence for theories, and to add to the progression of expertise in a field of study. Detailed below are all the many reasons why research in both engineering and science is important to everyone, not just students and scientists.

- Finding out why research is important seems obvious, but many people are avoiding it like the plague. Yet, for those who enjoy learning, whether or not they are members of a research institute, conducting research is not only important but also imperative.

- It is a tool to develop knowledge and facilitate learning. Research is required not just for scholars and academics but likewise for all professionals and non-professionals. It is equally important for aspiring and veteran engineers.

- For lay people who value learning, doing research equips them with essential consciousness about the universe and abilities to help them survive and enhance their lives. When it comes to research professionals themselves, on the other hand, finding something interesting to discuss and/or write about should go beyond just personal experience. Determining what the general public might want to know or what researchers want others to achieve or conceive of can be a valid reason to carry out research work. Thus, research is an essential component of knowledge production and vice versa.

3

- Knowledge is generally described as a factual proposition in the mind of an individual. It basically refers to facts based on objective information and/or results of studies processed by the human brain. It can be obtained in different ways including reading books and articles, listening to experts, watching documentaries or investigative broadcasts, conducting scientific experiments, and interacting with others, talking to people, etc. Facts gathered during research can be checked against other sources to ensure their truthfulness and accuracy. Three types of knowledge have been identified, namely, procedural (skill or know-how), knowledge (familiarity), and propositional (description of a fact or a state of affairs).
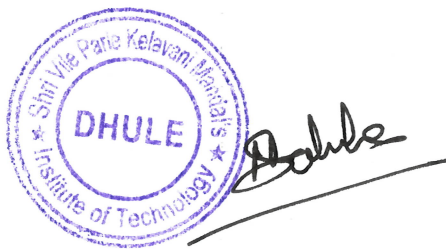
Constitution of R & D committee

The R & D committee comprises of expert and eminent personalities from industry and academic. It also contains faculty members from various departments in the institute. This committee oversees the smooth and efficient co-ordination of research and development activities in the institute, thus fostering overall growth.

The Committee will contribute towards enhancing the inputs to research and developments at the institute. The R & D Committee will plan, promote & evaluate R& D activities at the institute level. The committee meets once in every six months to discuss the status of ongoing projects & to plan for the future one. The minutes of the meetings are recorded.

Objectives:

- To encourage the faculty members to prepare research proposals

- To encourage faculty and students to publish papers in reputed journals and conferences

- To keep a track of various research funding schemes of funding agencies

- To scrutinize the research proposals made by the faculties.

- To keep records of research proposals communicated and sanctioned

- To organize Seminars / Conferences/ Workshops in the relevant areas.

- To develop research proposal for up-gradation of laboratories through AICTE / UGC / MODROB/ MHRD/ VCRMS funding.

- To encourage the number of patents and IPRs.

- To conduct National Conferences.

- Motivate faculty and students to design and fabricate and implement viable functional projects for the benefits of institution.

Responsibility of the research and consultancy committee towards R & D:

- To encourage the faculty members to prepare research proposals, interdisciplinary research, product design and development, publications in reputed journals and conferences.

- To initiate and promote MoU with industries and R & D organizations; for consultancy, collaborative research, sponsored projects, industry institute interactions etc.

- To arrange talks and interactions by eminent personalities from industry, R & D organizations and institutions of repute; for the better understanding of research methodology and practices currently followed.

- To suggest peer reviewed national and international journals for subscription in central library.

- To develop research proposal for up-gradation of laboratories through AICTE / UGC / MODROB / MHRD / VCRMS funding.

- To encourage the number of patents and IPRs.

- To conduct National/ International Conferences.

- To allocate the budget for conducting workshops, training programs, seminars, conferences and faculty development programs also for the staff who are attending workshops, conferences and paper presentation outside the institute. It also includes software / product purchasing for various department for research purpose.

- Motivate faculty and students to design, fabricate and implement viable functional projects for the benefits of institution.

- To motivate students for presenting technical papers at least in conferences and projects in competitions and exhibitions.

Policy and Guidelines:
- Motivate the faculty for doing his/ her PhD.
- Provide the study leave for their course work.
- Provide facility to do research work in college campus / research labs.
- Motivate the faculty to publish books in good publishers at national or international level.
- Provide incentive for publishing Technical Paper in National/International journals with good impact factor and indexed in Scopus/Web of Science/SCI/Google Scholar/IEEE etc. Journal must be listed in UGC/Scopus/Web of Science/SCI/IEEE etc.
- Provide Incentive for presenting a paper at National/ International Seminars/Conferences.
- Provide facility of checking Plagiarism of research paper using plagiarism software.

Publication
• It is mandatory that every faculty member & Ph.D. scholar will have to generate plagiarism report before they submit their articles to publishing agency. This will have to be stringently followed.

• Any publications in Scopus/ Web of Science /UGC journals/Thomson Routeur indexed journal will be recognized by the institute and the Management.

6
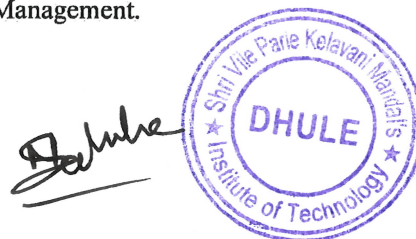
- To Incentivize research publication in Journals with Impact Factor, the following financial incentive will be paid to the faculty.

Journal Impact Factor	Incentive
5 and above	Rs. 1 lakh
3 to 5	Rs. 50,000/-
1 to 3	Rs. 25,000/-

In case the publication is shared between faculties and our students, the share of the faculty will be notionally arrived at, out of the total incentive money admissible.

Entitlements for Registration & Travel for presenting papers at National & International Seminars/Conferences.

o For the faculty/student attending national or international conferences in India as author, the institute will pay the registration charges (maximum celling of Rs. 2000/- per paper).

o Faculty members will be eligible for travel outside India (50% of travel expenses or a maximum of Rs. 50,000 whichever higher) and registration fee (100%), for paper presentation, provided the conference/seminar is hosted by a reputed institution once in years of span. Preferably, such expenses should have been factored into the project/research grant.

Faculty Development Program (FDP)/ Staff Development Program (SDP).

o Members of the faculty are encouraged to participate in Workshops/SDP/FDP, as may be decided by the Institute from time to time.

o Faculty members attending a program of more than three days duration shall plan their participation in the semester break /summer vacation so that the academic schedule of the students remains undisturbed. Members of the faculty pursuing their PhD part time are also encouraged to attend summer training programs organized by NITs and IITs.

o Faculty sent for such programs shall be eligible for TA and DA for the duration of the training program.

o Eligibility for such programs shall be restricted to two faculty members per semester from a department. In general, programs sponsored by AICTE/ISTE/DST and other instances where the host institution takes care of significant portion of the training cost shall be given priority, and the faculty will be given Academic Leave for the period.

Incentive for Externally Funded Research
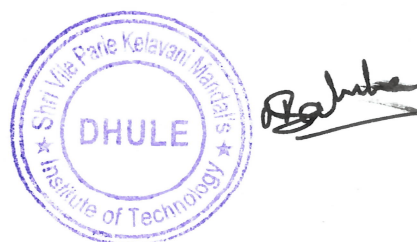
o The Institute shall pay the research team an incentive equivalent to 10% of the research grants received from external funding agencies after successful completion of research work (in case of a team, the amount shall be shared equally among team members).

IPR Filling

In order to give support for filing of Patent and actively pursuing the same, the following assistance will be provided.

- On grant of National Patent, incentive payable Rs. 50,000/-
- On commercialization of the Patent, the royalty to be shared by the faculty with the institution in the ratio of 80:20.
- On grant of International Patent, incentive payable Rs. 1 lakh.
- On commercialization of the Patent, the royalty to be shared by the faculty with the institution in the ratio of 80:20.

The Head of the Institution should scrutinize the proposal relating to Patent initiated by faculty and submit the same at appropriate time to the Management for sanction.

Policy for Filing Patents / Copyrights

Receiving patent /copyright of one's research work is one of the most important and influential factor to judge the quality of research. Full financial and legal assistance as per government Norms shall be provided to those who are interested in registering the patent. The patent shall irrevocably be registered in the affiliation of SVKM's Institute of Technology with the researcher's name prominently featuring as the inventor. The commercial aspects shall be mutually worked out between the institute and the researcher.

As in lieu of the ethics in higher education, fair conduct of research and prevention of misconduct, as per UNIVERSITY GRANTS COMMISSION (PROMOTION OF ACADEMIC INTEGRITY AND PREVENTION OF PLAGIARISM IN HIGHER EDUCATIONAL INSTITUTIONS) REGULATIONS, 2018, students, researchers and faculty members should not perform any academic misconduct by the theft of intellectual property in any manner. Therefore, the proper attribution, seeking permission of the author wherever necessary, acknowledgement of source compatible with the needs and specificities of disciplines and in accordance with rules and regulations governing the source is essentially required. In case of found guilty of plagiarizing, they shall be considered under following class of severity:

Policy on Consultancy (Revenue Sharing Between Institution & Faculty)

The Consultancy works are drawn into the streams:

Stream A: Regular Consultancy works, where expert opinion is a trivial one.
Works like Quality control, structure and road construction material testing, Soil testing, Water quality testing, Bitumen testing, Software development and maintenance etc.

Stream B: Consultancy works, where expert opinion is a vital. Design of foundation, Design of structure, Soil Investigations, Noise abatement, Design of machinery subjected to dynamic loads, vibration analysis, Satellite data analyses under GIS

Environment, website design and maintenance etc.

Stream A: Institution share 50%, Faculty share 50% (Can be shared with expert faculty who involved in the work)

Stream B: Institution share 50%, Faculty share 50% (Can be shared with expert faculty who involved in the work)

Separate dead stock registers shall be maintained for all Research & Consultancy projects as well as externally funded projects in every department.

Seed money

Taking into account the difficulty in securing industry collaboration/support in research and development activities or for getting grants from funding agency for academic research, Seed money grant will be available to the faculty for establishing suitability of an idea for research, developing pilot project for being able to make a substantive proposal for support to Industry/funding agency. The objective of the grant is to provide financial support for pilot scale validation of the project and to motivate faculty members to take up research on priority basis. Seed money of upto Rs. 1 lakh may be sanctioned to the faculty after receipt of proposal and the same is vetted by an expert committee including an external expert.

Research Proposal Submission Guidelines

All the faculty members who intend to apply for Research & Consultancy projects and grants, and all those who have obtained approval for their projects from various apex bodies, industries and universities shall follow the work procedure given herewith.

1. Every research proposal shall pass through a multi-tier review, where the proposal shall first be reviewed by the PI/CO-PI themselves, then by the concerned Head/experts in the department, followed by other eminent researchers in the field. The proposal shall then be vetted by Research & Consultancy committee before submission to the funding agency.

2. It is advisable to have a faculty working in the same field, as Co-Investigator; for every proposal submitted for funding to external agencies.

3. Principal Investigator and Co-Investigator shall ensure that the instruments, software, etc. purchased are secured in the laboratory/ department.

4. The entire sanctioned amount shall be utilized as per the guidelines of the funding agency.

5. In case the Principal Investigator leaves the institute; all the items, instruments, software, etc. purchased shall remain as an asset of the institute.

6. All departments Research & Consultancy coordinator must regularly and diligently update the Research & Consultancy information and achievements of their departments in the Research & Consultancy page on the institute website through Research & Consultancy committee.

Policy for Research Awards
The SVKM's Institute of Technology follows a unique point based incentive scheme to reward the research work carried out by faculty in the respective year.

SAMPLE APPLICATION

Date: 16/02/2023

To,
The Principal,
SVKM's Institute of Technology,
Dhule

Subject: Application for incentive applicable for Journal publication

Respected Sir,

My research paper titled 'Role of Swarm Intelligence Algorithms on Secured Wireless Network Sensor Environment - A Comprehensive Review' is published in Scopus indexed 'International Journal of Performability Engineering' ISSN: 0973-1318 with Impact Factor (CiteScore):1.4 (2022) in Vol. 18, Issue (2): pp. 92-100. The paper is available online at:

http://www.ijpe-online.com/EN/10.23940/ijpe.22.02.p3.92100

Kindly consider my candidature for incentive against research paper publication in scopus indexed journals as per institute research policy 2022. I request you to consider my application for the same and grant approval for incentive applicable.

Thanking you.

Encl: 1) Web extract of Journal Source Details
      2) Web extract of Publication Details
      3) Scopus Journal List 2023

Yours Sincerely,

Dr. Bhushan Chaudhari
Associate Professor & HOD,
Dept of Information Technology
Emp ID; 28210048
Mob-9823016070