RESEARCH POLICY

OF

K. K. WAGH INSTITUTE OF ENGINEERING AND REASERCH HIRABAI HARIDAS VIDYANAGARI PANCHAVATI NASHIK 422003



K.K.Wagh Institute of Engineering Education & Research, Nashik

RESEARCH POLICY

Preamble:-

K.K.Wagh Institute of Engineering Education and Research, Nashik has been striving to develop itself into an institution of excellence in education and research in consonance with the contemporary and future needs of Maharashtra and India through meaningful education, original research of the highest standard and leadership in technological innovation for the industrial growth of the country. With the path-breaking innovations in both of its teaching learning methodology and research, the institute is rapidly gaining a legendary reputation in the country.

In addition to offering formal undergraduate and post-graduate programs, the institute actively encourages its faculty and other academic staff to undertake sponsored research and consultancy projects in order to strengthen the research profile of the institute. Research and development is carried in several areas like energy and environment, manufacturing, automobile, telecommunication, materials, simulation, infrastructure, and computation.

These projects are very important for maintaining external linkages and are also as a source of revenue for the institute.

The Research Promotion Scheme of institute aims to nurture research culture in the institute by promoting research in newly emerging and challenging areas of science and engineering. It encourages the Undergraduate, Post graduate and Doctoral degree candidates to undertake the research in newly emerging frontier areas of science and engineering including multidisciplinary fields. This will enhance the general research capability of budding technocrats and presenting it by the way of participating in conferences, seminars, workshops, project competition, etc.

Objectives:-

- 1. To formulate a research development program to equip the faculty with the knowledge, skills, and competence to do research and publish their research outputs.
- 2. To encourage students to engage in various types research activities for social problems.
- 3. To improve research productivity of students and the quality of students researches.
- 4. To encourage the faculty to engage in various types of research activities.
- 5. To produce through the research team refereed articles for publication in different research journals.
- 6. To encourage faculty to apply and obtain funding from various agencies.

Institute Research and Development Committee (IRDC): -

The research committee is constituted at institute level involving qualified and experienced faculty to monitor and address the issues of research.

Sr. No.	Name of Member	Post	Committee Designation
1	Dr. K. N. Nandurkar	Principal	Chairperson
2 .	Dr. S. S. Sane	HOD Computer	Member
3	Dr. B. E. Kushare	HOD Electrical	Member
4	Dr. P. D. Jadhao	HOD Civil	Member
5	Dr. P. J. Pawar	HOD Production	Member
6	M. B. Murugkar	HOD Mechanical	Member
7	Dr. D.M Chandwadkar	HOD E/TC	Member
8	Dr. P.D.Bhamre	HOD IT	Member
9	Dr.V.S.Mane	HOD Chemical	Member

Research and Development Budget: -

To promote research and development activities among faculty and students to develop new technologies and facilitate technology transfer, the institute provides the budget under 'Research and Development Activities', yearly for each department. Accordingly sanctioned, budget is utilized for salary of project staff, purchase of new equipments, consumables, travelling (domestic, international), purchase of books and e-resources.

Procedure for Research Work:-

- 1. Research Idea: Generate a list of best ideas from your research area in which you are interested. As a Principal Investigator (PI), you should take into account your professional interest in identifying new and important research questions. Organization of brainstorming with a group helps in terms of idea mapping. Moreover, identifying ideas that are innovative in which you will be comfortable requires refinement of your research idea in terms of its implementation within the availability of resources. One could establish an internal review panel as a team to discuss the efficiency of the proposed study. The team will concentrate on the improvement of scientific content of the proposal.
- 2. Funding Agency: One needs to learn about the funding agency in terms of its mission, research priorities, available financial resources, recent awards and current announcements. Faculty should initiate interaction with the research coordinator and seek required information on matching of the research Idea and objectives of the agency. Faculty should visit the funding agency, if necessary and volunteer to serve on the review panel. Faculty needs to read and analyze the solicitation of the agency's grant application.
- Ethics/ IPRs: Funding agencies are concerned with ethical issues of the scientific experimentation on humans, animals, etc. PIs are responsible for upholding academic integrity.
- 4. Viable research budget and term: It consists of direct and indirect costs of the proposed study. Moreover, provide rationale for each budget item within the lines of the objectives of the study. It is advisable to seek assistance from the concerned staff of the institute. It is necessary to check your calculations before you submit it to the funding agency.

Research Proposal Contents: -

- 1. **Proposal Description:** Title: It is the summary of the proposed study. It shall be a good match to the proposed themes of the funding agency. Moreover, it should be easily remembered by the reader cum reviewer.
- Summary of the Proposal: One needs to highlight the aims and overview of the research plan. It should demonstrate the importance of the study and generate interest to the reviewer.
- 3. **Research Statement:** Faculty should incorporate the relevance of the proposed study, the focus of the study and a rational plan to achieve the study goal(s).
- 4. **Objectives:** The proposal should establish the overall direction of the proposed study. In the case of several objectives faculty should state the action, the behavior and the standard against which it will be measured.
- 5. **Literature Review:** Faculty needs to incorporate important work in a concise manner in the proposed study. In addition, faculty should try to advance the knowledge.
- Study Design: It shall be simple and clear. Moreover, the design should be based on the study objectives. You may need to discuss with the expert in research methods, if necessary, to obtain suggestions on sample design, data measurement, collection and analysis.
- 7. **Benefits to the academia and the society:** The proposed study should contribute to the knowledge base and find solutions to the society's problems. The relevant design

and finding of the study should be disseminated to the targeted groups of the society. The information sharing strategy could be worked out in consultation with stakeholders. The funding agencies provide incentives to the PIs to share the findings of the study. Thus, the investigator could incorporate the cost of the dissemination in proposed budget of the study.

Implementation of Research Promotion Scheme:-

Looking in to the diversified interests of the faculty members and their experience and expertise in respective fields it has become essential to set up rules and regulations for research promotion schemes at the institute level. Following strategies are made for the benefit of an individual faculty member, department and the institute as a whole.

- All departments are encouraged to prepare strong proposals of research work to be carried
 out in the department involving the faculty members, Post graduate and Doctoral students
 of the department.
- It is recommended that post graduate students, Ph.D. students and Ph.D. supervisors should be involved in the research projects of the department.
- Every department is expected to have information of various research project funding agencies / institutions/ industries etc. (like AICTE,DST,UGC,CSIR laboratories, DRDO/BCUD various national and international schools with collaborative projects, Ministry of Communications and Information Technology, Ministry of Non-Conventional Energy Sources, etc.)
- There should be strong research understanding between department and the above mentioned institutions along with MOU signed for collaborations and projects. The effectiveness of the MOUs over the performance of the department shall be responsibility of concerned HOD.
- It is expected that every Doctoral students along with supervisor should submit one
 proposal to government funding agencies with K.K.W.I.E.E. & R. as place where in
 equipments/facilities will be installed.
- Institute includes the budget for "Research and Development Activities", in yearly institute budget policy.

Sponsored Research Projects: -

- The institute provides information regarding various funding agencies and schemes, announced by central and state government to faculty & supports them to prepare & submit research proposals.
- Sponsored project refers to one in which the Principal Investigator (PI) does not charge honoraria/consultation fee. For a project sponsored by a government agency, no honorarium in any form can be claimed. Amount may be used by the principal investigator as approved in the respective budget head by the funding agency.

Individual projects: -

- The institute encourages investigation of basic and applied areas of science and technology, high end technology development individually. Research grants for such projects are given by government agencies and industries (both national and international). These projects are usually of 2-5 years duration with periodic appraisals, while research objectives and goals may be refined along the way.

Collaborative projects:-

- Faculty may also participate in collaborative projects with other domestic or foreign partners. In such projects, there must be a separate budget and scope of work statement to be done by the faculty and staff of the institute. The summary statement provided to the institute should be based primarily on the portion to be done by the institute. The institute will treat this like any other sponsored project.
- The additional fund for the purchasing small equipment, stationary, consumable materials in laboratory etc. which is not considering in budget of project that additional fund provided by institute to promote research activity/work/project.

Utilization of Funds (How it is utilized): -

- 1. After receiving the research grant, the institute releases the funds as per the demand of the principal investigator. Additional amount, if required is given by the institute. The institute has well equipped laboratories, adequate internet facility and library resources to carry out investigations dealing with research projects. The teaching load of principal investigator may be adjusted during research work. The institute has appointed a Academic Research Coordinator (ARC) for the University. The accounts section helps to carry out timely audit and preparation of utilization certificate.
- 2. The institute, soon after receiving the sanction letter from the Sponsoring Agency allows the Project Investigators to initiate the project work by duly hiring the personnel (if necessary) spending on consumables, using the infrastructure and resources of the institute, in anticipation of the release of the Funds.

Utilization of financial Assistance:-

Utilization certificate is to be submitted in following format.

Sr. No.	Item	Description	Individual Sub head cost
1	Permanent Equipment		
2	Equipment's on lease		
3	Temporary Equipment's		
4	Materials required		
5	Manpower		
6	Consumables		
7	Travel		
8	Overhead charges		
9	E-resources		
	Grand Total (Rs.)		

Accounts: -

- The money received through research grants is parked in the current account held by the institute and the institute does not earn any interest on the grants received, neither the institute/individual charges any interest from the funding agencies in case of delay in reimbursement of expenditure or transfer of the Funds pledged by the agency towards the execution of the projects by the principal investigators of institute.
- A consultancy project/task/work is one, where faculty and research staff provides knowledge and intellectual guidance to industry (within India/outside India), primarily for their purposes. This is effectively a contract work in which all outputs belong to the sponsor.
- A MoU/agreement that satisfies all the conditions, particularly of the overheads, service tax will be approved by the institute. Any deviation from the norms (e.g. reduction of overhead) will have to be discussed and explicitly approved.
- When MoU is verified for legal issues by the law section of K.K.Wagh Education Society, Nashik and acceptable to both the parties, it is sent to the Principal, K.K.W.I.E.E.R for approval along with the Note File
- After approval, Principal Investigator/HOD as the case may be along with witness sign the MoU.
- After completion of the project, final report should be submitted to the funding agency.
- A completion certificate should be obtained from the funding agency for successful completion of the project based on which project account will be closed.

Equipments:-

Major equipment in the areas of research where a long-felt need exists or for new thrust areas of research is the main focus of the committee for acquisition of research equipment scheme. Proposals for purchase of major research equipment are invited from or a group of faculty members drawn from across the institute.

Publications: -

The rich outcome of the research endeavors can be seen in the large publications and number of books. The strong academic environment prevailing in the campus encourages faculty members to write research papers and books in the area of their expertise. Following the practices across the world, books authored by faculty or research staff are not treated as projects or consultancies. Royalties received for books authored by faculty/staff members will not be shared by the institute. Such authors of the books are expected to donate copies to the central library.

Recruitment of Research Fellow:-

For having grant from Central or State government and also having provision for recruitment of research fellows following guidelines are followed by institute.

Norms for manpower and overhead, from TPEM grants.

Nomenclature & Emoluments	Qualification		
Junior Research Fellow (Rs. 25,000 / - + HRA)	Post Graduate Degree in Basic Science with NET qualification or Graduate Degree in Professional Course with NET qualification or post Graduate Degree in Professional Course		
Senior Research Fellow (Rs. 25,000 / - + HRA)			
Research Associate – I (Rs. 36,000/- + HRA)	Ph.D. / MD/MS/MDS or equivalent degree having 3 years of research, teaching and design and development experience after		
Research Associate – II (Rs. 38,000/- + HRA)	M.V.Sc. / M. Pharm/ M.E. / M. Tech. with at least one research paper in Science Citation Indexed (SCI) Journal.		
Research Associate – III (Rs. 40,000/- + HRA)	The Research Associate Scale may be decided by the institute / organization based on the experience of the candidate.		

The appointment of Research Fellows is done by inviting application from eligible candidates. Selection is done after conducting written test and interviews for the shortlisted candidates.

Interaction with Eminent Researchers: -

Research and development committee of the institute regularly invites renowned personalities for motivation where it research among faculty and student. Number of researchers and scientists visit our institute regularly. Expert lectures and keynote session of all these personalities motivate the faculty and student for research in frontier areas of technology and interdisciplinary research etc. Faculty and student obtain an advanced knowledge from such session that eventually will result in new or improve products, processes, systems etc. which is one of the major objectives of such visits. Institute provides accommodation facility for all visiting scientists / research scholars in the guest house which is equipped with Wi-Fi and computing facilities available on 24x7 basis.

Dr K.N. Nandurkar Principal