

INTERNAL QUALITY ASSURANCE CELL GOVT. MADHAV SCIENCE P.G.COLLEGE UJJAIN



A GRADE ACCREDITED THROUGH NAAC DST-FIST SUPPORTED

POLICY DOCUMENT ON PROMOTION OF RESEARCH

With a vision statement clearly focusing on value based education for holistic development of science practioners, who care for society through application of research, College believes in a judicious combination of teaching and research for the benefit of student community at large. The Institution envisages innovation and technological development through its R & D cell. It has plans to cultivate academic and research collaborations with Institutes of national and international importance, government agencies and industries to meet the immediate needs of society and the industry. The Institution also remains committed to long-term research as the foundation for future development.

OBJETIVES:

- To enhance the Research awareness among Faculty, Research Scholars and students by organizing discussion forums and consortia with eminent Scholars and by conducting International and National Seminars Conferences and workshops on Research methodology, IPR and General subject areas which have uses in Research. R& D cell will coordinate with **PURE** coordinator **PURE** is a Flagship prograame to promote research and stands for **PU**rsuit of **R**esearch **E**xcellence.
- To motivate Faculty to pursue Doctoral and Post-Doctoral assignments at various National and International Institutes
- > To encourage Faculty to write Research Proposals and undertake Research Projects in contemporary thrust areas in
- > Science and Technologies. Research Proposals will be forwarded to External Funding agencies like MPCST, DST and UGC after approval from the expert panel of the concerned subject constituted by R&D Cell

- > To explore new horizons of knowledge and ensure its practical implementation through collective efforts and quality research work.
- > To provide an innovative ecosystem, complemented by adequate facilities and resources in which higher studies and research thrive amongst the faculty and students.

R&D CELL:

The R & D cell comprises of faculty members from core departments in the Institution. This committee oversees the smooth and efficient co-ordination of research and development activities in the Institution, thus fostering overall growth.

R&D Cell is headed by one of the senior faculty member of the college being director of R& D Cell with members from different core departments of the college. Cell should meet twice a month to prepare plans for the promotion of Research and innovation Ecosystem on campus. Director R&D would report directly to the Chairperson IQAC (Principal of the college) and keep coordinator IQAC in CC.

RESPONSIBILITY OF THE R & D CELL:

- > To encourage and motivate faculty for submitting proposals to externally funded research and development projects.
- > To support interdisciplinary and multidisciplinary research, product design and development, publications in national and international journals of high repute
- > R& D Cell will felicitate UG and PG research projects and adopt mechanism to promote research insight in to young students through Student exchange programmes and Internship at various institutes of National Importance like IIT and IISER
- > R& D Cell will felicitate Research Audit of the Institution through Internal and External Mechanism once in two years.
- > R&D Cell will promote incubation for development of new products and will help in filing the IPR
- > To initiate and promote MOU with industries and R & D organizations for consultancy and collaborative research.

- > To encourage faculty to deliver talks and be resource person for various events like seminars, workshops, conferences and training programmes.
- > To visit R&D organizations and disseminate information regarding the effective implementation of research projects.
- ➤ To suggest peer reviewed national and international journals for subscription in central library.
- ➤ To keep everyone abreast of all announcements by various funding agencies like Department of Science and Technology, Department of Atomic Energy (DAE), Defense Research & Development Organization (DRDO), Indian Space Research Organization (ISRO), Council of Scientific and Industrial Research (CSIR), and University Grants Commission (UGC).
- > To motivate students to present technical papers in National and International conferences and display projects in competitions and exhibitions.
- > To depute faculty for seminars, workshops, FDPs and conferences in order to upgrade their knowledge.
- ➤ The R & D Cell will plan, promote & evaluate R&D activity like funded R&D projects and consultancy projects at the Institutional level.

MEMBERS:

Single point of contact (SPOC) from every core department. Each department has the department R& D Coordinator who will monitor the R& D activities of the department. The faculty of the departments will be grouped into clusters based on their interest and they will be allotted projects pertaining to their area of expertise.

Teaching and Research are the main functions assigned to the faculty of the Institution. Teaching is a prime function that needs to be performed at the highest level of competence and this is possible only when the faculty is involved in the research activities. Research essentially nourishes the academic program and updates the faculty about the advances in their field of expertise. Importantly, it helps the Institution to stand at the global level.

FUNDED PROJECTS AND CONSULTANCY WORK:

The general guidelines for faculty engaging in research, development and consultancy are as follows:

BASIC GUIDELINES:

- ➤ Every research proposal shall pass through a multi-tier review, where the proposal shall first be reviewed by the Principal Investigator/ Co- Investigator and then by the concerned Head of the Department / experts in the department. This may be followed by review by eminent researchers in the field. The proposal shall then be vetted by the R&D committee before submission to the funding agency.
- ➤ All applications related to R&D shall be routed through the principal along with one hard copy for R&D records. A soft copy shall also be emailed to the R&D director, department R&D cell and also to the Head of the Department.
- > Separate stock registers shall be maintained for the entire R&D for the externally funded projects in every department.
- > Purchase of equipment, software and submission of the audit report thereof shall follow the Finance Officer guidelines.
- ➤ Principal Investigator and Co-Investigator shall ensure that the equipment and software purchased are maintained in the laboratory/ department and shall be entered in the stock register.
- ➤ The entire sanctioned amount shall be utilized as per the guidelines of the funding agency.
- > In case the Principal Investigator leaves the Institution, all the items purchased shall remain as an asset of the Institution.
- ➤ All Heads of the Department must regularly and diligently update the R&D information on the Institution website for department and give reports to R&D team.

A. ACADEMIC RESEARCH POLICY:

- > Faculty of each department shall conduct research in focus areas of research.
- ➤ Faculty publication in UGC CARE LIST, WEB OF SCIENCE or SCOPUS indexed journals are appreciated. In no case any paper or article published other than the mentioned databases will be entertained for academic appreciation.
- ➤ Individual Faculty/ Researcher should keep track of his/ her citation index and h index.
- ➤ All publications and research papers of faculty have to go through plagiarism check.

B. PRINCIPAL INVESTIGATOR (PI)

- ➤ Principal Investigator (PI) of a sanctioned project is considered to be the prime interface between the funding agencies and is the operational head of the project.
- > The PI is advised to keep the whole project team aware about the progress of the project.
- > PI Should involve the Co-PIs in all related project activities.
- In his/her absence, the PI may request any of the Co-PI to take-over the responsibility of running the project

FACILITIES AVAILABLE ON CAMPUS

- Wifi facility
- ➤ ADVANCED Instrumentation Facility with State of the art equipment like
- ➤ High Performance Liquid Chromatography
- ➤ Double Beam Spectrophotometer
- > Fourier Transform Infra Red Spectroscope
- Microwave Organic Synthesizer
- ➤ High precision Balances
- Autopippettes and Micro Estimation techniques
- ➤ E library with NLIST subscription
- > PCR
- > ZELDOC

