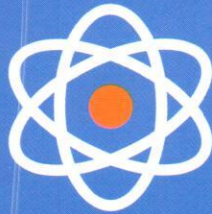
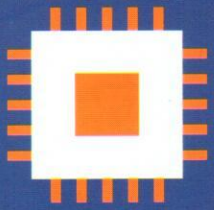




Research & Innovation Policy



Jiwaji University, Gwalior

Prince Jiwaji Rao Scindia



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Vice Chancellor



Jiwaji University
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Preface

Golden Jubilee of Jiwaji University is the culmination of efforts of thousands of brilliant minds, souls, each one striving to reach the ultimate. Jiwaji University, now takes a step ahead with the research and innovation policy.

Research is today the base of development and Jiwaji University will always endeavour to embrace research based development. Jiwaji University has introduced, its own policy in order, to enable learning to become the core of education today.

I am of the opinion that this draft policy will enhance accountability and responsibility of our faculty members to assure quality improvement. The framework of research and innovation policy is required in order to provide guidelines to the academic faculty for the enrichment of research environment, development and implementation. This will also provide forum for faculty and students for strategic assessment and initiatives. In support of our mission and vision, this policy aims to fulfil following goals: ensures scientific excellence, innovation and leadership; integrate undergraduate education, reinforce in the acquisition of new knowledge and patents; foster interdisciplinary research and finally promote efficient use of advanced instrumentation resources.

We are to create a research and innovation ambience, where teaching and learning will take a leap towards coming centuries. As the Vice Chancellor, I take this opportunity to unwrap this policy. It is a privilege for the Jiwaji University to adopt research and innovation policy.

I also ensure that with the strong participation of our faculty, researchers and students in their own research activities, the basic aim enshrined in the policy will be fulfilled. The research outcome will not only be an asset to the academic world but society will also be benefitted.

I wish this research and innovation policy will be indispensable in advancing the frontiers of knowledge in Science, Arts and Social Sciences.

(Prof. Sangeeta Shukla)



Mission and Goal

Our mission at Jiwaji University's Schools of Studies research programs is to be the leader in advancing the frontiers of knowledge creation. The purpose of this research and innovation policy is to provide researchers, an environment where they could accomplish their academic excellence, research commitments and responsibilities within the resources they have in hand or the university could provide so that they may be motivated for knowledge creation.

We envision a community of research scientists at all schools of studies working to further strengthen the Schools reputation for excellence in scientific research and extend it in the areas of emerging sciences, arts and social sciences through collaborations with basic scientists and researchers across the borders.

We support our mission and the fulfillment of this vision by striving towards the following goals:-

- Ensure scientific excellence, innovation, and leadership through the recruitment and retention of outstanding faculty.
- Integrate undergraduate, graduate, and postdoctoral education into all aspects of our research.
- Reinforce our position as leaders in the translation of new knowledge and scientific innovation into useful applications with patent rights.
- Identify and foster strong interdisciplinary research efforts based on individual disciplinary strengths.
- Promote efficient use of the advanced instrumentation resources for research.



Strategic Assessment

The faculty research programs have long been recognized as one of the defining elements. Jiwaji University has a reputation for excellence in scientific research and innovation. This established strength is acknowledged and reinforced by the schools mission statement. We are committed to remaining a research-intensive Schools of studies. The high quality of the Schools' research programs reflects the caliber of the research scientists and as a result, the quality of the Ph.D. students and postdoctoral scholars with whom they associate. Many elements and characteristics of the Schools of studies contribute to the continued excellence of its research.

Most faculty members have collaborations with overseas scientific and research organizations in addition to their distinguished laboratory facilities. Collectively, these factors create and reinforce a unique culture of collaborative innovation among the Schools' researchers, presenting a distinguishing opportunity for the future. Along with these benefits, the relatively small sizes of Schools of studies also presents certain challenges. Faculty turnover has been limited and has resulted in more retirement than recruitment of new faculty. Also, with a small group of faculty members, the loss of a key and senior member can have a major impact on continuing programs.

The past successes of research enterprise and the associated economic strengths of local information technology and biotechnology industries also present challenges to the future success of the Schools of studies research programs. Successful recruitment of new faculty and availability of advanced instrumentation are indispensable for speedy growth of research. A number of internal constraints, conventions, and organizational structures may also present challenges to a contemporary research agenda. These include organizational and procedural barriers and limitations in facilities development.

While the continued strength of its research programs represent a key opportunity for the School of studies, its success will be dependent on the ability to meet these critical issues.



Our Initiatives

Our mission and vision for research will be pursued through coordinated efforts of faculty, facilities renewal, collaboration and rational resource allocation.

To achieve our goal, we will start the following initiatives:

Faculty Excellence

- Establish a research funding facility preferably for new junior faculty.
- Develop reserve funds, and space for allocation to promising new areas of research.
- Establish guidelines for ongoing evaluation of new programs.

Education and Research Integration

- Enhance available students funding to doctoral/post-doctoral scholars in their research activities.
- Develop contemporary educational facilities, including adequate space for research facilities.
- Develop programs to facilitate the interaction of all undergraduate, graduate, and postdoctoral trainees.

Translational Knowledge and Research

- Develop comprehensive core facilities for translational knowledge and research.
- Establish translational research facilities in all new faculties.

Promote Collaborations

- Mitigate existing cultural and geographic barriers.
- Establish a management structure to ensure the efficient processing of research proposals and ethical conduct of research.
- Include collaborating departments in faculty search and promotion processes.
- Require the documentation and analysis of opportunities for translational research in all disciplines.
- Promotion of research to application and filing significant results as Patents



Strong Interdisciplinary Research

- Develop governance mechanisms for interdisciplinary programs and organizational models for School of studies.
- Create a reserve fund for interdisciplinary programs.
- Create research seminar series featuring interdisciplinary research opportunities.
- Establish a faculty research network website to provide information on faculty research interests and collaborative opportunities.
- Enhance activities of Patent Cell.

Rational Resource Allocations

Develop a comprehensive research core facilities, incorporating the following principles:

- Effective management and communication.
- Rational budgetary provision to pursue entrepreneurship through university research facilities, reward creativity for original thinking and publication of research works.
- Develop adequate space for advanced instrumentation facility under SIT scheme.
- Develop a transparent process for efficient use of these facilities
- Develop a standard method for evaluating investments in new research opportunities and to develop Intellectual Property Right (IPR).
- Establish new faculty recruitment policies.

Prioritization and Implementation

The further development, prioritization, and implementation of these initiatives will be led by the Dean, in consultation with faculty research committee. Of the 21 initiatives proposed for the School of Studies research programs, the following have been prioritized for development and implementation in initial phases. These priority initiatives reinforce the importance of interdisciplinary translational research in the future success of the School of Studies.

Education and Research Integration Projects :

Develop contemporary educational facilities, including adequate space in research facilities.

The programming, design and construction of new educational facilities are critical to the successful implementation of a new education and innovation system as well as planned initiatives in graduate education and postdoctoral training. As envisioned, the Jiwaji University will reflect the new model of biomedical sciences and the emerging new relationships between information and its users.

Translational Research Projects

Promote collaborations between basic and applied scientists within the School of studies and across the university through:

- Mitigation of existing "cultural" and geographic barriers.
- Inclusion of collaborating departments as partners in faculty search and promotion processes.

The Dean, in collaboration with the faculty committee on research to develop recommendations for organizational and operational initiatives required to support the faculty's pursuit of research opportunities and the eventual translation of research findings into useful practice at Jiwaji University.

Interdisciplinary Research Projects :

Hold a research meeting to establish new program priorities

The Dean for Science, Arts and Social Sciences will work with the faculty research committee to establish a focused program and agenda to develop proposals to establish research programs and resource priorities.



Establish guidelines for the creation and governance of interdisciplinary groups.

The Dean for Science, Arts & Social Sciences will continue the development of the proposed policies and procedures for Schools of Studies, in general, and a Scientific Instrument Facility (SIF), in particular. Both documents will be reviewed by the faculty research committee and brought to the Schools of Studies Executive Committee for review and approval.

Create a faculty research network website

The Dean with support from other Dean for Information Resources and Technology, will continue the development of a Faculty Research Network website.

Resource Allocation Projects :

Develop a comprehensive core facilities incorporating the principles of:

- Effective management and communication
- Rational budgetary allocation
- Accessibility and affordability,
- Sustainability

The Dean for Science, Arts and Social Science will work with the faculty research committee to:

- Develop a working definition of "core facilities."
- Evaluate Schools of studies inventory of core facilities, including their service, organization and management relative to the above principles.
- Develop recommendations for School of studies core facilities operations and management.



Task Group for Advancing Excellence in Research

- | | |
|---|-------------------------------|
| 1. Prof. Sangeeta Shukla | Vice-Chancellor & Chairperson |
| 2. Prof. R. J. Rao | Rector |
| 3. Prof. Ashok Jain
School of Studies in Botany | Member |
| 4. Prof. D. D. Agarwal
School of Studies in Chemistry | Member |
| 5. Prof. J. N. Gautam
School of Studies in
Library & Information Sciences | Member |
| 6. Prof. A. K. Singh
School of Studies in AIHCA | Member |
| 7. Prof. G. B. K. S. Prasad
School of Studies in Biochemistry | Member |
| 8. Prof. P. Raja Ram
School of Studies in Physics | Member |
| 9. Prof. I. K. Patro
School of Studies in Zoology | Member |
| 10. Prof. O. P. Mishra
School of Studies in Mathematics | Member |
| 11. Prof. K.S. Thakur
School of Commerce & Business Studies | Member |
| 12. Dr. S. N. Mahapatra
School of Studies in Earth Sciences | Member |
| 13. Dr. Sameer S. Bhagyawant
School of Studies in Biotechnology | Member |
| 14. Prof. Sushil Kumar Gupta
School of Studies in Chemistry | Coordinator |
| 15. Dy. Registrar (Acad.) | Member |

Published by : Registrar, Jiwaji University, Gwalior



Transmission Electron Microscope