

Lakshmibai National Institute of Physical Education
Gwalior (M.P.)
(Deemed to be University)



RESEARCH AND DEVELOPMENT
POLICY
2024

Research and Development Cell

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RESEARCH AND DEVELOPMENT POLICY

INTRODUCTION

The National Education Policy (NEP) 2020 envisages the promotion of quality research within the Higher Education system. Research and innovation are important aspects to enhance quality education by the Higher Education Institutions (HEIs).

Societal challenges of our country can only be addressed by having a strong and vibrant higher education ecosystem with an emphasis on research, innovation, and technology development. The integration of Research, Innovation and Technology Development is the foundation of Atma-Nirbhar Bharat (Self-reliant India).

The establishment of Research and Development Cell (RDC) in LNIPE will enable attainment of targets of Atma-Nirbhar Bharat and is expected to play a pivotal role in catalyzing multidisciplinary/ transdisciplinary and translational research culture mandated in NEP 2020.

VISION

To put in place a robust mechanism for developing and strengthening the research ecosystem within LNIPE, aligned with the provisions of NEP-2020.

MISSION

- To create a conducive environment for enhanced research productivity.
- To encourage collaboration across industry, government, community- based organizations, and agencies at the local, national, and international levels.
- To facilitate greater access to research through mobilization of resources and funding.

OBJECTIVES

- To create an organizational structure with role-based functions of Research and Development Cell, formulate Research and Development Policy for the LNIPE, identify thrust areas of research and form related cluster groups/ frontline teams/consortia of researchers.
- To create enabling provisions in Research Policies for recruitment of research personnel, procurement of equipment, and financial management with adequate autonomy to the Principal Investigator(s) and disseminate research outcomes to stakeholders and the public at large.
- To establish a special purpose vehicle to promote researchers and innovators, identify potential collaborators from industry, research organizations, academic institutions & other stakeholders for cooperation and synergistic partnerships.
- To act as a liaison between researchers & relevant research funding agencies, extend guidance in preparation & submission of project proposals and post-sanctioning of the grants to oversee adherence to timelines.
- To have better coordination among other cells/centers dealing with University-Industry Inter Linkage, Incubation, Innovation and Entrepreneurship Development and Intellectual Property Rights (IPR).
- To develop an Institutional Research Information System for sharing the status of ongoing/ completed research projects/Programmes, expertise & resources, etc., making effective use of Information & Communication Technology (ICT) for preparing the database of in-house experts to provide industrial consultancy and services.
- To engage & utilize the services of superannuated active faculty/scientists in research capacity building of talented young minds and promote mobility of researchers across institution and Research and Development Lab.

- To serve as Nodal Center for ideation and conceptualization of research topics/themes by organizing workshops and training programs and ensuring the integrity and ethical practices in research activities including clearance of bioethical committee wherever required.

FUNCTIONS

The UGC launched an initiative to establish a Research and Development Cell in HEIs with the mandate for promoting quality research that contributes meaningfully towards the goal of a self-reliant India ("Atma-Nirbhar Bharat"), aligned with the provisions of NEP-2020.

The RDC would help creating a research ecosystem for reliable, impactful, and sustained research output. The essential elements of such an ecosystem, viz., generation of knowledge and facilitation of research, innovation and technology development for industrial & societal benefits, are addressed by human resource (researcher & faculty), intellectual capital (knowledge & skills), governance (regulation & policies) and financial resources (funding & grants).

1. Governance

An efficient governance mechanism, which ensures functional autonomy, transparency, accountability, adaptability by strengthening interlinkages to create a conducive research environment.

The LNIPE can foster the human elements (faculty, staff, scholars, and students), logistics (land, buildings, and facilities), knowledge resources (research equipment, project utilities, and consumables), fund flow, etc. through a steady, proficient, effective governance (Rules, Norms, and Policies) and financial (Grants and Funds) management. Dedicated leadership and administrative structure for research, led by experienced researchers, are essential for establishing an effective and robust Research Governance in Research and Development Cell at LNIPE.

Research Advisory Council (RAC):

S. No.	Name	Post
1	Prof. Indu Bora	Chairman
2	Lt. (Dr.) Brij Kishore Prasad	Convenor
3	Prof. Joseph Singh	Member (IPR Legal and Ethical Matters)
4	Prof. M.K. Singh	Member (Product Development Monitoring and Commercialization)
5	Dr. K.K. Sahu	Member (Finance and Infrastructure)
6	Dr. Birendra Jhajharia	Member (Collaboration and Community)
7	Dr. Ashish Phulkar	Member (Research Program and Policy Development)
8	Dr. Sankar Basumatary	Special Member

Frequency of Meeting: The committee shall meet atleast two times a year or as and when required. The Convenor in consultation with the chairman prepares and circulates the agenda of the meeting well in advance. The Convenor maintains the minutes of the meeting and action taken report.

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Quorum: Two-third(2/3) members constitute the quorum. If there is no quorum for the meeting convened up to 15minutes, then the meeting shall stand adjourned to the next convenient date.

Term: The tenure of the members shall be minimum three years.

2. Administration

Established organizational structure (Bodies, Authorities, and Committees) will facilitate planning, implementation, and monitoring of research activities in LNIPE, formulate rules, regulations, and policy frameworks for utilization of facilities and resources at LNIPE.

A strategy adopted to integrate multiple functional units can support institutional research under a single-window operational system for effective administration.

The activities of Research and Development Cell will be mentored and monitored by various committees for devising research models, technology, appraisal, foresight & review functions, mediating sectoral R&D progress, and IPR protection.

Research and Development Cell should keep a close contact with Ministry Innovation Cell to make use of various innovative plans for facilitating the researchers.

3. Research Ecosystem/Collaboration

A vibrant research ecosystem in LNIPE aims to provide meaningful thrust for sustainable research and innovation and promote collaboration between government, universities, research institutes and industries.

LNIPEs need to build a sustainable research ecosystem that leads to consistent quality research outcomes and enhanced productivity.

RDC will act as a facilitator for networking and collaborative research with other national and international institutions working in inter- disciplinary, trans-disciplinary, and multidisciplinary research areas. Reformed administrative structure at LNIPE can reach out to key industry players, research organizations, institutions, associations, NGOs, Government bodies to forge strategic partnerships.

LNIPE need to establish collaborations, teams/consortia, partnerships, and combined ventures for joint research activities through clustering institutions and organizations to facilitate the exchange of students, scholars, and faculty.

There is a need to strengthen resource sharing in content and infrastructure both within the university and among universities, funding agencies, industries, corporates and government.

A. Memoranda of Understanding for quality research work:

The following is a fairly exhaustive list of MoUs (Memoranda of Understanding) signed by LNIPE with various Governmental and non-Governmental Agencies, Institutes, Universities, etc., in India and abroad for research collaborations:

MoUs (Memorandum of Understanding) signed with the following Institutes/Universities:

- i. Kazakh Academy of Sports and Tourism, Qazaqstan.
- ii. German Sports University, Cologne
- iii. The All India Football Federation (AIFF) to establish the first Centre of Referees' Excellence (CORE) in India.
- iv. S-VYASA University, Bangalore
- v. DAV University Jalandhar, Punjab
- vi. IIT Patan, Bihar
- vii. LPU Jalandhar, Punjab
- viii. PEFI, New Delhi
- ix. SRM Institute of Science and Technology, Chennai

10/11/2017

B. Research at UG and PG Level

To enhance quality research outcome, mentorship/internship shall be facilitated to encourage UG/PG students to pursue research activities leading to tangible outcomes, such as publication, process, novel, prototype, design and functionality changes. Research component is already embedded in the curriculum at all levels/years of their academic/professional stay/association at the institute being a society member in various clubs/committees/cells/chapters/associations and also as a student member. The staff members of the institute shall provide suitable professional/ expert guidance in all spheres of student R&D activities.

The UG/PG students are encouraged to take up a module/content in the ongoing research projects funded by government agencies/industries with the support of investigators. Those students who are the part of funded projects should transfer know-how to other UG/PG students for further research. RAC should form standard guidelines for thesis/dissertation at Master Degree.

4. Information Management System

LNIFE play a key role in the advancement of research and innovation as two distinct entities through Research Information Management System (RIMS) for the benefit of faculty, students, industry and other stakeholders.

LNIFE should put in place a RIMS to collect and manage research-oriented information, databases, publications, research projects, fellowships, collaborations, patents, thrust areas, innovations etc. aligned with the institution's research policies.

RIMS would also provide a platform for accessing resource-centric information pertaining to human capital (Expertise), physical capital (State-of-Art Research Laboratories and Sophisticated Instrumentation Facility), and knowledge capital (Digital Library & Information, Intellectual Property Facilitation, Quantitative Methods & Data Analysis, Analytical and Consultancy Services).

As per the requirements of various regulatory agencies, researchers can submit, modify, or update their research compliances such as protocol approval, training records, equipment lists, etc. RIMS can provide a centralized and integrated database to manage issues related to and radioactive-safety approval clearances for use and disposal of biological, chemical and radioactive hazardous materials, protective equipment measures, surveillance of staff, appropriate trainings/workshops, etc.

LNIFE needs to create a blog or portal for Institutional Research Information and Institutional Repository and sign an MoU with UGC- INFLIBNET to access and upload the research information through Shodh Ganga, Shodh Gangotri, Shodh Sindhu, Shodh Shuddhi, and Shodh Chakra.

The Innovation Management (ISO 56002:2019) can be implemented as a common framework to develop and deploy innovation capabilities, evaluate performance, and achieve intended outcomes of global standards.

5. Human Resources

The Director (Research and Development Cell) and members of various committees (nominated by the Director- Research and Development Cell from/among the existing faculties with research credentials) and supporting administrative/technical staff would ensure smooth conduct of the research activities in LNIFE.

Re-employing or designating superannuated faculty/scientists with exceptional research profiles and eminent faculty as Mentors/ Scientists/ Professor Emeritus on a selective basis will help to build a resilient research ecosystem. Distinguished faculties or research scientists

grooming young talents can help replenish the void created as a result of superannuated faculty/researchers.

6. Research Promotion and Guidance

Research promotion activities at LNIPE should be aligned with the mandates of various National Missions, SDGs, Start-up India leading to a Self-Reliant India (Atma-Nirbhar Bharat). Research Guidance from Research and Development Cell will aim to encourage faculties to conceive ideas through enhanced industry-academia interactions and prepare research proposals for funding from various agencies. Organizing events like capacity- building programs (Research

Methodology and Research Techniques) and specific research theme-based workshops and Research Internships will motivate the end-users (students, scholars, and faculties) to participate actively in the process of ideation and innovative research in emerging areas.

LNIPE has, since inception, been laying special emphasis on promotion of research by the scholars as well as the faculty members.

a. Research Thrust and Clustered Areas

Thrust areas for Research in LNIPE should be identified, underpinning the societal needs and the availability of key resources, including in-house human resources, faculty research competencies, and support systems. This would enable LNIPE to consider establishing a Center of Excellence (CoE) in these identified contemporary areas of research.

Research Clusters and/or Regional Research Consortia prompted/formed by Research and Development Cell to bring all researchers, faculty, students, scholars, and Post-Doctoral Fellows for joint high value (interdisciplinary and trans-disciplinary) research projects to avail national and international funding opportunities. Shared infrastructure and expertise will enable cross- fertilization of ideas and mobilization of resources. Further, forming Regional Research Consortia adds a synergistic advantage in finding solutions in interdisciplinary, trans- disciplinary, and multidisciplinary areas.

CoEs' can serve as Incubation Centres to transform innovative ideas into processes and products administered and monitored by the proposed Research and Development Cell. Research and Development Cell could also provide an avenue for community talent with prior learning/expertise to engage in research and innovation activities of LNIPE. Thrust Areas of Research at LNIPE are:

- Physical Education Pedagogy
- Sports Bio-Mechanics
- Exercise Physiology
- Sports Psychology
- Health Sciences
- Yogic Sciences
- Sports Management
- Sports Coaching
- Inter Disciplinary

b. Research Incentives and Recognition

Incentives play a significant role in triggering and catalyzing research interest among scholars and faculties. Incentivizing quality publications and patents by students and faculty will have an enduring positive impact.

Institution of Excellence Awards for accomplishments/achievements in the form of impactful quality research and/ or research-based teaching will further stimulate and invigorate the research and innovation activities of the HEI.

Research and Development Cell should also develop a policy focussing on identifying specific intensives for research faculty and develop a unique Research Career ladder for strengthening the mission "Research".

i. Incentive to faculty members and students:

As a part of the continual quality improvement policy, the institute encourages publication of papers in various conferences and journals by the staff members and can claim incentives. Staff members presenting their research papers in national/international-seminars/conferences/ workshops will be provided by On-Duty leave.

For presenting paper in Conference/Seminar

Category	Faculty	Full Time Regular Research Scholar	Frequency
International (Outside Country)	Registration Fee, Visa Fee and Travel Expenses in Economic Class by Flight.	Full Registration Fee and 50% train fare.	Once in every 03 years for Faculty members and only once to a PhD scholar.
International (Within Country)	Registration Fee and Travel Expenses as per entitlement.	50% of Registration Fee and Full train fare in 3AC.	Once in every 02 years for Faculty members and only once to a PhD scholar.

Note:

1. Staff members and students presenting their research papers in national/international-seminars/conferences will be provided by On-Duty Leave.
2. Only one faculty and one PhD Scholar can avail it in each semester.

How to Apply

Regular Teachers shall apply to the Registrar at least 02 months before the date of commencement of National / International events respectively. The application shall be routed through the respective Heads of Department.

Selection Process

- (a) RAC committee will scrutinize the applications to be forwarded to the competent authority for approval. The meeting is expected to be held once in every two (02) months.
- (b) Preference will be given to those applicants who have not availed any financial assistance so far.
- (c) At a time 10% of the total faculty members of the Institute and off-campus shall be allowed to avail the above facilities for a particular event.
- (d) The seniority of merit shall be decided on the basis of date of receipt of application form.
- (e) Ordinarily one should have put in minimum one year service in our institute in case of National seminar etc. and minimum three years service in our Institute in case of international seminar etc. before being eligible to receive grant for attending.
- (f) The decision of the Vice-chancellor shall be final and binding in all respects.

For Publication:

Catego ry	Description	Faculty	Student
A	WoS/ESCI/Scopus Indexed Journals with Thomson Reuters Impact Factor 3.0 and above.	Full publication fee upto 50,000/-.	Full publication fee upto 50,000/-.
B	WoS/ESCI/Scopus Indexed Journals with Thomson Reuters Impact Factor 2.9 and below.		
C	WoS/ESCI/Scopus Indexed Journals with existence of more than 2 years, prior to the date of publication.	Full publication fee upto 25,000/-.	Full publication fee upto 25,000/-.
D	Authors of Books/Book Chapters indexed in WoS/ESCI/Scopus Indexed Journals with existence of more than 2 years, prior to the date of publication. Provided the affiliation should be institute name. This reward is only for Authors, not Editors.	10000/-	5000/-

Note: Once the paper is published, before applying for reimbursement, the faculty has to submit a soft copy of publication in the Department and Central Library.

ii. Incentive to faculty members for Patents

The fee for patent filling will be borne by institute; provided "Institute" is, the applicant and Inventors (with institute address) belong to the institute.

For the Patents filed & published filed & published individually (wherein institute does not bear any filling charges) and applicant not being Institute, reward of Rs.5000/- will be given to the first Inventor with institute address.

Once the patent is published, before applying for reimbursement, the faculty has to submit soft copy of patent in the IQAC and Institute Incubation Centre and Central Library.

iii. Incentive to Ph.D

Two NET qualified Full time Ph.D Scholars from each Department will be given 8000/- per month.

c. Technology Development and Business Centred Facility

The Technology Development and business-centered facility will be a hub for strategic partnerships/ collaborations, industry-institute interface, sponsored or contract research, new knowledge generation, IPR, and patent services, venture capital, trade/market portfolio, technology transfer, and commercialization of research to facilitate innovation, incubation, entrepreneurship and start-up ventures.

d. Finance

Research and Development Cell can facilitate resource mobilization and create a Corpus for research and development from government, industry, and other funding agencies and channelize Corporate Social

Responsibility (CSR) funds for sustenance and furtherance of research activities. Apart from creating a Corpus fund exclusively for R&D, Research and Development Cell can explore venture capitalists and angel investors for funding in research and innovation. It needs to liaise with funding agencies, and track funding opportunities from industrial consortia. The LNIPE may make provision for research in the annual budget subject to the availability of funds.

The corpus created for research could also support the seed funding for freshly recruited faculty for developing research facilities, publications and patenting.

7. Integrity and Ethics

Regular initiatives by Research and Development Cell will ensure that researchers understand the importance of integrity and ethics and comply with ethical codes of research and publishing practices at institutional, national, and global levels. A standard plagiarism check should be mandatorily implemented and the requisite software in this regard made accessible to all researchers. In addition, the Research and Development Cell will sensitize the research community about dubious research and publishing practices and predatory journals.

Code of Ethics for Research

- Academic Honesty: The institute holds high respect for honesty in all scientific communications in reporting data, results, methods, procedures, and publication status. The institute does not entertain fabrication, falsification, misrepresentation of data. Deceit of colleagues/funding-agencies or public is considered misconduct on the part of the researcher.
- Integrity: The institute gives high regard for keep-up promises & agreements and
 - sincerity & consistency of ideas and implementation.
- Carefulness: One must carefully and critically examine one's own work, associates/team work and keep a record of research activities such as data collection, research design, and correspondence with agencies of journals.
- Respect for Intellectual Property: Honor patents, copyrights, citations, and other forms of intellectual property. One must not use unpublished data, methods, or results without permission. Authors should give proper acknowledgements/citations and avoid plagiarism.
- Confidentiality: The author should protect confidential communications such as documents, works, blue-prints, papers, publications, observations, trade secrets and patent records.
- Social Responsibility: Mitigate social harm through research and public education/advocacy
- Competence: Improve professional competence and expertise throughout life in education & learning and promote research competence in all aspects of research.
- Legality: A researcher must know and obey government policies, relevant laws and institutional rules and regulations with regards to IPR issues.
- Protection of Human Subjects: Minimize harms & risks to human subjects, use special precautions with vulnerable situations and respect human dignity/privacy/autonomy. Equitable distribution of benefits and burdens of R&D.
- Rules for Plagiarism: All project/seminar reports, dissertations/thesis, research papers, case studies, and any such documents need to be checked with the standard plagiarism software tool. In case of project/seminar reports, dissertations/thesis, the concerned student needs to submit a plagiarism report generated by a licensed software tool. Master Degree students should also go for plagiarism test with some relaxation in percentage of plagiarism in comparison to PhD scholar.

8. Capacity Building

Research and Development Cell would play a crucial role in building the capacity of faculty and students to undertake research problems in line with the latest advances in diverse disciplines to push the boundaries of knowledge through publications and contribute to technological developments relevant to societal needs. It would also pave the way for LNIPE to attract more research grants under norm-based funding, improve its accreditation ranking and enhance its brand image.

Regular events such as refresher courses, workshops, trainings/internships, group discussions and seminars/conferences may be organized for capacity building. Research and Development

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Cell would play a pivotal role in creating central R&D facilities with the provisioning of associated training/internship thereon.

9. Research Monitoring

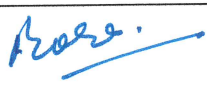

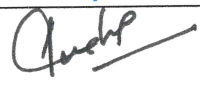
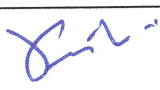
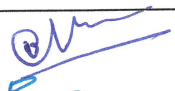
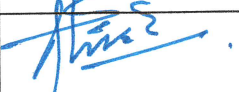
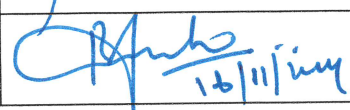
The current policy environment in India encourages HEI to be responsible and accountable for research development and innovation activities through the creation of infrastructure, generation of resources, promotion of business, and facilitation of policy framework to nurture the culture of quality research by adhering to ethical practices. Among the standard functions, the Research and Development Cell in an HEI needs to monitor and oversee research progress, coordinate program, manage and facilitate optimizing resources, timely review of research activities for completion of the projects as per schedule.

Minor, Major and Sponsored Projects

The institute encourages to faculty member and students to take-up research projects as detailed below:

- To improve the quality and content of project, all projects must be submitted through Research Development Cell to various agency such as UGC, CISR, MYAS etc., only after approval of Research Advisory Council(RAC).
- After the approval of project investigator must submit Approval Letter to RD Cell.
- The guide/supervisor/investigator has to submit the periodical progress report of the approved research project to the Research and Development Cell.
- The disbursement of sanctioned amount and completion of the project is the sole responsibility of guide/supervisor/investigator and may utilize the facilities, infrastructure and human resources of the institution.
- All the equipment purchased, fabricated-prototypes shall be the property of the institute only.
- The amount should not be used either for remuneration or honorarium purpose.

Approved by Research and Development Council 2024

<u>Research and Development Council</u>	<u>Signature</u>
Prof. Indu Bora Chairman Research and Development Council	
Prof. Joseph Singh Member (IPR Legal and Ethical Matters)	
Prof. M.K. Singh Member (Product Development Monitoring and Commercialization)	
Dr. K.K. Sahu Member (Finance and Infrastructure)	
Dr. Birendra Jhajharia Member (Collaboration and Community)	
Dr. Ashish Phulkar Member (Research Program and Policy Development)	
Lt. (Dr.) Brij Kishore Prasad Convenor Research and Development Council	 16/11/24