Policy Document for Establishment of Research and Development Cell



राजीव गाँधी विश्वविद्यालय Rajiv Gandhi University

रोनो हिल्स, दोइमुख - 791112, अरुणाचल प्रदेश, भारत Rono Hills, Doimukh - 791112, Arunachal Pradesh, INDIA

Contents

| S1. | Particulars | Page(s) |
|-----|---|---------|
| | | |
| A. | About the Rajiv Gandhi University | 02 |
| | | |
| В. | About the Research and Development Cell (RDC) | 04 |
| | | |
| C. | Vision | 05 |
| | | |
| D. | Mission | 05 |
| | | |
| E. | Definition & Terminology | 06 |
| | | |
| F. | Objectives | 06 |
| | | |
| G. | Functions | 07-15 |
| 1. | Governance | 07 |
| 2. | Administration | 80 |
| 3. | Research Ecosystem/Collaboration | 09 |
| 4. | Information Management System | 09 |
| 5. | Human Resource | 10 |
| 6. | Research Promotion & Guidance | 11 |
| 7. | Integrity and Ethics | 13 |
| 8. | Capacity Building | 15 |
| 9. | Research Monitoring | 15 |

A. About the Rajiv Gandhi University

Rajiv Gandhi University (formerly Arunachal University), the premier institute of higher learning in Arunachal Pradesh, has completed thirty-seven years of its existence. Smt. Indira Gandhi, the then Prime Minister of India, laid the foundation stone of the University on February 4, 1984. Subsequently, it started postgraduate courses from the Academic session 1988-89 in the sprawling and picturesque Rono Hills. The University was converted into a Central University on April 9, 2007 by a notification of Ministry of Human Resource Development (now Ministry of Education), Government of India. Recently RGU was ranked as 2nd in the country amongst the 50 other central universities of India by the UGC (Ministry of Education), New Delhi based on the performances in 17 parameters.

The only affiliating University in the state, has, its jurisdiction encompassing whole of the state. In total, there are 45 colleges affiliated to this university comprising of 19 Government Degree Colleges, 9 private degree colleges, 1 Govt. Medical College, 1 Govt. Law College, 2 Govt. Nursing Colleges, 1 private Law College, 9 private Teacher Education Colleges, 2 private Nursing Colleges and a private Homoeopathy Medical College. Post-Graduate programmes are offered in thirtytwo subjects viz. Agricultural Sciences, Anthropology, Botany, Chemistry, Commerce, Computer Science & Engineering, Economics, Education. Electronics & Communication, English, Food Technology, Geography, Geology, Hindi, History, Law, National Security Studies (NSS), Management, Mathematics and Computing, Mass Communication, Performing Arts, Physics, Political Science, Psychology, Sociology, Social Work, Statistics, Sports Physiology, Sports Biomechanics, Sports Training, Sports Psychology, Tribal Studies and Zoology. Undergraduate programmes are offered in Agriculture (BSc), Computer Science & Engineering (BCA), Fine Arts (BFA) & Music (BMUS) & Geology (BSc).

University was also offering M.Phil. programmes in different subjects. However, the M.Phil. programme has been discontinued from 2021-22 session following the

directives of the UGC. In addition to this, all the Departments and Institutes of the University offer the Ph.D. programme, baring few.

The University runs P.G. Diploma courses in Hospitality Management & Tourism, Mass Communication, Geoinformatics, Banking & Insurance, Functional Hindi, Environmental Sanitation, and Yoga Therapy Education and Advanced PG Diploma in Biodiversity, besides Diploma in Computerized Accounting and Certificate Courses in Communicative English, Tribal languages, Yoga Therapy, Myanmarese Language, German Language, etc.

Rajiv Gandhi University with its motto "Vidhyaamritshnute" i.e. "Excellence and Immortality through nectar of Education" has been striving to maintain high standards in both teaching and research. Years of concerted efforts have shown the signs of qualitative and quantitative progress. The percentage of the students clearing the NET/SLET and other national tests like RGNF, INSPIRE, etc. is fairly high. Campus recruitment programme by leading recruiters has been there. The research potential of the University is being strengthened by increasing number of registered Ph.D. scholars and offering fellowship to regular scholars. Two Research Journals, one each in English and Hindi, are published regularly. As on date, a total of 98 regular programmes including Ph.D. and M.Phil. are offered in the varsity through its 29 Departments, 1 Institute and 2 Centres, spread over 9 faculties besides a significant number of UG, PG and Certificate level programmes offered through the Institute of Distance Education (IDE) of the university.

The University had also signed MOUs with some of the leading universities and institutions across the globe for collaborative research and higher studies. It is quite notable that the conduct of Convocations of RGU on a particular date (30 November) every year has been highly praised by the MHRD, now Ministry of Education, in the year 2018. The Visitor of the University had also made a mention of this good practice during a meeting with the Vice-Chancellors. The conduct of Convocations of RGU on a fixed date is one of the Best Practices of the University.

The University has been organizing webinars (during pandemic), besides conferences, seminars, symposia and workshops in order to generate, disseminate and upgrade knowledge on various key areas. The university boasts of its sea of alumnus. An Alumni Association of the University is functional. There are facilities such as; Bank & Post Office, Bioinformatics Centre, a Boxing Academy, a Canteen & Co-Operative Store, College Development Council, Community College, Community Development Cell, Computer Centre, a Day Care Centre, EDUSAT Centre (National Network), a Health Center, Hindi Cell, Hostel (Residence) Accommodations 10 (Ten) halls of residence for students (5 for Men & 5 for Women), an Innovative Centre, Institute of Distance Education, Internal Quality Assurance Cell (IQAC), International Scholars' Cell, National Service Scheme (NSS), Office of Dean of Students Welfare, Physical Education Branch, high quality infrastructure Facility and Equipment, a Public Grievances Cell, Right To Information (RTI) Cell, SC/ST/OBC/PWD & Minority Cell, a well maintained University Library, Transport Facilities, University Industry Interface Cell (UIIC), V-SAT Facility, Women Studies and Research Centre (WS&RC), besides others make this varsity a perfect academic package.

RGU continuing with its one of the best practices of conducting the convocations regularly on a fixed date since near about a decade. In a span of around four decades (38 years), the Rajiv Gandhi University has grown into an institution with proven academic excellence, social commitment and cultural interest with a clear vision for its future growth.

B. About the Research and Development Cell (RDC)

National Education Policy (NEP) 2020 envisages the promotion of quality research within the Higher Education System. Research, innovation and development are important aspects to enhance quality education by the Higher Education Institutions (HEIs). Societal challenges of the 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 purpose of the establishment of RDC at Rajiv Gandhi University is to put in place a robust mechanism for developing and strengthening the research ecosystem within the University, aligned with the provisions of NEP-2020. The RDC will 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 and to facilitate greater access to research through mobilization of resources and funding.

The establishment of RDC in the University will help in creating new knowledge, creating a research ecosystem for reliable, impactful, and sustained research output and facilitating intellectual growth that would promote quality research and contribute meaningfully towards the goal of a self-reliant India.

C. Vision

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

D. 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.

E. Definition & Terminology

- a. "University" means Rajiv Gandhi University (RGU), Rono-Hills, Doimukh.
- b. "RDC" means Research & Development Cell
- c. "RAC" means Research Advisory Council of RDC at RGU
- d. "Resource" means anything that can be considered a valuable addition for the University such as Human Resource, Financial Resource, and Material Resource.
- e. "Competent Authority" means any person, committee, statutory body to whom powers have been delegated to perform the designated function as per the Acts and Ordinances of RGU and established rules.

F. Objectives

- To create an organizational structure with role-based functions of RDC, formulate Research Policy for the Rajiv Gandhi University, identify thrust areas of research, and form related cluster groups/ frontline teams/consortia of researchers.
- 2. 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.
- 4. 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.
- 5. To have better coordination among other cells/centers dealing with University-Industry Inter Linkage, Incubation, Innovation and Entrepreneurship Development and Intellectual Property Rights (IPR).

- 6. 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 institutions and R&D Labs.
- 8. 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.

G. Functions

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), information management system, research promotion & guidance, Integrity and ethics, capacity building and research monitoring.

1. Governance

An efficient governance mechanism will be set up to ensure functional autonomy, transparency, accountability, adaptability by strengthening interlinkages to create a conducive research environment.

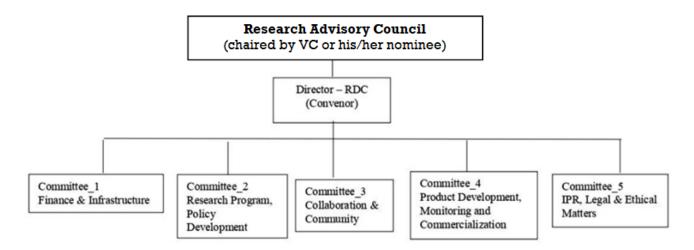
The University will foster the human elements (faculty, staff, scholars, and students), logistics (land, buildings, and facilities), knowledge resources (research equipment, project utilities, and consumables), fund flow, etc. through

a steady, proficient, effective governance (Rules, Norms, and Policies) and financial (Grants and Funds) management.

In this regard, the Research Governance will have an apex body of RDC namely Research Advisory Council (RAC). RAC will be headed by the Vice-Chancellor or his/her nominee but not junior to the Director RDC.

The Director, nominated by Vice-Chancellor among the distinguished researchers from the university, will head various committees to drive the governance.

RDC may form multiple committees to smoothen its functioning with respective committee members nominated by the Director RDC and approved by RAC. The organizational structure of RDC comprising of various committees for specificized functions may be as under:



2. Administration

Established organizational structure (Bodies, Authorities, and Committees) will facilitate planning, implementation, and monitoring of research activities in the University, formulate rules, regulations, and policy frameworks for utilization of facilities and resources at the Rajiv Gandhi University. The activities of RDC 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. RDC will keep a close contact with Innovation Cell of Ministry of Education, Govt. of India to make use of various innovative plans for facilitating the researchers.

3. Research Ecosystem/Collaboration

RDC would play a crucial role in creating a vibrant research ecosystem in the University with an aim to provide meaningful thrust for sustainable research and innovation and promote collaboration between government, universities, research institutes and industries.

In order to make RDC functionality viable, initially, the University will develop a connection with RDCs of already well-known/established HEIs for the research. RDC will act as a facilitator for networking and collaborative research with other national and international institutions working in inter- disciplinary, transdisciplinary, and multidisciplinary research areas.

Strategic partnerships will be established with key industry players, research organizations, institutions, associations, NGOs, government bodies to build a sustainable research ecosystem that leads to consistent quality research outcomes and enhanced productivity. The University will 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. RDC will also try to strengthen resource sharing in content and infrastructure both within the university and among universities, funding agencies, industries, corporates and government.

4. Information Management System

The Rajiv Gandhi University will 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.

The Rajiv Gandhi University will 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.

The Rajiv Gandhi University will 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, ShodhShuddhi, and Shodh Chakra.

The Innovation Management (ISO 56002:2019) will 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 (RDC), the Convener and members of various committees and supporting administrative/technical staff would ensure smooth conduct of the research activities in the Rajiv Gandhi University.

RDC may also engage re-employing or designating superannuated faculty/scientists with exceptional research profiles and eminent faculty as Mentors/ Scientists/ Professor Emeritus on a selective basis to build a resilient research ecosystem. RDC will also try to groom the young talents through distinguished faculties or research scientists.

6. Research Promotion & Guidance

Research promotion activities at the Rajiv Gandhi University will 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 RDC 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.

a. Research Thrust and Clustered Areas

Thrust areas for Research in the Rajiv Gandhi University will 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 the Rajiv Gandhi University to consider establishing a Center of Excellence (CoE) in these identified contemporary areas of research.

Research Clusters and/or Regional Research Consortia will be formed by RDC 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. RDC will try to utilize shared infrastructure and expertise to enable cross- fertilization of ideas and mobilization of resources. Forming Regional Research Consortia will add a

synergistic advantage in finding solutions in inter-disciplinary, trans- disciplinary and multidisciplinary areas.

CoEs' will serve as Incubation Centres to transform innovative ideas into processes and products administered and monitored by the proposed RDC. RDC will also provide an avenue for community talent with prior learning/expertise to engage in research and innovation activities of the Rajiv Gandhi University.

b. Research Incentives and Recognition

RDC will develop a policy focusing on identifying specific intensives for research faculty and develop a unique Research Career ladder for strengthening the mission "Research". Incentives may 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 Rajiv Gandhi University.

c. Technology Development and Business Centered 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

RDC will 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, RDC 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 Rajiv Gandhi University 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

A standard plagiarism check will be mandatorily implemented and the requisite software in this regard will be made accessible to all researchers. In addition, the RDC will sensitize the research community about dubious research and publishing practices and predatory journals. RDC will ensure through its regular initiatives that the 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. Integrity in Research

Research integrity may be defined as active adherence to the ethical principles and professional standards essential for the responsible practice of research. Active adherence means adoption of the principles and practices as a personal credo, not simply accepting them as impositions by rule makers. Ethical principles mean honesty, the golden rule, trustworthiness, and high regard for the scientific record.

"For individuals research integrity is an aspect of moral character and experience. It involves above all a commitment to intellectual honesty and personal responsibility for ones actions and to a range of practices that characterize responsible research conduct." These practices include:

- Honesty and fairness in proposing, performing, and reporting research;
- Accuracy and fairness in representing contributions to research proposals and reports;

- Proficiency and fairness in peer review;
- Collegiality in scientific interactions, communications and sharing of resources;
- Disclosure of conflicts of interest;
- Protection of human subjects in the conduct of research;
- Humane care of animals in the conduct of research; and
- Adherence to the mutual responsibilities of mentors and trainees.

While science encourages vigorous defence of one's ideas and work, ultimately research integrity means examining the data with objectivity and being guided by the results rather than by preconceived notions.

b. Research Ethics

Ethics in science requires researchers to pay due attention to the effects on their subject group, including also animals, as well as to wider society and to minimise harmful effects on their research subjects. Therefore, ensuring that research ethics are abided by serves to put science on track to be trustworthy, reproducible and sustainable. In research ethics conflicts of values and interests between stakeholders are identified, analysed - and proposals for solution of such conflicts are described (in empirical research ethics), or are made and argued for (in normative research ethics). The stakeholders involve other researchers, users, research subjects, including animals, funding agencies as well as society at large, including future generations. Research integrity touches on the ethos of science and is guided by the rules imposed on the research community by itself. As such, research integrity aims at providing a comprehensive framework for scientists as to how to carry out their work within accepted ethical frameworks as well as following good scientific practice.

It is the responsibility of the policymakers to ensure:

- Research Integrity
- Ethics Education as Part of Research Training
- Ethics of Scientific Policy Advice

- Role of Ethics Committees
- Science and Human Rights
- The Role of Science in Supporting Policymakers

8. Capacity Building

RDC 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 the University to attract more research grants under normbased funding, improve its accreditation ranking and enhance its brand image. Regular events such as refresher courses, workshops, trainings/internships, symposia, exposure visits, group discussions and seminars/conferences will be organized for capacity building. RDC would play a pivotal role in creating central R&D facilities with the provisioning of associated training/internship thereon.

9. Research Monitoring

Among the standard functions, the RDC at Rajiv Gandhi University will 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.

In this regard, the University will formulate and adhere to specific quality benchmarks for research to meet the global/ international standards. The proposed RDC will conduct a quality review (SWOC Analysis) or internal evaluation of the research papers and suggest Scopus Indexed, Web of Science (WoS), or UGC-CARE recognized journals for appropriate publications. R&D Cell of the University will also try to ensure that all the Research Labs in the institution fulfill the norms of Good Laboratory Practices (GLP) and Safety (Bio and Chemical) measures, recognized as QIP center and by the National Accreditation Board of Laboratories (NABL).



राजीव गाँधी विश्वविद्यालय Rajiv Gandhi University

रोनो हिल्स, दोइमुख – 791112, अरुणाचल प्रदेश, भारत Rono Hills, Doimukh – 791112, Arunachal Pradesh, INDIA

Website: rgu.ac.in