

RESEARCH POLICY DOCUMENT



Kakatiya University, Warangal

Director
Research and Development Cell
Kakatiya University
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1. Introduction:

1.1 Preamble:

Kakatiya University, Warangal (KUW) was established on August 19th 1976 as fulfilment of the aspirations of the Telangana people for higher education. The **Vision** is "Transforming KUW into a Centre of Excellence Ensuring Quality, Access, Equity and Values" and the **Mission** is "Acquiring commanding heights in the field of Innovation, Knowledge dissemination, Cutting-edge Research, Competency building and Extension activities with Holistic approach for Societal needs".

Since inception of KUW, the founding fathers have spawned, nurtured and supported research culture. They laid a strong foundation for undertaking basic research in science, arts and commerce, pharmacy, engineering and technology. So far several research projects were completed, 12 colleges/departments are UGC-SAP-DRS and 8 are DST-FIST recognized departments. Thousands of research papers were published in national and international journals (with high impact factor). Since 1980s, M.Phil., and Ph.D., program in various departments has been in vogue. Degrees have been awarded.

Another feather in the cap of KUW is that most of the faculty have worked in world class research labs in USA, France, Germany, UK, Australia, Singapore, Italy, etc with the support of Research Funding organizations of Central and State Governments.

KUW is now offering 222 programmes in Engineering, Pharmacy, Law, Computer Science, Business Management, Education, Science, Arts, Commerce, Oriental courses within the University, constituent and affiliated colleges. In addition, the School of Distance Learning and Continuing Education (SDLCE) is offering 54 programs through distance mode.

It also recognized some research centres in Government Colleges in Warangal and Khammam by identifying the eligible faculty as per the UGC guidelines to guide the students for Ph.D. The faculty at other college may continue research to improve their academics further in Career.

1.2 National Education Policy-2020 (NEP-2020):

The National Education Policy-2020 (NEP-2020) envisages the promotion of quality research in Higher Education Institutes. Research, innovation and technology development form the impeccable foundations of Atma Nirbhar Bharat (Self-Reliant India). Amalgamation of research, innovation and technology development is the rock foundation for Atma Nirbhar Bharat (Self-reliant India). The accomplishment of the targets of Atma Nirbhar Bharat is possible by undertaking interdisciplinary, multidisciplinary and transdisciplinary research work.

University Grants Commission, New Delhi (UGC) has formulated guidelines for establishment of Research & Development Cell (RDC) in Higher Education Institutions (HEI) (F.No. 1-5/2021/NEP/DESK-PARL; Dated 14/03/2022). KUW has constituted a committee called "Research Program and Policy Development" for formulating a policy document for development of research culture amongst, students, research scholars and faculty.

1.3 Purpose of the Research Policy Document:

This document provides best practices to promote research, innovation and technology development across various disciplines/departments and establishment of Research and Development Cell (RDC) and committees for effective functioning to address the societal challenges at local and global level. The policies of this document are subject to approval by the competent bodies, authorities and committees from time to time.

1.4 Objectives:

The objectives of the R & D are

1. Inculcate research culture in students, research scholars and academia
2. Identify thrust areas of research and promote interdisciplinary, multidisciplinary and transdisciplinary research
3. Develop state of art technologies and disseminate the research outputs to stakeholders and society at large.
4. Furthering research activities by collaboration and partnership with academic institutions, industry and other R & D companies and also the alumni.
5. Exchange of students and faculties across institutions and R & D labs
6. Accruing research grants/funds from governments, business houses, industry and extramural sources
7. Promote innovative and entrepreneurship skill, enhance capacity building, serve as consultants and acclaim intellectual property rights (IPR)

1.5 Functions:

The functions of RDC are

- (i) Intellectual Capital: Human resource and Knowledge & skill development.
- (ii) Technology Hub: Facilitate research, innovation and technologies for industrial and societal use
- (iii) Financial Resources: Tap research funds and grants from industry and government agencies.

2. Governance:

For smooth and effective functioning, for functional autonomy, transparency accountability, adaptability and to create conducive research ecosystem in Kakatiya University following bodies, authorities and committees are constituted.

2.1 Research Advisory Council (RAC):

The Vice-Chancellor is the head of Research Advisory Council (RAC) that oversees and implements research policies in KUW.

2.2 Research & Development Cell (RDC):

The Directors of RDC (Engineering and Technology/other than E & T) will serve as convenors of R & D programs.

2.3 Committees:

i) Finance and Infrastructure Committee:

The Finance & Infrastructure Development committee will evolve strategies to mobilize funds and create a corpus funds from Government, industry and other funding agencies

ii) Collaboration and Community Development Committee:

The Collaboration and Community Development committee will strive to establish collaborations, partnerships and combined ventures for joint research activities through clustering institutions & organizations and to facilitate the exchange of students, research scholars and faculty

iii) Product Development, Monitoring, Commercialization and Technology Transfer Committee:

The Product Development, Monitoring, Commercialization and Technology Transfer committee will augment technology development, create business-centred facility for enabling industry-institute interface, sponsored or contract research, Venture capital & start-up, technology transfer and product commercialization, innovation, incubation and entrepreneurship

iv) IPR, Legal, Ethical Matters and Institution Bio safety Committee:

The IPR, Legal, Ethical Matters and Institution Biosafety committee will ensure integrity amongst researcher to comply by ethics and ethical codes of research and publishing practices at institutional, national, global levels, and also to educate research community about predatory journals and dubious research publications.

3. Research Ecosystems and Collaboration:

KUW brainstorm a roadmap for R&D programs for various disciplines/departments to develop a vibrant research ecosystem focusing on interdisciplinary, multidisciplinary and transdisciplinary research. This will be possible by taking in consideration the previous impactful research work done and supplementing it with present research strengths through specific investments and leadership and support for societal needs.

KUW will support faculty and young researches with innovative ideas and concepts that are original.

KUW will establish collaborations in R & D with national and international universities (Universities of Wales, UK) and organization in the areas of Pharmaceutical Sciences, Biodiversity, Nanotechnology, Geochemistry, Microbial Technology, Cybersecurity, AI, Biomedical engineering, social anthropology etc.,

Information and Management Systems:

Objectives: KUW will

- Develop a dedicated research portal for R & D that includes a database for research-oriented information, a platform for resource centric information and a repository of Institutional research information.

The database of research-oriented information will encompass information about thrust areas of research, research publications, research fellowships, research projects, foreign visits, collaborations, patents etc.,

The platform for resource centric information will include academia/scientists, centers for research excellence, incubation center instrumentation facilities, digital library, IPR cell, start-ups, internship, student exchange program, aluminic etc.

KUW has signed a MoU with UGC-INFLIBNET. This facility will be used to access and upload research information through Shodh Ganga, Shodh Shuddhi etc.,

Human Resources:

The Directors for RDC, Heads of the 5 committees and the existing technical and administrative staff will promote a vibrant research culture in KUW. The importance of adjunct faculty (superannuated faculty) in helping to build a resilient research ecosystem is being explored.

Research Promotion & Guidance

Objectives: KUW will

- Identify innovative ideas and pragmatic research problems/issues in the emerging and high impact areas of research for local, regional and global spheres.
- Undertake interdisciplinary, multidisciplinary and transdisciplinary research.
- Establish IT parks and incubation centers for transforming innovative ideas into processes and products.
- Establish centers of excellence (CoE) with state of art technologies for contemporary areas of research.
- Start in-house human resource development, organize research internships, inculcate entrepreneurship mind-set.
- Organize scientific deliberations and interactions like seminars & conferences on specific thematic areas, research orientation programs (ROPs) for faculty and workshops for skill development (soft and hard skills) for younger generations.
- Encourage Twinning program for research and development
- Form regional research consortia/society for cross fertilization of ideas and finding solutions to contemporary problems/issues.

4.0. Thrust areas of Research

4.1. Research Centers:

Eight (08) research centers with objective oriented approach in research and development will be set-up in KUW. They are

- Center for Drug Research in Pharmacy (CDRP).
- Center for Molecules and Materials Physics (CMMP).
- Center for Nano-Drug Delivery Systems (CNDDS).
- Center for Ethno Medicine Plants and Biodiversity Conservation through Biotechnology (CEMBC).
- Center for Cyber Security, Robotics and Intelligence systems in Electronica and Communication Engineering (CCSRAI).
- Center for Molecular Biology and Microbial Technology (CMBMT).
- Center for Social and Human Concern (CSHC)
- Center for Geological Science and Mining (CGSM) etc.

4.2 Research Incentives and Recognition:

Research Publications in high impact factor journals are crucial factors in hiring decisions, grant approvals, conference invitations, and their general reputation. KUW will award incentives and recognitions to faculty and research scholar who have made exemplary efforts to publish quality research papers, granted institutional patents, best oral presentation/poster presentation in national and international for a, research-based quality teaching.

4.3 Technology Development and Business:

KUW will lay emphasis on KU-industry interface, will establish IPR Cell, will moot commercialization of product and process, focus on entrepreneurship development and support start-up grants.

HRD, New Delhi sanctioned funds under the component Research, Innovation and Quality Improvement of Rashtriya Uchchatar Shiksha Abhiyan (RUSA) and accordingly the university registered with companies act under section-

8 on the name of "Kakatiya Innovative Foundation" to administer funds for R & D (637/A2/KU/2022/GEN-102; Dated 4/10/2022).

4.4 Finance: KUW

KUW will make substantial budgetary allocation for R & D which includes university research fellowships, seed money and attract research funds from government, industry and alumni

5.0 Integrity and ethics:

Anti-plagiarism cell will ensure integrity and honest of the researcher. Ethics committee and Biosafety committee will ensure that rules and regulation succinctly followed.

6.0 Research monitoring

Objective: RDC will

- Monitor research work
- Optimize resources,
- Review research activities
- Encourage research publications in Scopus indexed journals, WoS, UGC-CARE list journals
- Ensure fulfilment of Good Laboratory Practices (GLP), Biosafety rules and regulations

7.0 Guidelines and Resolutions

- Paper on the focus on interdisciplinary, multidisciplinary and transdisciplinary research.
- Paper on the Consultancy services
- Paper on institutional ethics and research
- Annexure of RUSA funds
- Orders on appointment of Directors, Committees, Heads of Centers of excellence etc.

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