

## **Research & Development Cell**



# **KN UNIVERSITY**

**(Established Under section 2(f) of the UGC Act,1956)**

**S.G. Highway, Gota, Ahmedabad, Gujarat**

**Website: [www.knu.edu.in](http://www.knu.edu.in)**

# **UNIVERSITY**



# **KN University**

## **Research & Development Cell**

### **1. Preamble**

Research and development are one of the key vision and mission of the KN University (KNU). Research is positioned as an essential pillar for knowledge creation, directly contributing to the socio-technical, economic well-being of students and overall societal progression. KNU aims to become a research centric university, underscoring the importance of research in the academic landscape. The policy is introduced to provide a comprehensive framework that promotes and supports the research ecosystem within the university. Moreover, research activities shall flourish in an environment of academic freedom implying that the students shall have freedom of inquiry, inquisitiveness, and the right to disseminate the findings there of. The academic freedom environment shall include the responsibility to ensure that all research is conducted with honesty, integrity, accountability, and safety. The primary focus of research is on investigating truth and enhancing knowledge for the benefit of society and the nation. The adoption of the policy is expected to contribute to achieving targeted research outputs, including patents. The policy serves as a roadmap to create an environment where research can flourish and contribute meaningfully to the academic and societal progress envisioned by KNU.

### **2. Vision**

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

### **3. 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.

### **4. Scope**

The policy is intended for all the academic, research and supporting staff (permanent or temporary), and students of KN University engaged in teaching-learning and R & D activities.



## 5. Policy Statement

KN University (KNU) Ahmedabad is committed to the pursuit of excellence in research and aims to achieve international recognition through inter-departmental and inter-institutional collaborative research program in various streams like, Business and Management, Computer Sciences, Liberal Studies, Pharmacy, etc. KNU shall ensure that research in all domains grows exponentially, keeping the ethical norms and research standards intact. It is equally important to ensure that the products and outcomes of the research are appropriately disseminated to reach the widest possible audience at both national and global levels. This policy provides a set of guidelines for conduct of research at all levels and is applicable to all faculties and students of the University who may be involved in any form of research activity.

## 6. Key Objective

- a) The primary aim of this policy document is to cultivate, promote and strengthen research and scholarly activities among the faculty and the students of the University, and to enhance the quality of R & D activity undertaken by them.
- b) To integrate research activities with the thrust areas of research of the university which are drawn keeping in view the local, regional, national, and international needs, present and future and sustainable development goals (SDGs) of united nations.
- c) To create, strengthen and maintain state-of-the-art research infrastructure to facilitate cutting-edge research activity.
- d) To create an enabling academic freedom environment within university to foster intensive research culture as well as provide required support through research framework and guidelines.
- e) To augment research funding through extramural research grants.
- f) To nurture an environment of undertaking socially useful research with potential for commercialization.
- g) To provide research seed money to freshly recruited young faculty.
- h) To incentivize the best performers in research and innovation.
- i) To translate new knowledge, technology, innovations emerging out of the research at university into processes, products, and services for benefit of the society.
- j) To ensure effective dissemination of research outcomes in the form of research publications in quality journals, UGC-CARE list, indexed in Scopus/Web of Science and/or with impact factor.
- k) To protect Intellectual Property Right (IPR) in the form of patent, copyright etc., arising



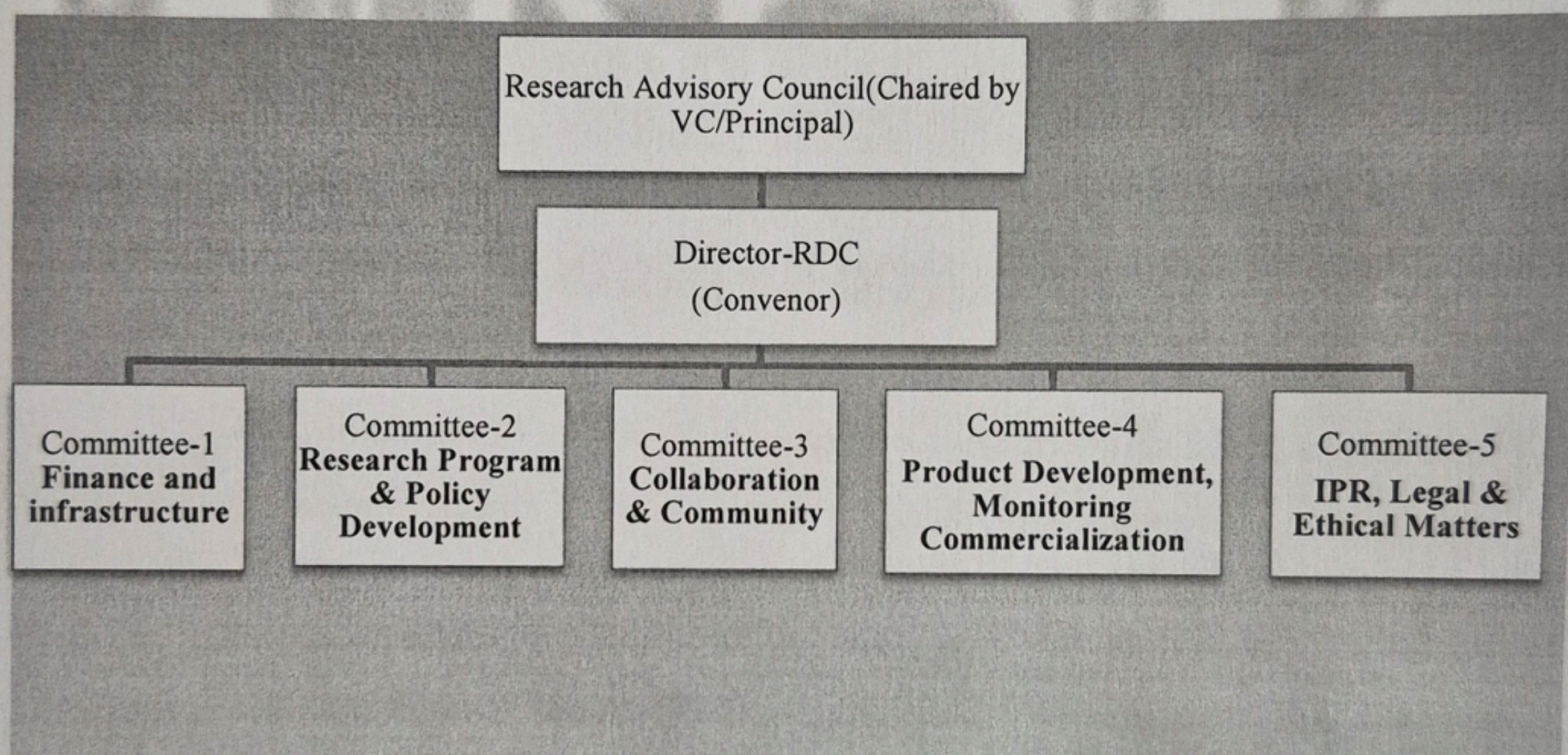
out of the research conducted by the university fraternity.

## 7 Research & Development Cell

The establishment of the Research and Development Cell (RDC) as a central coordinating department within the university is a significant initiative to enhance research and development (R&D) activities. Here's an overview of the key points related to the RDC's role as outlined

### 7.1 The Governing Structure of RDC

The Research Development Cell governs by the foremost research body of the University shall frame the research policies and research programs. The RDC shall review as well as supervise the formulation and execution of research proposals by teachers and/or scholars associated with the University. The organizational structure of RDC comprising of various committees for specified functions may be as under.



#### a) Research Advisory Council:

The research governance will have a Research Advisory Council (RAC) headed by the VC/Principal or his/her nominee as the apex body RDC.

#### b) The Director- RDC:

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

#### c) Multiple Committees of RDC:

The RDC may form multiple committees to smoothen its functioning with respective committee members nominated by the Director.

#### Committee 1: Finance and infrastructure

- The Finance and Infrastructure Committee provides an assurance to board of members of RDC on the development and delivery of key elements to facilitate research. It is



responsible for overseeing the development and implementation of the financial, estates and digital infrastructure objectives of the RDC. Its aim is to ensure that the RDC is operating in line with strategic objectives of the University.

#### **Committee 2: Research Program & Policy Development**

- This committee provides impetus to the research and development activities and to provide guidance, directions to the research community within the University. It has representation from all departments. The committee is a vibrant entity to discuss and propose R&D policy issues. The members highlight shortcomings in procedural matters and thus sharpen the performance of the RDC.

#### **Committee 3: Collaboration & Community**

- The main responsibility of this committee is to establish collaboration with other universities, public and private sectors and identify R&D projects including consultancy services which could be undertaken at the institution. This committee will foster collaborations for mutual benefits and to maximize industrial connectivity

#### **Committee 4: Product Development, Monitoring Commercialization**

- The committee is a hub for strategic partnerships/ collaborations, industry-institute interface, sponsored or contract research, new knowledge generation, technology transfer, and commercialization of research to facilitate innovation, incubation, entrepreneurship and start-up ventures.

#### **Committee 5: IPR, Legal & Ethical Matters**

- This committee will function with the prime focus of enabling researchers to identify, generate and protect their intellectual property (IP) through filing procedures for rights like patents, copyrights, trademarks, designs, etc. This committee envisions creating an environment for acquiring new knowledge through innovation, developing an attitude of prudent IP management practices and promoting an IPR culture compatible with the educational mission of the academic institution. This committee also provide advice and guidance to the academic community on all matters pertaining to academic research ethics.

#### **7.2 Details of RAC and RDC Members:**

- **Research Advisory Council (RAC)**

Sr. No	Name	Designation	Email/Contact Details
1	Prof. (Dr).Vijay Kumar Srivastav	Vice-Chancellor	vc@knu.edu.in
2	Dr. Apurv Raval	Dean-Academics	dean.academics@knu.edu.in



3	Dr. Deepak Solanki	Research Director	director.research@knu.edu.in/9016512996
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• **Research and Developed Cell Members (RDC):**

Sr. No.	Head	Name	Email /Contact Details
1	Convener	Dr. Deepak Solanki	phd@knu.edu.in/9016512996
2	Finance & Infrastructure	Mr. Ashok Roondhe	ashok.adm@knu.edu.in/97730 69858
3	Research Program & Policy Development	Dr. Prashant Pandya	prashant.smcs@knu.edu.in/9428807739
4	Collaboration & Community	Mr. Adarsh Singh Bhadoria	adarsh.sop@knu.edu.in/96249 15169
5	Product Development, Monitoring and Commercialization	Mr. Premal Patel	premal.smcs@knu.edu.in/9909717417
6	IPR, Legal & Ethical Matters	Mr. Viral Gajjar	viral.smcs@knu.edu.in/9924379809

**8 Role and Purpose of the RDC**

a) **Central Coordinating Department:**

The RDC serves as the central coordinating department within the university. It is designated as the custodian of all Research & Development activities within the university, signifying its responsibility for overseeing and managing these activities.

b) **Promoting R&D:**

The RDC plays a pivotal role in promoting and fostering a culture of research and development throughout the university.

c) **Advisory and Coordinating Functions:**

The RDC engages in advisory functions, providing guidance and support to researchers across the university. It takes on a coordinating role to ensure the proper management and execution of the university's R&D policy.

d) **Supporting Researchers/Students/Faculty:**

RDC, actively engaging with researchers, the Cell offers support and resources to enhance the quality and impact of their research endeavors. All proposals for financial assistance like proposals for travelling for paper presentation, invited expert talks, and incentives for publishing research papers, books/book chapters, for patent application filing and examination requests, or awards (Research excellence/promotion awards) should be addressed to RDC. Similarly, RDC shall process all such applications as per



the laid down procedures.

**e) Execution of R&D Policy:**

The RDC is responsible for executing and implementing the university's R&D policy effectively. It ensures those researchers/students/faculty are aligned with the policy guidelines and objectives.

**f) Management Oversight:**

The RDC oversees the management of various R&D projects and activities within the university, working to streamline processes and enhance overall efficiency.

**g) Facilitating Collaboration:**

Facilitating collaboration among researchers, departments, and external partners is a key function of the RDC, promoting interdisciplinary research and knowledge exchange.

**h) Resource Allocation and Utilization:**

The RDC plays a role in the allocation and utilization of resources to support R&D projects and initiatives effectively. Likewise, all research proposal/project/patent applications shall be processed by the inventors/researchers after obtaining necessary advice from RDC.

**i) Monitoring and Evaluation:**

Engaging in ongoing monitoring and evaluation of R&D activities, the RDC ensures alignment with the university's goals and maintains high standards.

**j) Contribution to R&D Policy Implementation:**

The RDC actively contributes to the successful implementation of the university's R&D policy by providing guidance and fostering cooperation among researchers.

## **9 Research and Development Program**

### **9.1 Research at UG/PG level**

There is a limited scope of research at UG level in most of the disciplines except for those disciplines which have 'Project' work in the final year of the UG programs. Project is normally a part of teaching-learning process for these students but sometimes an observation may lead to some new finding. However, PG courses in many disciplines have a project work for full two semesters (one year) where in the students undertake Research & Development work. This project work need to be taken more seriously so that it can lead to some innovations/development of new technology, but at least should provide some quality publications. The University has a well defined policy on research paper publication resulting out of each dissertation, which shall be adhered to. Best PG dissertation awards are given to the selected candidates from individual faculties.



## 9.2 Research at UG/PG level

Ph.D. degree program: It is understood without saying that Ph.D. is a purely research oriented program. 'Research' can be defined in different ways but is nothing but unraveling the mystery of nature, creating new knowledge/technology or redefining the existing knowledge. It also includes the use of existing knowledge for the development of new devices, products, processes or improved materials. But it excludes standard routine activities like data collection, preparation of teaching materials, routine testing, or other professional activities devoid of basic tenets of research components. Research findings are always open to scrutiny or formal assessment by subject experts. KNU has a large pool of PG and Ph.D. scholars who need to channelize their energy and efforts by undertaking quality research work which should be applicable to the society and for nation building. Apart from the self-financed Ph.D. scholars, the University supports the Ph.D. degree seeking scholars financially by extending financial assistance falling under the following four categories:

- a. Ph.D. Scholarship/Fellowship is provided to some selected applicants registered in the University as full time research scholars.
- b. JRF/SRF Fellowship on UGC pattern is provided to a limited number of fulltime Ph.D. registered candidates in the University who are NET/GATE/GPAT qualified.
- c. The University teachers registered for Ph.D. in the University can avail intramural research project assistance on the basis of merit for pursuing their Ph.D. degree programs.
- d. Ph.D. scholars are provided financial support to purchase chemicals/glassware/small equipments, testing/analysis charges etc. for their research work.
- e. Fee-waiver scheme (for a limited number) is available to faculty members of KN University who are registered for their Ph.D. programme in the KNU.

## 9.3 Research by Faculty members:

Faculty members are supposed to involve themselves in R & D activities along with their normal academic and administrative duties. Faculty members are encouraged to protect the intellectual property generated by their R & D activities undertaken in the University using their intellectual capability by applying for patenting of their innovations. They should also try to disseminate their research findings by publishing in peer-reviewed journals of high repute and by presenting their work in National/International conferences. Faculty members are also encouraged to upgrade



their knowledge by attending QIPs/SDPs or workshops. Faculty members are encouraged to share their expertise in delivering invited expert lectures on different platforms in and outside the University. For encouraging the faculty for R & D activities, faculty members have the options for applying for the following research schemes:

**9.4 Extramural projects:** Due to the constraints of financial resources, the University can fund research proposals in a limited manner. It is expected that faculty members would strive for research funding from extramural sources by applying to various government funding agencies like MHRD, AICTE, UGC, DST, DBT, ICMR, CSIR, AYUSH, DAE, GUJCOST and GSBTM or private funding agencies/International funding agencies. Incentives are given to faculty members for bringing projects from externally funding agencies.

## **10 Responsibilities of Researchers**

### **10.1 Responsibilities of Faculty to Both Staff and Students**

Faculty members must be aware of their obligations to staff and students working as part of the research team. It is particularly important that at least annually, each faculty member should review intellectual and tangible property rights and responsibilities (for management of data in all media, for proper authorship attribution, etc.), with all members of the group under his or her direction, including staff, students, postdocs, and visiting scholars.

Each member has the right to know who is sponsoring the research and supporting his or her salary or stipend because KNU believes in academic transparency. The University is committed to demonstrate support and appreciation for its research staff. To that end, faculty members are encouraged to provide staff development opportunities (such as FDPs and special Training Courses or Workshops) and, if possible, a mentor relationship for those in their research group

### **10.2 Health & Safety**

Each faculty member is responsible for advising and helping members of his or her team in appropriate health, insurance and safety procedures that must be taken to work in a particular area of research, and for management of those procedures in his or her office or laboratory, studio or other workplaces.

Principal Investigators (PI) are directly responsible to assure the periodic inspection of lab facilities, take corrective measures, if required, and to cooperate in any inspections by safety personnel or by external agencies. Faculty members also need to ensure that approved research protocols for the use of human and animal subjects in research are obtained and



followed.

### **10.3 PI's Responsibilities to Sponsors**

Although the legal agreement funding a sponsored project is between the sponsor or sponsoring/funding agency and the KNU, the overall responsibility for management of a particular project within funding limitations rests with the PI. Funds must be spent judiciously to remain within the restrictions of the contract or grant. If any overdraft should occur, or change of head is needed, it is the responsibility of the PI to get it approved both by within the administration and also by the sponsoring agencies.

### **10.4 PI's Responsibility for Research Equipment**

The control, upkeep and record-keeping of both KNU funded and Government owned equipment is mandatory under the university rules as well as under the externally funded contracts and grants. PIs are responsible for securing necessary approvals for the purchase of the equipment, proper tagging, and maintaining inventory, utilization of equipment and peripherals, and disposal once the equipment becomes either obsolete or dysfunctional and irreparable

### **10.5 Preparation of Proposals and Application for Extensions or Continuation**

The cost of proposal preparation activities in support of new directions in research or for continuation of the projects could be charged to existing or sponsored projects. Department Head or Faculty Dean (college-wise) must ensure that some research related funds could be made available to create new proposals. It could perhaps come from the earlier project overheads deducted by the University. The cost of proposal preparation efforts for continuing research is appropriately charged to current projects.

**11 Ethical values and legal implications:** KN University respects Indian traditions and professional ethics. It expects all its researchers to take into consideration the ethical and legal implications of their research and be aware of their responsibilities to their profession, regulatory/sponsoring agencies, society and the environment.

**12 Ethics and Good Research Practices:** In order to conduct a responsible and quality R & D activity, the following attributes are important to be imbibed by any researcher:

- a. **Honesty:** It means honestly conducting the procedures/methods, collecting data, reporting results, publication status in scientific communications, i.e. not indulging in scientific misconduct, and not deceiving colleagues, funding agencies or public at large.
- b. **Objectivity:** It is about avoiding bias in experimental design, data analysis, data interpretation, paper review, personnel decisions and other aspects of research where



objectivity is required.

- c. **Integrity:** It is about keeping promises and agreements, acting with sincerity and presenting data in full, precisely, fairly and frankly manner.
  - d. **Carefulness:** It is avoiding careless errors, examining one's own or ones peers' work carefully and critically and keeping good records of research activities.
  - e. **Openness:** It is about accepting open criticism and new ideas.
  - f. **Respect for intellectual property:** Give credit where credit is due to all contributors, honor patents, copyright and other forms of IPR, and never plagiarize.
  - g. **Confidentiality:** Maintain confidentiality of records for the sponsors, and of the records of the patients/human volunteers.
  - h. **Responsibility:** Be responsible for the research outcome regarding:
    - **Responsible publications:** Publish in order to advance research, avoid duplicative and wasteful research.
    - **Responsible mentoring:** Help, educate, mentor and advise students regarding their research.
    - **Social responsibility:** Strive to promote social goodness and prevent/mitigate social harms.
  - i. **Respect colleagues in collaborative work:** Foster scientific collaboration by maintaining an atmosphere of openness, mutual assistance and trust.
  - j. **Nondiscrimination:** Avoid discrimination against colleagues/students/research subjects on the basis of gender, race, religion or any other factor not related to the scientific competence.
  - k. **Professionalism:** Maintain and improve professional competence and expertise through learning and upgrading your knowledge by keeping abreast of scientific developments in your field of interest.
  - l. **Human rights protection:** Respect human dignity, privacy and autonomy, maximize benefits and minimize harms.
  - m. **Animal care:** Give proper respect and care to animals. Do not conduct poorly designed/unnecessary animal experiments.
  - n. **Legality:** Know and obey relevant institutional laws and policies, and the laws of the land.
- 13 Recognizing And Showcasing The R & D Output Of The Faculty Members**
- **Publication in journals:** Faculty members are encouraged to publish their research work in reputed International/National journals with high impact factors (SCI). Preference shall be given to publication of research articles in journals publishing the articles free of cost.



- **IPR protection:** If the research work has potential for industrial application then the faculty members shall not disclose their findings on any public platform by publishing in journals or by presenting the work in conferences, public display or in any other manner, before filing a patent application/other forms of IPR protection.
- **Writing of books:** Faculty members are also encouraged to disseminate their knowledge/expertise by writing books or book chapters in edited books, and publishing them with publishers of repute.
- **Research excellence/promotion awards:** The University has instituted Research Excellence Awards and Research Promotion Awards for the faculty and the students respectively, for recognizing and honoring good researchers in the University. The awards shall be given away every year (calendar).
- **Expert lecture delivering/attending training programs/paper presentation:** In order to showcase and disseminate their expertise the faculty members are encouraged to deliver invited expert lectures in and outside the University and present their research work in conferences. Faculty members are also encouraged to upgrade and refine their professional knowledge and skills by attending QIPs/SDPs/workshops organized by other institutions.

#### **14 Promoting and Incentivizing Research**

The faculty members are encouraged to undertake and execute research projects, file patents, publish their research outcome in good quality research journals and participate in paper presentations, QIP/FDPs/workshops and other similar activities. Different schemes/incentives\* are made available for this purpose as mentioned below:

(\*All schemes/Incentives/assistance are subject to changes from time to time and following due scrutiny by expert committee)

##### **14.1 Promoting Patent filing:**

Research involving industrial application is encouraged to be protected by patent filing. The full expenditure for patent filing shall be borne by the University. Apart from this, the following incentives\* shall be offered to the inventors.

- i) Patent application filing with full specifications: Rs. 2000/-
- ii) Grant of patent : Rs. 5000/-

\*The incentive shall be offered to the mentor (it may be distributed among other collaborating inventors. All assistance are subject to changes from time to time and following due scrutiny by expert committee).



#### 14.2 Promoting Research Publication:

Publication of research/review articles or letter to the editor in peer reviewed journals is a recognized scale for measuring the outcome of R & D activity. Incentives are offered to the authors of publications as given below.

a:	UGC/NAAC listed journals	:- Rs. 2000/-
b:	SCOPUS indexed/listed journals (without impact factor)	:- Rs. 2500/-
c:	Web of Science/ SCOPUS/SCI, ESCI/PubMed Journals having SCI impact factor), with impact factor less than 2.5	:- Rs. 3500/-
d:	Journals with SCI Impact Factor (IF) >2.5 (with every increase in IF of one, there would be enhancement of Rs. 1000/- with a maximum of Rs. 10,000/-)	:- From Rs. 5000/- to Rs. 10,000/-
e:	Additional Rs. 1000/- per research paper shall be given beyond publication of two research papers (this is applicable for the two research papers published in journals listed in SCI/SCOPUS/Web of Science) in a year. For research papers in other journals, this augmentation shall not be done.	