



Promotion of Research and Innovation at AKS University

Satna 485001 (M.P.) from January 2023

Establishment of Research & Development Cell (RDC)

Introduction

According to National Education Policy 2020 Research and Innovation is a co-requisite for outstanding quality education and development. AKS University envisages transforming into multidisciplinary research and innovation university by putting more emphasis on research and innovation along with out of box thinking and creativity. We believe and trust that education and research can not be separated from each other. Moreover, we also believe and trust that research start from undergraduate level which is further extended to post graduate level and finally at doctoral and post doctoral level. In order to promote the robust research and innovation culture, we have started following initiatives from January 2023 as a part of our research and innovation policy.

1. Establishment of Research & Development Cell (RDC) :

The Cell is established as per UGC guideline published in March 2022. The objectives of RDC are as following

- i. To create and develop organizational structure with role assigned functions at RDC and formulate a Research Policy for AKS University, identify trust areas of research, from specific cluster groups and develop research team in each faculty.
- ii. To promote research/researchers and innovators from undergraduate, post graduate, Ph.D., Post doctorate level as well as professors from different faculties/scholar.
- iii. Identify and develop potential collaborations from various other national and international universities, national research institutes of Govt of India, industries from Madhya Pradesh and across the country and alumni for cooperation and developing synergistic partnership.
- iv. Provide enabling provisions in research and innovation policy from recruitment of research, personnel, procurement of equipments, financial management, autonomy to the principal investigator and disseminate research outcome to respective stakeholder, public and government.
- v. To act as a liaison between researchers and all funding agencies of Govt. of India. Extend guidance in developing the ideas for research and accordingly preparation and submission of project proposal in time as per the guideline of respective funding agencies. Provide all administrative help at post sanctioning at the project grant as per timeline
- vi. To develop better coordination of RDC with following Cells at University
 - University-Industry Cell
 - Incubation, Innovation, and Entrepreneurship Development Cell

- Intellectual Property Rights (IPR) Cell
- vii. To develop AKS University “Research Information System” (RIS) for sharing the following :

- The Status of ongoing research projects
 - The Status of completed research projects
 - Expertise of faculty
 - Resources at each departments
 - Effective use of ICT for preparing database of university in house experts to provide industrial consultancy and services.
- viii. To utilize the services of superannuated active faculty/scientists for
- In building of research capacity of talented young students.
 - Promote mobility of researchers across various universities, research institutes and R & D laboratories.
- ix. To serve as nodal centre for developing new ideas and conceptualization of research topics and themes by following :
- Organization of workshops
 - Organization of training programs
 - Ensure the integrity and ethical practices in research and innovation activities are strictly followed
 - Clearance of bioethical committees for projects.
- x. Overall the RDC would help in creating/establishing a research ecosystem for reliable, impact full and sustained research output

2. Governance :

We would like to develop an efficient governance mechanism which ensures

- Functional autonomy
- Transparency
- Accountability
- Adoptability

by strengthening the interlinkages among above points and create a conducive research environment. RDC would faster the faculty, staff, scholars and students, logistics, knowledge resources which include research equipments, project utilities, consumable and grants and funds management. We would select experienced researchers and establish an affective and robust research governance in RDC.

3. Research Advisory Council :

The research Governance will have a Research Advisory Council (RAC). The composition of RAC is as follows :

Chairman	:	Vice-Chancellor
Co-Chairman	:	Pro-Vice-Chancellor (Dev)
Director	:	Convener
(nominated by VC)		
Committee 1	:	Finance and Infrastructure
Committee 2	:	Research Program and Policy Development
Committee 3	:	Collaboration & Community
Committee 4	:	Product Development Monitoring and Commercialization
Committee 5	:	IPR, Legal & Ethical Matters

Committee 6 : Experts from Industry
 Secretary : Prof. Kamlesh Choure

4. Administration :

- i. AKS University bodies, authorities and committees will facilitate planning, implementation and monitoring of research activities by formulating rules, regulations and policy frameworks for utilization of all facilities and resources.
- ii. A single window operational system will be employed for the effective administration.
- iii. The activities of the RDC will be mentored and monitored by various committees for devising
 - Research Model
 - Technology Appraisal
 - Foresight review functions
 - mediating sectoral R & D progress
 - IPR protection
- iv. RDC should keep a close contact with Ministry of Education-Innovation Cell (MIC) of Govt. of India, New Delhi to make use of various innovative plans for facilitating the researchers of AKS University, Satna.
 - Ministry of Education Govt. of India has established an 'Innovation Cell' with a purpose of systematically fostering the culture of Innovation in all Higher Education Institutions. (HEI) across the country.
 - MIC will focus on creating complete ecosystem which will foster the culture of innovation across all educational institutes such as
 - Idea generation to pre-incubation
 - Incubation
 - Develop successful startups
 - MIC will also work on designing ranking system to identify institutions in the forefront of Innovation.
 - Mandate of MIC would be work closely with our higher education institutions (HEIs) to encourage
 - The creative energy of our students population to work on new ideas and innovation
 - Promote them to create start-ups
 - Promote them to start entrepreneurial ventures
 - **Institution's Innovation Council (IIC) :**
 AKS University would like to establish Institution Innovation Council (IIC) as per the guidelines of Ministry of Education (MoE) Govt. of India, New Delhi. We would like to strengthen the IIC at AKS University.
 - Innovation Ambassador
 - Impact lecture series
 - On time session
 - National innovation contest
 - Mentor mentee program

AKS University would like to take active part in ARIIA ranking of Universities.

- IIC would also initiate following activities
 - i. Smart India Hackathon
 - ii. Atal Ranking of Institutions on Innovation achievements (ARIIA)
 - iii. School Innovation Council
 - iv. Kalam program for IP literacy and awareness
 - v. Yukti
 - vi. National Innovation and startup policy (NISIP)
 - vii. School Innovation Ambassador

5. **Research Ecosystem/Collaboration**

:

- AKS University wish to establish a vibrant research ecosystem which aims to provide meaningful thrust for sustainable research and innovation.
- It also aims to promote collaboration between government universities, research institute and industries.
- AKS would like to build a sustainable research ecosystem that leads to consistent quality research outcome and enhanced productivity.
- RDC of AKS University will act as a facilitator for networking and collaborative research with various national and international institutions working in following levels of research such as :
 - Inter-disciplinary
 - Trans-disciplinary
 - Multi-disciplinary

6. **Functions of RDC :**

Administrative structure of RDC will reach out to various organizations to develop strategic partnership as follow :

- i. Key industries
 - ii. Research organizations
 - iii. Universities
 - iv. Government bodies at state and central level
 - v. National Academic and Professional associations
 - vi. NGOs
 - vii. National and International Institutions etc.
- AKS University would like to establish collaborations, teams/consortia, partnership and combined ventures for joint research activities with various universities, research institutes and industries so as to facilitate the exchange of faculty, research scholars and students.
 - AKS University would strengthen resource sharing in content as well as infrastructure both within the universities, among universities, funding agencies, industries, corporate state and central government.

7. **Research Information Management System (RIMS) :**

AKS University would like to play a key role in the advancement of research and innovation as two distinct entities through the establishment of Research Information System (RIMS) for the benefit of faculty, students, industry and other stakeholder.

- i. RIMS would collect and manage research oriented information, databases, publications, research projects, fellowships, collaborations, patent, innovations, and thrust areas which are aligned with AKS University. Research policies.
- ii. RIMS would also provide a platform for assessing resources centric information pertaining to human capital, expertise, state of art research laboratories and sophisticated instrumentation facility, digital library and information, Intellectual Property facilitation, quantitative methods and data analysis, analytical and consultancy services.
- iii. RIMS can provide a centralized and integrated database and manage issue related to
- iv. Radioactive-safety approval clearance for use and disposal of biological, chemical and radioactive hazardous materials.
- v. Protective equipment measures
- vi. Surveillance of staff
- vii. Appropriate trainings/workshops etc.
- viii. AKS University would like to create a portal for RIMS and University repository and sign a MoU with UGC INFLIBNET to across and upload the research information through.
 - Shodh Ganga
 - Shodh Gangotri
 - Shodh Sindhu
 - Shodh Shuddi
 - Shodh Chakra
- ix. AKS University would like to implement the innovation management (ISO56002:2019) as a common framework to develop and deploye innovation capabilities, evaluate performance and achieve the intended outcomes of global standards.

8. Research Promotion and Guidance :

Research promotion activities of RDC of AKS University would like to align with the mandates of various national missions of Govt. of India such as

- i. Sustainable Development Goals (SDGs)
- ii. Startup India. This will lead to self
- iii. Reliant India that is Atma Nirbhar Bharat.
- iv. Research guidance from RDC will aim to encourage all faculties to conceive ideasthrough enhanced industry academia interactions.
- v. Prepare research proposals for funding from various agencies.
- vi. Organize capacity building programs through research methodology and research techniques.
- vii. Organize specific theme based workshops
- viii. Research internships for students, scholars, and faculties
- ix. Active participations in process of ideation and innovative research in emerging frontier areas.

9. Research Thrust and Cluster Areas :

- i. AKS University would identify the thrust areas of research with the understanding of societal needs and the availability of key resources including in house human resources faculty research competencies and support systems. This would help AKS

University to consider establishing Centre of Excellence (CoE) in these identified contemporary areas of research.

- ii. Research clusters and/or regional research consortia prompted/formed by RDC to bring all researchers, faculty, students, scholars and post-doctoral fellows for joint high value interdisciplinary and transdisciplinary research projects to avail national and international funding opportunities.
- iii. Shared infrastructure and expertise will enable cross fertilization of ideas and mobilization of resources.
- iv. From regional research consortia for synergistic advantage in funding solutions in the interdisciplinary-trans-disciplinary and multidisciplinary areas.
- v. CoE can serve as Incubation Centre to transform innovative ideas into processes and produced administered and monitored by the proposal of RDC.
- vi. RDC could also provide an avenue for community talent with prior learning/expertise to engage in research and innovation activities of AKS University.

10. Research Incentives and Recognitions :

- i. Incentives play a significant role in triggering and catalyzing research interest among scholars and faculties.
- ii. Incentivizing quality publications and patents by students and faculty will have an enduring positive impact.
- iii. Start Excellence Awards for accomplishment/achievements in the form of impactful quality research and/or research based teaching will further stimulate and invigorate the research and innovation activities at the AKS University.
- iv. RDC should develop a policy focusing on identifying specific intensives for research faculty and develop a unique research career ladder for strengthening the mission of “Research”.

11. Technology Development and Business Centered facility :

This will be a hub for

- i. Strategic partnership/collaborations
- ii. Industry-University interface
- iii. Sponsored or contact research and new knowledge generation
- iv. IPR and Patent Services
- v. Venture Capital
- vi. Trade Market portfolio
- vii. Technology transfer
- viii. Commercialization of research to facilitate innovation, incubation, entrepreneurship and startup ventures.

12. Finance

- i. RDC can facilitate resource mobilization
- ii. Create a corpus for research and development from Government, industry and other funding agencies.
- iii. Channelize corporate social responsibilities (CSR) funds exclusively for sustainanceand furtherance of research activities.
- iv. Explore venture capitalists and angel investors for funding in research andinnovation
- v. Liaise with funding agencies

- vi. Track funding opportunities from industrial consortia
- vii. Make provision for research in the annual budget
- viii. The corpus created for research could also support the seed funding for freshly recruited faculty for developing research facilities, publications and patenting.

13. Integrity and Ethics :

- i. RDC should organize seminars, workshops on integrity and ethics among faculty and students.
- ii. Develop ethical code of research and publishing practices at University, national and global level.
- iii. A standard plagiarism check should be mandatorily implemented in all faculties of University and requisite software about this made accessible to all researchers.
- iv. RDC will sensitize the entire research community about dubious research, publishing practices and predatory journals.

14. Capacity Building :

- i. RDC will play most important role in building the capacity of faculty and students to undertake research problems in line with latest advances in the diverse disciplines to push the boundaries of knowledge through publications and contribute to the technological developments which are relevant to the society.
- ii. Procure more research grants from various funding agencies.
- iii. Improve its accreditation ranking.
- iv. Enhance brand image of University.
- v. Regularly organize refresher courses, workshop, training programs, internships, group discussions, and seminars and conferences for capacity building.
- vi. RDC would play a pivotal role in creating central R & D facilities with the provision of associated training and internships.

15. Research Monitoring :

- i. AKS University would like to develop a policy framework to nurture the culture of quality research by strictly adhering to ethical practices.
- ii. RDC of AKS University will monitor and oversee research progress as well as
 - Coordinate program
 - Manage and facilitate optimizing resources
 - Timely review of research activities

For completion of the projects as per schedule.

- iii. RDC would conduct a quality review in terms of SWOC analysis of University and or do internal evaluation of the research papers and suggest Scopus Indexed web of science (WoS) on UGC-CARE recognized journals for appropriate publications.
- iv. Research and Development Cell of AKS University shall ensure that all research laboratories fulfill the norms of Good Laboratory Practices (GLP) and biological and chemical safety measures recognized as QIP Centre and by the National Accreditation Board of Laboratories (NABL)

We at AKS University assure to implement the policy of Research and Development Cell for promotion of Research and Innovation in all faculties and contribute to science.

Reference:

Guideline for establishment of Research and Development Cell in Higher Education
Insitutions.

University Grants Commission (UGC) New Delhi, March 2022