RESEARCH, INNOVATION, DISSEMINATION AND DEVELOPMENT POLICIES

1. Introduction

1.1. Scope/ Applicability of the Policy

The Research Policy on its formal approval by Board of Management and ratification by Academic Council shall drive research, innovation, dissemination, and development in all constituent schools of the university and shall be applicable to all faculty, staff and students involved in any form of research, innovation, dissemination, and development activities.

1.2. Policy Statement

CVRUK is committed to be a Research and Innovation Driven University. The aim of CVRUK is to see that it becomes a torch bearer in the region, where research, innovation, its dissemination, and development in the nascent stage. The CVRUK aspires to become a knowledge hub in real time measures through education, research, innovation, dissemination, and development in its focused area.

CVRUK aspires to attain this goal and deploy double edge strategy of Participatory Action Research (PAR) and Participatory Technology Development in all domains/ schools of studies addressing actional issues in a transparent, responsible, and ethical manner for accumulation, dissemination, adoption, adaptation and development of new knowledge and development of appropriate protocols to access Indigenous Technical Knowledge (ITK), appropriate technologies, processes, and products. CVRUK places highest significance to ensure that the outcomes of such research, innovation are disseminated to reach the widest possible audience at both regional, national, and global levels. This policy provides set – off the research protocols applicable to academic and research employees of the CVRUK and all students both regular or part – time, as well as private be involved in any form of research activity.

1.3. Rationale

1.3.1. CVRUK considers creation, accumulation, appropriate and dissemination of new information, sets pathways to convert the rich and vivid information into practice, convert it into tacit and explicit knowledge. The policy intends to enable conduct the researchers as students to engage in PAR and PTD, use the opportunities and inculcate the habit of inquisitiveness among its students. This demands conducive and amenable work culture to encourage research, innovation, dissemination and development among faculty, scholars, and students and it protects, provides, and preserves the intellectual fairness equity, equality, dignity, accountability and responsibility towards communities, collaborators, individuals, institutions and CVRUK.

1.3.2. CVRUK Research, innovation, dissemination, and development policy intends to assure that individual scholars are provided with appropriate opportunities and freedom to choose the researchable issues, in the discipline of their choice, with significant inter-disciplinary perspectives and end users in their minds. The research scholars at any appropriate level exercise

freedom to form and articulate opinions, theories, explanations, findings in research reporting with due diligence and independent declaration of ownership and authority.

1.3.3. The policy assures that all outcome reports, research proceedings, research papers, publications, whether e – content or otherwise in conventional mode and final publications from the CVRUK Research, Innovation, Dissemination and Development Programme shall carry appropriate citations of Dr, .C.V. Raman University, Khandwa, with appropriate, statutory disclaimers, credits, correct postal and web address, tag lines in the published books, research papers, book chapters, articles, and on-line or off-line reports.

1.3.4. The policy assures that the findings and conclusions shall have to pass through and abide to the internal (through a Research and Innovation Committee) and external scrutiny processes (as per the appropriate provisions and mechanisms mandatory to fulfil the contractual obligations by individuals and institutions appointed formally to assess and evaluate innovations, proposed patents, and research). All research reports shall be open to criticism as required by the CVRUK' Policy on transparency and ethical code applicable to research, innovation, dissemination, and development.

1.3.5. CVRUK Research, Innovation, Dissemination and Development Policy shall any methodology or technique that may violate code of ethics and shall pose threat to health, safety, privacy, and other personal rights of anybody and or subjects to the infliction of injury, pain on animals and living organisms which is not permissible.

1.3.6. CVRUK shall offers an environment that is conducive to research in all fields of knowledge creation and or cultivating the habit of intensive inquiries. However, limitations of infrastructure, funding, and human resources, the CVRUK have constraint to provide and fulfil certain demands. The CVRUK shall prioritize allocation of laboratories, library, design table, spaces and facilities, and other resources such as its own funds to match with that of the funding agencies for research programmes depending on the merits of the research proposals.

1.3.7. The CVRUK shall discourage, dissociate, and debar unrealistic speculations, un called for discussions on any kind of platform, including social media concerning the political or moral impropriety or the uses which might be made of its results of research. The CVRUK shall create for a in the form of a '**Research and Innovation Committee**' for discussions of this nature, if need arises, and shall address any controversies that impede progression.

1.3.8. CVRUK research policy and the platforms abide to the national policies, and shall be in consonance with the universally accepted international laws and provisions.

1.4. Research Objectives

CVRUK shall encourage academic and research staff and students to serve CVRUK' stated research objectives with commitment to engaging in teaching, research, industry connect, and other support activities that are consistent CVRUK Values. CVRUK research, innovation,

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dissemination, and development shall tread the collaborative pathways appropriate and desirable for CVRUK academic community to participate in both governments funded and private activities beyond campus by engaging in academic and professional activities including public service and consulting that may benefit the CVRUK. CVRUK faculty members are expected to undertake research activities in addition to their teaching and administrative responsibilities. All research activities should be undertaken in compliance of these research policies.
The CVRUK research objectives deciphers into

1.4.1. Mandatory inclusion of research in all its curricula;

1.4.2. Signifies and emphasize quality of research at all levels;

1.4.3. Optimize funding support for research through external and internal sources;

1.4.4. Create transparent, effective, and efficient systems for optimizing research outputs;

1.4.5. Integrate research activities undertaken by the undergraduate, post-graduate and doctoral students with the research focus of the CVRUK in alignment with the local, regional, national thrust areas; create, maintain, and enhance infrastructure to enable conduct of research with the twine strategy of PAR and PTD;

1.4.6. Provide an appropriate framework to conduct of PAR and PTD in a transparent, socially responsible, and ethical manner;

1.4.7. Ensure amicable environment to conduct high – quality, authentic and original research by all individuals affiliated with CVRUK and provide continued and effective support for pursuit of research activities;

1.4.8. Translate new information into meaningful knowledge, innovations, technologies, and tools emerging out of research conducted at CVRUK into products and processes for commercialization or for societal benefit;

1.4.9. Evolve strategies and protocols to gain Intellectual Property Rights (IPRs) generated because of research conducted at CVRUK;

1.4.10. Integrate research activities undertaken by the students with the research focus of CVRUK research priorities;

1.4.11. Create a rational, transparent, and efficient system for management of all research processes;

1.4.12. Encourage and facilitate research collaborations within CVRUK constituent schools of the CVRUK and with reputed Institutes, Universities and Research Organizations both in India and abroad;

1.4.13. Ensure effective dissemination of research activities and achievements of the CVRUK both internally and externally;

1.4.14. Enhance the research profile of CVRUK by effective dissemination of research activities and achievements of CVRUK at all levels to optimize the impact and recognition of research done at CVRUK at national and international levels

1.4.15 Foster interdisciplinary research collaborations to address complex societal challenges and promote innovation through cross-cutting approaches.

1.4.16 Cultivate a culture of lifelong learning and professional development among researchers, faculty, and staff to continually enhance research capabilities and productivity.

1.4.17 Establish mechanisms for regular monitoring and evaluation of research activities, outputs, and outcomes to ensure alignment with institutional goals and objectives.

1.4.18 Promote diversity and inclusivity in research participation, ensuring equitable opportunities for all researchers regardless of background or affiliation.

1.4.19 Strengthen international research partnerships and collaborations to leverage global expertise, resources, and perspectives in addressing local and global research priorities.

1.4.20 Implement sustainability practices in research activities to minimize environmental impact and promote responsible stewardship of resources.

1.5.Research Management

There would be multi – tier management of all research, innovation, dissemination, and development activities at CVRUK. A **Research, Innovation, Development and Dissemination Committee** (RIDDC) with an advisory role, and school wise research and innovation cell of the RIC for regular monitoring of all research activities.

1.5.1. The composition of the RIDDC:

The **Research, Innovation, Development and Dissemination Committee (RIDDC)** will be headed by the Director Research, Innovation, Development and Dissemination and will include Dean (Academics), Dean (Faculty) Chairs of all Schools, two Researchers and Registrar or his / her representative, all professors of practices and two eminent experts from outside CVRUK.

In the absence of the Director Research and Innovation, the RIDDC meeting will be chaired by the Dean (Faculty) CVRUK. The RIDDC will meet quarterly to plan, review and monitor

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progress, offer critical comments, and suggest corrective measures to enhance the research activities of CVRUK.

The term' of the RIDDC, once constituted, will be for a period of three years after which, either the new members shall be inducted or the same members may be continued for another term.

The members may be replaced in case of non-availability of existing member(s) for any reason. The two external members will be chosen by the Vice Chancellor, CVRUK from a panel of names as may be suggested by the Dean (Academic) and Dean (Faculty). The composition of the school wise Research, Innovation, Development and Dissemination Cell of the RIDDC will be decided by the Dean, (Faculty).

1.5.2. The role and function of the RIDDC will be:

To make recommendations to the academic council on matters related to research promotion and infrastructure.

A comprehensive mapping of the core and ancillary competencies of individual faculty members would be undertaken by the RIDDC along with other soft skills to identify strengths and weaknesses. This will enable identification of research potential optimizing the output from everyone.

The researchers may strive to generate research funding to undertake research activities, the CVRUK may also support the research activities. The extent of support will be decided based on the potential of research outcome on peer review. It is expected from the researcher to ensure potential benefits to CVRUK.

RIDDC will also facilitate designing of custom – made Faculty Development Programmes especially imbibing the spirit of mainstreaming research using PAR and PTD regimes in advanced areas to improve upon the skills of CVRUK faculty and researchers and help them overcome their weaknesses tooptimize their contribution to CVRUK.

The policy advocates School specific / domain specific research as school wise committees for research with the following composition: Dean (Faculty) and Chair of the School with 2 HoDs by rotation as members, 2 members and 1 external expert**.** The school wise committees will also decide on the short- term research, student research to be undertaken by undergraduates and post – graduates, discuss and fine tune the strategies in specific areas as well as monitor and review research work.

2.Overview: Rights and Responsibilities

2.1. CVRUK Research, Innovation, Dissemination and Development Policy assures "no conflict of interest" between teaching faculty and research staff to the CVRUK' other activities in which faculty and research staff members shall be engaged themselves. It is expected that faculty and

Project Investigators (PIs) will conduct their affairs synchronizing with regular academic activities to avoid or minimize such conflicts of interest, and should there be any actual, potential or perceived conflicts between one's private beliefs and interests and her/his professional obligations to CVRUK, such matters should be properly and promptly revealed by the faculty, staff and PIs to the CVRUK administration so as to resolve any issues before engaging in research, development and innovation activities.

2.2. CVRUK Research Policies should be able to help all faculty and researchers in deciding as to what extent their individual and group activities may conflict with the faculty's primary commitment to teaching, research and other responsibilities in the CVRUK; to educate faculty, research staff and primary investigators about situations that generate the potential for conflicts of interest or conflicts of commitment; to clarify expectations about disclosing such interests and activities that might result in conflicts; to identify means to manage, reduce or eliminate such conflicts; and finally to promote the best interests of students and others whose work depends on the direction of our faculty and Investigators.

2.3. The general principle in this matter is simple and straightforward. If a faculty member, research staff or investigator has a query or a question about whether an activity is permitted under the CVRUK' Research Policy, the faculty member or investigator should disclose the potential or appearance of conflict to and seek guidance from his or her Chair of School, or Dean (Faculty), or the Office of the Pro Vice Chancellor and Dean, Academic.

2.4 Faculty members have the right to disseminate the results and findings of their individual or collaborative research without suppression or modification from external sponsors beyond the specific undertakings or provisions that may be written down and agreed upon by the sponsoring agencies, Universities, and researchers.

2.5. The Faculty and Researchers could also engage in external consulting activities, subject to the CVRUK's rules, regulations, and limitations. A separate section on Consultancy Policy is included in this document to facilitate this activity. But it is important that faculty adhere to both the spirit and the letter of the policy. Along with these freedoms come corresponding responsibilities.

3. Responsibilities of Researchers

3.1. Responsibilities of Faculty, Staff and Students

It is obligatory to all academic / research staff, scholars and students working as part of the research team understand and abide to the general research protocols, code of ethics and this policy directives in letter and spirit in complete fulfilment of the CVRUK; research and innovation commitments and obligations. It is particularly important that quarterly each faculty member review intellectual and tangible property rights and responsibilities, management of database, media, authorship attribution etc.., with other members of the group under their direction, including staff, students, scholars, and visiting scholars.

Each member the academic team and or research team drawing salary, funding and perks under any research, innovation, dissemination, and development initiative shall have the right to know who is sponsoring the research and supporting his or her salary or stipend because CVRUK believes in academic transparency.

CVRUK is committed to support and appreciate research initiatives taken up by its team and shall recognize all such efforts in the annual performance review and consider for career progression. 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.

3.2. Health and Safety

Chairs of the schools and would be responsible for advising and helping members of his or her team in appropriate health, and safety procedures while working in laboratories or on out station research sites, faculties, students, scholars, laboratory staff and anyone using the laboratories shall have to follow laboratory safety precautions, and procedures.

Principle Investigators, lead researchers and team leaders, HoDs, must assure the adherence to laboratory protocol and conduct regular inspections of laboratory facilities, cooperate in quality audits, Iso audits, consider the non – compliances, take corrective measures – if any required.

3.3. Consulting by External Academic Staff – Research Personnel

The members of the academic staff or research professionals are allowed to take consultancy assignments as per the consultancy policy and conditions outlined in the clauses under conflict of interest.

3.4. PI's Responsibilities to Sponsors

The principal investigators, Team Leaders, HoDs, and Chairs of the schools as the case demands and the type, size and needs of the research projects, follow the clauses mutually agreed in the agreements and MoUs signed between the CVRUK and any external agency if involved in funding or collaborative working shall operationalize and oversee project processes, assure the outputs, outcomes and monitoring, evaluation, learning, and documentation framework agreed.

If any additional budgetary requirements or change in the budget lines, head of expenses needed, it is the responsibility of the PI / TL to get it approved competent authority of CVRUK and the funding / sponsoring agencies.

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3.5. Management of research facilities

The PIs / TLs, HoDs, Chairs and Research Coordinators shall be responsible to manage the research facilities within the CVRUK campus, the laboratories, workshops, studio, library, incubation centres, IT facilities, they would be keeping control, upkeep, and record-keeping of both CVRUK assets, equipment and ensure the externally owned equipment (if any) as mandatory under the university rules as well as under the externally funded contracts and grants. PIs / TLs, HoDs, Chairs will be responsible for seeking approvals for the purchase of the equipment, appropriate asset tagging, inventory, utilization of equipment and peripherals, and disposal once the equipment becomes either obsolete or dysfunctional and irreparable or is in excess. The Administrative Officer / Registrar, CVRUK shall be contacted to seek advice on how to follow these steps.

3.6. Proposals, extensions, and continuation of the ongoing projects

The proposal development for new research projects, responding to EOIs, new dissemination and development projects under Mission HAPPY, Mission Samarth Bharat, RRRCs of the CVRUK in its core operational area, a team is constituted and shall have work in coordination with AGU, and CRIG guidelines as per the practice. The extension of time lines, reappropriation of the budget, changes in the project mandate, outputs, outcomes, or continuation of the projects should be mutually agreed between CVRUK Research and Innovation Directorate. The PIS, TL, HoDs, Chairs, Director R and I and Dean (Faculty)shall ensure that some research related funds are secured from all possible sources both internal and external, funds for developing new proposals may also be considered to secure research grants. The proposal development funds may be secured from earlier project overheads, or a separate head created for development of research proposals to secure external grants. The cost of proposal preparation efforts for continuing research is appropriately charged to projects.

3.7. Utilization Certificates (UCs) and Statement of Salaries under Projects

The research projects receiving funds from internal or external sources shall have to furnish audited fund utilization certificate duly verified by the PIs / HoDs, Chairs, and Director RIDDC, and finally approved by Registrar CVRUK, the finance and accounts Executive submits the UCs and accounts it in CVRUK Balance Sheet. It is also the responsibility of PI / TL / HoDs or Chairs of Schools to see that a system is in place to ensure that the PIs/ TL/ HoDs fulfil this requirement for review and certification. The salaries, wages, incidentals, capital expenses, operation expenses, overheads, and all line items approved in the project budget are charged respective heads, in case where CVRUK spends part of the research budget, in kind or salaries of the senior staff, and university administration, the apportioned expenses are monetized *e.g.* time spent by top officials are charged to research projects accordingly or else shown as CVRUK/ AGU / CRIG / AISECT Society contribution to the project.

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4 . Modus operand

4.1. Inception, Technical and Invention Reports

Principal Investigators (PIs) /Team Leaders (TL) / Head of the Departments (HoDs) and Chairs of the respective schools or consortium thereof shall be responsible for Monitoring, Evaluation, Learning and Documentation (MELD) reports as part of mutually agreed and standard research management protocols. All reporting obligation of any internal or external funded projects shall be submitted through the Office of Director RIC and duly verified by Finance and Accounts department after due diligence of financial aspects.

On the on – set of any new research project inception workshop shall be convened by concern PIs / TLs / HoDs / Chairs by inviting all key stakeholders to kick – start the project. **Inception Report** shall be prepared by concern person or respective team and a copy is shared with CDPO and Library, besides general circulation among key stake holders. The inception report shall be a contractual obligation of all research projects and shall follow an agreed standard format. The inception report document shall be prepared at the end of the Inception period defining in the Project Implementation Plan (PIP) a separate time bound operations plan shall be the operative part of the PIP. The PIP shall include stakeholder obligations and their respective roles and responsibilities including contractual obligations as per the Project Document and agreement, assessment, human capital plan and communications plan. The PIs / TLs / HoDs / Chairs shall submit a **Technical Report** as per the Logical Framework Analysis (LFA) agreed between the stakeholders describing the process, progress, or results of technical or scientific research, including recommendations and conclusions of the research project. For patenting purposes, the PIs / TLs / HoDs / Chairs shall submit an **Invention Report** in consultation with Centre for Excellence in IPR functional at CVRUK to facilitate patent application preparation, review and submission or any further action thereof. In case external funding agencies require a six-monthly or annual **Progress Report**. The research staff are expected to submit progress reports monthly basis to PIs / TLs / HoDs / Chairs and compilation of FNR and MPR at Director RIDDC.

4.2. Patents and Copyrights

All faculties, staff, scholars, students, and any other researchers, including Ph D Scholars, and visiting scholars, shall have to give a written undertaking for filing any Patent or Copyright arising out of the research being conducted under the aegis of Directorate of RIDDC, CVRUK before the commencement of any research activities.

4.3. Application of the General Principles

The general principles concerning the RIDDC shall be abiding regardless of personal, political, social, or other views not directly related to academic values or to the assumption of academic responsibilities; without regard to the conduct of a person holding an appointment at CVRUK in some other capacity, or without regard to an individual's race, ethnic origin, sex, or religion. The authorities will accordingly decide on

1. The search for, and appointment and promotion of faculty
2. The assignment of teaching and other primarily academic responsibilities
3. The support and sponsorship of scholarly research

4. Any other granting or withholding of benefits or imposition of burdens

4.4.Grievance Procedures

The grievance redressal procedures articulated in the University Policy documents shall apply in the conduct of research projects as well. The general principles illustrate that: these procedures are designed to assure that decisions by faculty members and Directorate of RIDDC comply with the standards of academic freedom granted to all faculty and PIs / TLs/HoDs / Chairs. These procedures are internal to CVRUK, enforcing confidentiality and academic integrity while protecting the rights of individual staff. The provisions of engagement in the projects do not create contractual rights subject to review by agencies outside CVRUK. There must be some administrative remedies for faculty or research staff grievances covered by parallel rights established under the laws of the land.

1.   The rights herein conferred shall be enforceable only by a person who is directly aggrieved and who holds a faculty or research position; no other person or persons could complain on her/his behalf.
2.   If any faculty member feels aggrieved by a decision that she or he believes to be in violation of this guidelines and rules, he or she may file a grievance pursuant to the Statement on Faculty Grievance Procedures and its attendant standing rules.
3.   For grievances brought in whole or in part for alleged violation of the Statement on Academic Freedom, the rules and procedures of the Statement on Faculty Grievance Procedures shall be modified as required. For a grievance not arising out of a negative decision on appointment, reappointment or promotion, the grievance and appeal structure shall rest on the authorities of CVRUK.

4.5. The Requirement of Secrecy and Security

4.5.1. A research project or Programme may, at times, require secrecy for various reasons, either because of governmental/funding body restrictions, or because of patent requirements. If any part of the sponsoring or granting documents that establish the project is not freely publishable, or if there is a reasonable basis for expectation that any documents to be generated during the research project will be subjected by an outside sponsor to restrictions on publication, the funding agency or the sponsor can ascertain whether information he or she is entitled to have treated as confidential would be disclosed by publication or not. If access is required during the project to confidential data, it will be up to the Vice Chancellor, Director RIDDC and Dean (Academics/ Faculty) to resolve the issue in consultation with the Chairs / HoDs / TLs and the PIs.

4.5.2. Four principles guide the security practices and guidelines for research computing systems: safety, confidentiality, integrity, and availability. **Safety** is important because it defines what imposed security measures are taken to prevent any unauthorized use or any possible cyber

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attack by others. Since the speculative and unpolished nature of research systems may result in data breaches more likely, research system safety often involves taking extra measures to reduce, detect, and ameliorate compromises – all of which will be the PI's responsibility. **Confidentiality** is the property that information is not made available or disclosed to unauthorized individuals,

entities, or processes. Insufficiently protecting of confidentiality can jeopardize the work and privacy of others. **Integrity** means maintaining and assuring the accuracy and completeness of data over its entire life cycle. Research systems and procedures should be chosen or designed to maintain the integrity of the data they store and to detect modification. **Availability** means that the system and its data can be used and accessed by authorized users when needed.

4.6. Confidentiality Clause

If an external agency – private or governmental, or any outside person or entity/group has made available to the investigator certain confidential information, provision may be made to preserve confidentiality and/or a short delay in the publication of research results during which time the information the RIDDC may examine the proposed publication in order to assure that the investigator has not disclosed, intentionally or unintentionally, any portion of the confidential information supplied by them.

4.7. Use of Private Papers, Documents, Diaries or Analogous Materials

If, in a research project certain private papers, deeds, documents, daily journals, diaries, emails, personal communications, or blogs and similar materials have been provided to the investigator, provision must be made to preserve the confidentiality of those materials for the purpose of protecting the privacy of the supplier of information or the author, or her/his inheritors.

4.8. Review of General Principles

The General Policies shall be reviewed by the University Research Committee annually based on the experiences gained from the projects and Programme undertaken. A proposal to that effect could be made by the PIs or Institute Directors and Deans in one of its meetings. This meeting and others primarily devoted to considering a revision of research policy shall be announced widely to all faculty by e-mail inviting suggestions on specific issues by the staff of the Vice Chancellor, Director RIDDC and Dean (Academic/ Faculty). Changes, if any, arising out of such meetings will be added by notification and in the newer drafts of the CVRUK Research Policy documents.

5. Authorship and Related Issues

5.1. In the normal instances, the PIs /TLs/ HoDs / Chairs of the concerned schools decides on the sequences of names in any research publication arising out of a project work. The CVRUK shall in no case impose any CVRUK guidelines to define **"significant intellectual contribution"** or impose formal mechanisms for determining authorship. The authorship rights and responsibilities

of faculty, staff and students are a matter to be resolved within the group by the PIs / Ls / HoDs/ Chairs of the concern school.

5.2. In foreseeable time frame there may be changes in the patterns of research laboratories or research group composition, and the current policy shall adopt, amended, and implement any such changes as approved by Vice Chancellor of CVRUK or any committee empowered thereof. A Central Instrumentation Facility when set up in the CVRUK campus shall cater the needs of many projects and shall act as common facility to all big and small research projects, there will be an ideation lab, discussion for a, and other common facility like VCL, Knowledge hub, *Vanmali*

Studio, Central Documentation and Publication Unit, and the same shall be allocated based on merit and accordingly the credit and responsibility shall be defined. In some degree programs and disciplines, it would be mandatory for graduate students to publish their research results by themselves, even when their work involves close supervision by a faculty member, and in others, the research supervisors' name goes on virtually every paper produced in the laboratory.

5.3. At times, increased administrative burdens on the designated principal investigators may also contribute to decreasing time available for active participation in research. In such cases, the PIs, Heads, Directors, or Deans are expected to decide on allocation of credit in an ethical manner so as not to make it complex. It is realised that the customs prevailing in different fields may show differences in this respect.

5.4. It is not necessary that for each such publication all members of a research lab or research group will be given credit. But giving credit where it is due should be done, even if it is a small point or a personal communication, inwhich ca se 'Colophon' or a Footnote/Endnote would suffice. Several questions about authorship and intellectual "ownership" of the research paper draft may arise as to what level of contribution by different parties to a research enterprise has been which could qualify them for (co) authorship of the final product. What the norm would be for independent or first publication or to the use of data in another publication or project are also important questions. It is also understood that initial assumptions may well change as the course of research progresses. Even at its beginning, it is often difficult to trace the sources of the ideas and insights from which a research project originates; it is hard to say what was identifiably generated by one individual and what was "in the air" in the intellectual domain. By the time a project is over, the original conception or the germinal idea may not be central any more. The more interactive the process, the less we can retrospectively divide the work into parts corresponding to roles or contributions.

5.5. In cases where complaints and disagreements arise between students (postdoctoral, graduate, and undergraduate) and their faculty over credit for work to which both may have contributed, the Deans and Directors concerned may decide at their level. In doubt or dispute, the University Research Committee could provide guidance with respect to credit for scholarly work where several research staff and faculty are involved with or under a PI. This is only when it becomes difficult to determine responsibility of authorship.

5.6. The heterogeneity of custom that varies from one discipline to another may sometimes makes it very difficult to decide, in disagreements like the one between S and P, whether we are dealing with professional misconduct (the wrongful appropriation of another's intellectual product) or

whether we are in a domain of ethical judgments about the proper allocation of credit between joint researchers - judgments so close that they should be resolved by personal values, etiquette, and generosity, rather than by a faculty disciplinary process. Another aspect of the issue is as to who may publish first, who must consent, what connections with the work need be acknowledged and how - is associated particularly with review articles, books (or chapters of books), or symposium contributions, especially "state of the discipline" pieces. Opportunities to produce more comprehensive works of this kind come mainly to senior scholars. In describing the significant developments in one's field, there is a natural tendency to include work done by oneself

and one's students and junior associates. In the usual case, the scope of the topic is broad enough so that including all associates as co-authors is impractical. Where the piece deals with data or results of others that are already published as a paper or dissertation, or have been accepted for publication, employing them with appropriate citation is obviously proper. If the material is yet unpublished but will be issued as a joint work, I think it is generally accepted that any of its prospective co-authors may refer to it, even at length, in a separate work of sole authorship - provided that its joint origin is prominently acknowledged and provided that the opportunity for regular scholarly publication is not pre-empted.

5.7. It must also be pointed out that there is a tight coupling between authorship and responsibility. If the name of a faculty member has been included on a paper resulting from the relatively independent experiments done by a student or fellow, any error in the data or wrong methodology of data collection or accessing would also be the responsibility of the concerned faculty.

5.8. Lastly, multi-investigator research teams differ significantly from the individual faculty/graduate student research teams, and it may also be the case that at times, there is no single person who understands the entire gamut of a given research. The general principle for scholarly manuscripts emanating from multi-investigator research is as follows: First, the Principal investigators and senior faculty have special responsibilities to assure the overall cohesiveness and validity of the concerned draft publication. Secondly, all authors in a group effort have a shared responsibility for the published result and should have the opportunity to review all sample preparation procedures and data, as well as all data acquisition and analysis procedures. Thirdly, each author in a group should have access to the manuscript prior to its being submitted for publication, and should agree to his or her inclusion as a co-author. All the participants in the Programme should know that the paper is being prepared for publication.

6. Research Misconduct

6.1. The provisions under this heading – namely, 'Research Misconduct' deals with the procedures to be followed in the event of Allegations, Counter-Allegations, Investigations, and Reporting of any actual or perceived misconduct, for which the required notifications to the funding agencies may also have to be sent. There is no doubt that each member of the University, whether faculty or administrator or research staff, or technical personnel and students, has a responsibility to foster an academic environment conducive to free and fair research. Therefore, research misconduct can be extremely troubling – even if it is raised infrequently.

6.2. CVRUK definition of research misconduct, and procedures for investigating and reporting allegations of misconduct, will conform to the regulations of the governmental and other funding agencies which may have some elaborate policies on this subject. These will be applicable to the research proposed as well as to the research conducted or reported at. "**Research misconduct**" is defined as fabrication (making up data or results, and recording or reporting them), falsification (manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented), or plagiarism (appropriation of another person's ideas, processes, results, or words without giving appropriate credit) in proposing, performing, or reviewing research, or in reporting research results.

6.3. If the misconduct is committed intentionally, or knowingly, and if the allegation is proven by the University Research Committee or any of its sub-committees set up to investigate such allegations, even instances of failure to supervise adequately, and other lapses from professional conduct or neglect of academic duties could come under its purview. Findings (with respect to research misconduct) of serious academic deficiencies are to be addressed by the concerned Dean, or by the Director, initiating the relevant disciplinary processes, as may be deemed appropriate. A proper inquiry should be held based on preliminary information gathered and preliminary fact-finding to ascertain the merit of the case.

6.4. The outcome of an inquiry is a determination as to whether an investigation is to be conducted. Where a formal investigation is warranted, it will be guided by the CCS procedure of the Government of India's Service Manual. The Dean shall inform the funding to RIC, see that the proper charge-sheets are issued, obtain preliminary replies, and conduct such inquiries or investigations having taken all reasonable and practical steps to obtain custody of the research records and/or evidence needed to conduct the misconduct proceeding, inventory the records and evidence, and requisition them in an appropriate manner. Before the inquiry begins, the Charged Individual (hereafter "the respondent") shall be informed of the allegations, and be invited to comment on them. Finally, the respondent shall also be provided with a copy of the draft report of the inquiry, and be given an opportunity to comment on the findings for the consideration of those conducting the inquiry. In so doing, best efforts shall be made (where feasible) to protect the confidence of the individual(s) who brought forward the complaint (hereafter "the complainant(s)"). The relevant individuals, including the complainant(s) should be interviewed in the presence of the charged individual by a committee.

6.5. Based on the final report consisting of recommendation as to whether a full investigation is warranted, is to be submitted by the school dean to the Pro-Vice-Chancellor and Dean, Academic within 60 days of receipt of the allegations. The Faculty/School Deans are advised to review current regulations and requirements, and to consult with the Pro-VC's office who would decide how and when the funding agencies should be involved. The funding agencies will be notified of the outcome of an inquiry involving funds from their agency only if that outcome includes the recommendation to conduct a full investigation.

6.6. The funding agencies must be apprised of an interim report until the final report is ready. They may be sent a Special Emergency Notifications, in case it is seen that an immediate health hazard will break out otherwise, or if it is required to protect Governmental or University funds or equipment, or for the sake of integrity of the research, or if there is a suspicion that there may be a possible criminal activity.

7. Retention of and Access to Research Data

7.1. It will be ensured by the Deans and the PIs that research data is appropriately recorded, archived for a reasonable period, and available for review under the appropriate circumstances as

may be decided by the RIDDC. This is because accurate and appropriate records are an essential component of any research project.

7.2. Both the University and the PI have responsibilities and rights concerning access to, use of, and maintenance of original research data, except, where precluded by the specific terms of sponsorship or other agreements, tangible research property, including the scientific data and other records of research conducted under the auspices of CVRUK belongs to this University.

7.3. The PI is responsible for the maintenance and retention of research data that may be necessary for the reconstruction and evaluation of reported results of research and the events and processes leading to those results. It is the responsibility of the PI to determine what needs to be retained under this policy.

7.4. For all projects, the PIs should adopt an orderly system of data organization and should communicate the chosen system to all members of a research group and to the appropriate administrative personnel as a matter of research protocol.

7.5. Research data must be archived for a minimum of three years after the final project close-out, with original data retained wherever possible at least in the Cloud Servers. In addition, Data may have to be kept for as long as may be necessary to protect any intellectual property resulting from the work.

7.6. To avoid any possible allegations of scientific misconduct or conflict of interest, data must be retained until such issues are fully resolved.

7.7. Wherever students are involved, data must be retained at least until the degree is awarded or until the students have abandoned the work. Beyond this usual period of retention as specified, the destruction of the research record is at the discretion of the PI and his or her department or laboratory.

7.8. Wherever research is funded by an agency outside the CVRUK which may have or which impose certain specific provision(s) regarding ownership, retention of and access to technical data, the provision(s) of that agreement will supersede this policy. Otherwise, the scientific

record for projects conducted at the CVRUK and/or with university resources are its own resources.

7.9. Wherever or whenever necessary, the Pro-Vice-Chancellor and Dean, Academics may direct the PI to assure needed and appropriate access to the data to other faculty members for advanced research.

7.10. Further, when individuals involved in research projects at CVRUK join other universities or institutions, they may be allowed by the PI/Deans concerned to take copies of research data for projects on which they have worked but not necessarily all data or associated records. All such requests must be approved by the Pro-Vice Chancellor and Dean, Academics.

7.11. If a PI leaves CVRUK, and a project is to be moved to another institution as per the agreement with the funding agency, ownership of the data may be transferred with the approval of the Pro-Vice-Chancellor and Dean Academics, based on a written request from an agreement with the PI's new institution that would guarantee acceptance of custody of the data so transferred, and grant access to other CVRUK faculty in future to the same.

8. Human Subjects and Scientific Research

8.1. This section elaborates on the policy to give comprehensive information about the organization and focus of the human subject-based research protection Programme at the CVRUK. In these matters, the PIs and the University must comply with the applicable laws of the land. All members of the CVRUK who may like to be involved in any research – in sciences or social science/humanities involving human subjects must be knowledgeable about these laws and their requirements. The primary responsibility in this respect lies with the PI so that there is an institutional system to protect human subjects.

8.2. The RIDDC or the Executive Committee of the RIDDC should perform prospective and continuing review of each research protocol involving human subjects, including an evaluation of its risks and benefits to the human subjects. They must also check on the informed consent document, particularly as to its description of the risks and benefits as well as consider any unanticipated problems, possible non-compliance, and other information and incidents that might affect this research protocol. From time to time, the concerned Deans should also organize training for all investigators, research staff, students in the laws and provisions of use of human subjects in research.

8.3. Anyone who knows that, or has reason to believe that human research is being conducted in an unethical manner or not in compliance with the laws must report the matter promptly to the Dean Academics of CVRUK. Where appropriate, sanctions will be considered and imposed. Non-compliance, protocol deviations, and violations are dealt with by the RIDDC and University administration strictly. These may, in extreme cases, result in administrative, civil, or criminal

penalties against the concerned individuals and the organizations, including termination of employment, contract, or other relationships.

8.4. There are number of laws governing clinical research in India. These include the following, and CVRUK would like all PIs to adhere to these laws and regulations:

8.4.1. Drugs and Cosmetics Act - 1940
8.4.2. Medical Council of India Act - 1956 (amended in 2002)
8.4.3. Central Council for Indian Medicine Act - 1970
8.4.4. Guidelines for Exchange of Biological Material (MOH order, 1997)
8.4.5. The Biomedical Research on Human Subjects (regulation, control, and safeguards) Bill - 2005

9. Women as Subjects in Research

9.1.1. Historically, there have been concerns about the participation of women with childbearing potential in research trials due to potential risks of fatal harm should a woman become pregnant. Such apprehension has resulted in guidelines created by different wings of the Government of India dealing with Women and Child Welfare Ministry as well as by the National Women's Commission.

9.1.2. Over the past decade, questions have been raised by professional, consumer, and governmental groups about whether clinical treatments are adequately tested in various populations that are the recipients of such therapies. In terms of drug development, they are now WHO-verified information available pertaining to the safety and effectiveness of drugs for women and subpopulations such as the elderly and diverse racial groups. It detailed procedures to minimize the risks of pregnancy in women participants such as contraceptive counselling, pregnancy tests, timing of short-term studies in relation to the menstrual cycle, and the process of informed consent. It also calls for gender analyses with special attention to factors affecting pharmacokinetics, e.g. the role of the menstrual cycle and exogenous hormone therapy in relation to the drug, as well as the influence of the drug on oral contraceptives.

9.1.3. It is expected that experimental subjects will be informed about potential risks to their fertility including the development of any abnormalities or abnormalities in function of reproductive organs because of the proposed study

9.1.4. The inclusion of women in behavioural research studies is also important and must be accomplished unless there is a compelling rationale which establishes that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research.

9.1.5. Pilot Studies and such other Cultural and Sociological Studies such as Oral History data gathering may not undergo such strict compliances but because it is not generally thought to be a systematic investigation designed to contribute to generalizable knowledge beyond the individual

being interviewed. However, when using oral history as a technique in human subject research it may require consents and following certain ethical principles.

10. Animals as Laboratory Subjects

10.1.   Animals are frequently used in both exploratory/curiosity-based studies and in serious academic research, especially in School of Pharmacy for drug testing and for commercial products, the CVRUK shall follow the stated national policy guidelines as stipulated by the Pharmacy Council of India.

10.2.   In 2003, the Pharmacy Council of India (PCI) issued a directive to all pharmacy schools in India to use CAL software in place of classroom animal experiments. Further, in 2011, the University Grants Commission issued guidelines to phase out dissection of and experimentation on live animals in zoology and life science courses.

10.3. The Ministry of Environment and Forests, Government of India has also come up with "The Prevention of Cruelty to Animals Act, 1960." Animals in laboratories endure lives of deprivation, isolation, stress, trauma, and depression even before they are enrolled in any sort of protocol which CVRUK considers to be wholly undesirable.

11. Environmental Health and Safety

11.1. The University Research Committee on Health and Safety is charged with the responsibility of exercising oversight over all health and safety Programme at the CVRUK and ensure that adequate health and safety measures have been taken in designing and executing scientific and technological experiments.

11.2. If required, RIC will also recommend needs, priorities and strategies to promote good health, safety, and environmental practices on campus. The RIC will also encourage workshops and awareness Programme to make all concerned understands the value of operational responsibility for health and safety.

11.3. Each year, one meeting of the RIC could be publicized and open to all members of the University community and its residents to point out any measures that would enhance environmental health and safety of the campus. In particular, nothing should be done which could affect the health and safety of lab personnel, laboratory subjects, employees, students, the general public, and the environment.

11.4. This also applies to potential hazards of chemicals to which the students, staff or campus residents and visitors may come in contact in the workplace or laboratory. The RIC may also issue a Chemical Hygiene Plan (CHP) for the procedures, equipment, personal protective equipment, and work practices so that the laboratory personnel could be protected from potential health hazards of using certain chemicals and radio-active systems in the laboratory.

12. Export Controls

12.1."Export" here means to send or take controlled tangible items, software, or information out of the country in any manner including in hand luggage, to transfer ownership or control of controlled tangible items, software or information to a foreign person, or to disclose information about controlled items, software or information to a foreign government or foreign person. Such tangible item, software or information being sent or taken out are referred to as Export.

12.2. Under this would come "Re-export" too, which will mean an actual shipment or transmission of controlled tangible items, software or information from one foreign country to another foreign country. Also, technically, "Deemed export" is a term used to describe the situation where a foreign national on our campus may be exposed to, or have access in any manner to, an export-controlled item or export-controlled software or information. This is because sharing confidential technical information or software soRICe code with foreign nationals wherever located may not be encouraged.

12.3. Our primary concern at the CVRUK are transactions involving proprietary or confidential export-controlled information provided to CVRUK Researchers or Research group by third parties, such as corporate vendors, subcontractors, or government collaborators. These may generate disclosure restrictions that may only be acceptable if they fall within the narrow exceptions provided by the Openness in Research Policy and qualify for treatment under an exemption or license exception (EAR) in the Indian export control regulations.

12.4. In the case of international shipments of tangible items, or the export or deemed export of 3rd party export controlled software code or information to foreign countries or their nationals , CVRUK and the concerned PI has the responsibility to either to obtain an export license, and show that an exception to export licensing requirements applies in the given case.

13. Degree-Oriented Research

A separate Doctoral Research Policy exists which includes Doctoral and/or undergraduate or post graduate research.

14.MoUs for Research Collaborations

A separate Policy Document exists that would cover such MoUs which CVRUK enters into for collaborative research Programme.

15. Financial Responsibilities for Sponsored Research

All PIs should be well-versed in the FAS (Financial Assurance System) of AGU, CRIG AISECT and where applicable Government of India offices and the standard financial practices including accounting procedures based on which they would be required to deal with the Finance and Accounts Office of CVRUK to conduct research work. Wherever excepts are required, specific approval on file/-e-mail must be obtained from the University administration.

16. Idea Lab

16.1 The Idea Lab could serve as an incubator for novel research concepts and ideas, providing researchers with resources, mentorship, and support to develop their innovative projects.

16.2 It could facilitate interdisciplinary collaboration by bringing together researchers from diverse fields to brainstorm and co-create solutions to complex problems that transcend disciplinary boundaries.

16.3 The Idea Lab could provide researchers with the space and resources to experiment with new methodologies, technologies, and approaches, allowing them to prototype and test their ideas before scaling up.

16.4 It could engage with the broader research community, including students, faculty, industry partners, and policymakers, to gather input, solicit feedback, and promote dialogue around

emerging   research   priorities   and   challenges.

16.5 The Idea Lab could facilitate networking opportunities and partnerships with external stakeholders, including industry, government agencies, NGOs, and other research institutions, to leverage additional resources, expertise, and funding opportunities.

16.6 It could offer training workshops, seminars, and mentorship programs to build research skills, foster leadership development, and cultivate a culture of innovation and entrepreneurship among researchers.

16.7 The Idea Lab could track and evaluate the impact of funded projects, measuring outcomes such as publications, patents, commercialization efforts, policy influence, and societal benefits.

16.8 The Idea Lab should be designed to be flexible and adaptable, allowing it to respond quickly to emerging research trends, opportunities, and challenges.

Participatory Action Research (PAR) and Participatory Technology Development (PTD) are approaches that involve stakeholders actively participating in the research or technology development process. Here are some strategies typically associated with each approach:

17. **Strategies of PAR and PTD**

17.1. Strategies of Participatory Action Research (PAR):

1. Actively involve community members, stakeholders, and end-users in identifying research priorities, defining research questions, and designing interventions or solutions.

2. Foster collaborative decision-making processes where researchers and participants work together to analyze data, interpret findings, and co-create actionable solutions or interventions.

3. Empower marginalized or disadvantaged communities by providing them with the knowledge, skills, and resources to actively participate in the research process and advocate for change.

4. Build the research capacity of community members through training, skill development, and knowledge transfer activities, enabling them to contribute meaningfully to the research process and take ownership of the outcomes.

5. Ensure ethical considerations are integrated into all stages of the research process, including informed consent, confidentiality, and the equitable distribution of benefits and risks.

6. Emphasize the action-oriented nature of PAR, where research findings are translated into concrete actions, policies, or interventions aimed at addressing identified challenges or promoting positive social change.

7. Encourage ongoing reflection, dialogue, and iteration throughout the research process, allowing for continuous learning, adaptation, and improvement based on feedback from participants and stakeholders.

8. Share research findings with broader audiences through various channels, such as community forums, policy briefs, and academic publications, and engage in advocacy efforts to promote policy change or social justice.

17.2. Strategies of Participatory Technology Development (PTD):

1. Place a strong emphasis on understanding the needs, preferences, and constraints of end-users or beneficiaries when designing and developing new technologies or innovations.

2. Foster collaborative partnerships between researchers, technology developers, and end-users throughout the technology development process, ensuring that solutions are co-created and aligned with user needs and contexts.

3. Employ iterative prototyping and testing processes to gather feedback from end-users early and often, allowing for rapid refinement and improvement of technology prototypes based on user input.

4. Design technologies that are adaptable and customizable to different contexts and user preferences, taking into account factors such as cultural norms, socioeconomic conditions, and infrastructure constraints.

5. Build the technical capacity of end-users to effectively use and maintain the technology, providing training, education, and support as needed to ensure successful adoption and sustainability.

6. Integrate sustainability considerations into the design and implementation of technologies, including factors such as affordability, scalability, environmental impact, and long-term maintenance requirements.

7. Embrace open innovation principles by collaborating with a diverse range of stakeholders, including other researchers, industry partners, government agencies, and civil society organizations, to leverage complementary expertise and resources.

8. Facilitate the transfer of technologies from the research and development stage to real-world applications, working with stakeholders to overcome barriers and challenges to adoption and scaling.

18. Centre for Science and Communication (CSC)

18.1 Develop and implement a comprehensive science communication strategy that aims to communicate scientific research findings, breakthroughs, and their implications to diverse audiences, including policymakers, the media, educators, and the general public.

18.2 Design and coordinate public engagement programs, such as science festivals, exhibitions, workshops, and public lectures, to promote dialogue, increase awareness, and foster a deeper appreciation of science and research among the public.

18.3 Cultivate relationships with media outlets and journalists to ensure accurate and responsible reporting of scientific research and to facilitate access to expert scientists for interviews, comments, and analysis.

18.4 Utilize digital platforms, including websites, social media, podcasts, and online videos, to disseminate scientific information in accessible and engaging formats, reaching a wider audience and facilitating interactive engagement.

18.5 Offer training programs and resources for science journalists and communicators to enhance their understanding of scientific concepts, improve their science reporting skills, and uphold ethical standards in science communication.

18.6 Produce policy briefs, white papers, and other targeted communication materials to inform policymakers about relevant scientific research findings and to advocate for evidence-based policy decisions.

18.7 Collaborate with researchers and research institutions to develop communication plans and strategies for research projects, ensuring that the findings are effectively communicated to relevant stakeholders and the public.

18.8 Evaluate the effectiveness and impact of science communication efforts through surveys, audience feedback, and metrics such as reach, engagement, and changes in knowledge or attitudes towards science.

18.9 Uphold ethical standards in science communication, including accuracy, transparency, integrity, and respect for diverse perspectives, while also addressing controversial or sensitive topics in a responsible manner.

18.1.0 Provide training, resources, and support for scientists and researchers to improve their communication skills and to effectively engage with the public, media, and policymakers.

18.1.1 Foster collaboration with international science communication organizations and networks to share best practices, resources, and experiences, and to promote global dialogue and cooperation in science communication.

19. School wise research, innovation, dissemination, and development matrix

Department Name	Research Focus/Area	Research Goals/Objectives	Research Activities	Research Outputs	Research Funding	Innovation Goals/Objectives	Innovation Activities	Innovation Outputs	Innovation Partnerships	Innovation Funding	Dissemination Goals/Objectives	Dissemination Channels	Dissemination Activities	Target Audience	Dissemination Impact	Development Goals/Objectives	Development Initiatives	Development Impact	Development Partnerships	Development Funding	Cross-Departmental Collaboration	Collaborative Projects	Synergies and Opportunities	Challenges and Solutions
School A																								
School B																								
School C																								

20. Student Research Fellowship, JRF, SRF , RA

20.1. Student Research Fellowship (SRF):

Objective: To provide undergraduate or graduate students with hands-on research experience under the guidance of faculty mentors.

Eligibility: Open to undergraduate or graduate students enrolled in a degree program at the institution.

 Duration: Typically ranges from a few months to a year, depending on the scope of the research project.

Stipend and Benefits: Provide a stipend or financial support to cover living expenses and research-related costs.

Responsibilities: Assist faculty mentors in conducting research, literature review, data collection, analysis, and report writing.

Selection Process: Selection based on academic merit, research interests, and recommendation from faculty mentors.

20.2.Junior Research Fellowship (JRF):

Objective: To support early-career researchers in pursuing independent research projects or doctoral studies.
Eligibility: Open to postgraduate students or early-career researchers who have completed their master's degree.
Duration: Typically awarded for a fixed term, often renewable for up to three years, to support doctoral research or independent research projects.
 Stipend and Benefits: Provide a stipend, research grant, and other benefits such as health insurance and travel support.
 Responsibilities: Conduct research under the supervision of a faculty mentor, publish research findings, and contribute to academic and scholarly activities.
Selection Process: Competitive selection based on academic credentials, research proposal, and interview performance.

20.3. Senior Research Fellowship (SRF):

Objective: To support experienced researchers in conducting advanced research projects and mentoring junior researchers.
Eligibility: Open to postdoctoral researchers or experienced scholars with a proven track record of research excellence.
Duration: Typically awarded for a fixed term, often renewable for up to five years, to support advanced research projects.
Stipend and Benefits: Provide a competitive salary, research grant, and other benefits commensurate with experience and qualifications.
Responsibilities: Lead independent research projects, mentor junior researchers, publish research findings in peer-reviewed journals, and contribute to grant writing and research funding activities.
Selection Process: Rigorous selection based on academic credentials, research achievements, publications, and letters of recommendation.

20.4. Research Associate (RA):

Objective: To engage experienced professionals or scholars in collaborative research projects, providing specialized expertise and leadership.
Eligibility: Open to individuals with a doctoral degree or equivalent experience in their field of expertise.
Duration: Typically employed on a contractual basis for the duration of the research project or grant period.
Salary and Benefits: Provide a competitive salary, research support, and benefits package comparable to academic staff positions.

Responsibilities: Contribute specialized expertise to research projects, lead specific research tasks or work packages, supervise research assistants, and contribute to project management and reporting.
Selection Process: Competitive selection based on qualifications, experience, expertise, and fit with the research project's objectives.

21. Incubation Centre

21.1 Incubation centers provide a supportive environment for researchers, innovators, and entrepreneurs to transform their ideas into viable products or services. They offer resources such as mentorship, infrastructure, funding, and networking opportunities, which are essential for the development and commercialization of innovative technologies.

21.2 Research policies often aim to promote the commercialization of research outcomes to benefit society and the economy. Incubation centers act as intermediaries between academia and industry, helping researchers navigate the complex process of bringing their discoveries to market. They facilitate technology transfer and licensing agreements, connect researchers with potential investors or industry partners, and provide business development support.

21.3 Research policies increasingly emphasize the importance of cultivating an entrepreneurial mindset among researchers. Incubation centers offer training programs, workshops, and mentoring to help researchers acquire the skills and knowledge needed to start and grow

successful businesses. By encouraging entrepreneurship, incubation centers contribute to the creation of new jobs, industries, and economic growth.

21.4 Incubation centers play a vital role in building vibrant innovation ecosystems by bringing together researchers, entrepreneurs, investors, industry partners, and other stakeholders. By fostering collaboration and knowledge exchange, they help create synergies that drive innovation forward. These ecosystems often extend beyond the boundaries of the incubation center itself, encompassing universities, research institutions, government agencies, and the private sector.

21.5 Incubation centers can also serve as advocates for research policies that support innovation and entrepreneurship. They provide valuable insights and feedback to policymakers on the effectiveness of existing policies and suggest improvements or new initiatives to address emerging challenges and opportunities. By engaging with policymakers, incubation centers help shape the broader policy landscape to better support the needs of the innovation ecosystem.

22. Solar parks

22.1. Solar parks often serve as demonstration sites for new solar technologies, including photovoltaic (PV) panels, concentrated solar power (CSP) systems, and solar tracking mechanisms. Research policies may support the establishment of solar parks as test beds for evaluating the performance, efficiency, and reliability of these technologies under real-world

Conditions. Researchers can collect data and conduct experiments at these facilities to improve solar technology and inform future policy decisions.

22.2. Solar parks can facilitate research and development (R&D) activities aimed at advancing solar energy technologies. Research policies may provide funding or incentives to support collaborative R&D projects conducted at solar parks, with the goal of developing innovative solutions to enhance solar energy generation, storage, and integration into the grid. These efforts can lead to the commercialization of new products and services that contribute to the growth of the solar industry.

22.3. Solar parks are typically connected to the electrical grid to supply renewable energy to consumers. Research policies may focus on optimizing the integration of solar parks with grid infrastructure to ensure reliable and efficient electricity generation, transmission, and distribution. Researchers may investigate grid stability, energy storage options, smart grid technologies, and grid management strategies to maximize the benefits of solar power while minimizing its impact on the grid.

22.4. The development of solar parks may require environmental impact assessments to evaluate their potential effects on local ecosystems, biodiversity, and land use. Research policies may support studies that assess the environmental impacts of solar parks and develop mitigation measures to minimize adverse effects. Researchers may also explore ways to enhance the ecological compatibility of solar park sites through habitat restoration, biodiversity conservation, and sustainable land management practices.

22.5. Solar parks can serve as case studies for evaluating the effectiveness of renewable energy policies and regulations. Researchers may analyze the socio-economic, environmental, and technological impacts of solar park development to assess policy outcomes and identify areas for improvement. Research findings can inform policymakers and stakeholders about the successes, challenges, and lessons learned from solar park projects, helping to refine research policies and enhance their implementation.

23. Centre Instrumentation Laboratory and school wise laboratories

23.1. Centre Instrumentation Laboratories (CILs):

- CILs are typically equipped with state-of-the-art instrumentation and facilities that support advanced research across various disciplines. Research policies may prioritize the establishment and maintenance of CILs to provide researchers with access to specialized equipment and expertise that they may not have in their own laboratories.

- CILs often operate as shared resource facilities, allowing multiple research groups or departments to access and utilize expensive or specialized instrumentation. Research

    policies may encourage collaboration and resource sharing through CILs to maximize the efficiency and impact of research efforts.

- CILs offer opportunities for researchers, students, and faculty to gain hands-on experience with cutting-edge instrumentation and analytical techniques. Research policies may support training programs and workshops conducted at CILs to enhance research skills, foster interdisciplinary collaboration, and promote knowledge dissemination.

- CILs can facilitate innovation and technology transfer by providing researchers and entrepreneurs with access to prototyping, testing, and validation services. Research policies may incentivize the use of CILs for technology development and commercialization purposes, thereby stimulating economic growth and industry-academic partnerships.

23.2. School-wise Laboratories:

- School-wise laboratories, particularly in the fields of science, technology, engineering, and mathematics (STEM), play a critical role in education and talent development. Research policies may emphasize the importance of enhancing STEM education by investing in the establishment and modernization of school laboratories, enabling hands-on learning experiences and inquiry-based pedagogies.

- School-wise laboratories provide students with their first exposure to scientific research methods and experimentation. Research policies may encourage the integration of

research-oriented activities into school curricula to cultivate curiosity, critical thinking, and problem-solving skills among students from an early age.

- School-wise laboratories serve as a pipeline for nurturing future scientists, engineers, and innovators. Research policies may focus on improving access to high-quality laboratory facilities in schools, particularly in underserved communities, to promote diversity and inclusivity in the STEM workforce.

- School-wise laboratories can also serve as hubs for community engagement and outreach, providing opportunities for students, teachers, parents, and local residents to participate in science-related activities and events. Research policies may support initiatives that promote public understanding of science and encourage community involvement in research and innovation.

24. Central IT, Documentation and Publication Facility

24.1. Information Technology (IT) Infrastructure

- Central IT facilities provide robust infrastructure for storing, managing, and sharing research data securely. Research policies may mandate data management plans and open access requirements, which central IT facilities can support by offering data repositories and archiving services.

- Central IT facilities often host high-performance computing clusters and specialized software applications that researchers require for data analysis, simulation, and modelling. Research policies may prioritize investments in computational resources to accelerate scientific discovery and innovation in fields such as computational biology, climate science, and materials science.

- Central IT facilities implement cybersecurity measures and compliance protocols to safeguard sensitive research data and ensure adherence to regulatory requirements. Research policies may establish guidelines and standards for data security and privacy, with central IT facilities playing a key role in enforcement and oversight.

24.2. Documentation and Information Management:

- Documentation facilities assist researchers in organizing, cataloguing, and documenting their research outputs, including publications, datasets, protocols, and lab notebooks.

Research policies may promote best practices for research documentation and metadata standards to enhance reproducibility, transparency, and accountability.

- Intellectual Property Management: Documentation facilities support researchers in managing intellectual property (IP) rights, patents, and technology transfer activities. Research policies may encourage the disclosure of inventions and innovations to documentation facilities, which can facilitate the patenting process, licensing agreements, and commercialization efforts.

- Documentation facilities help researchers navigate regulatory requirements and compliance obligations related to research ethics, human subjects protection, animal welfare, bio safety, and export controls. Research policies may establish institutional review boards and compliance committees to oversee research activities and ensure adherence to legal and ethical standards.

24.3. Publication Support and Scholarly Communication:

- Publication facilities provide support for manuscript preparation, editing, formatting, and submission to peer-reviewed journals. Research policies may promote open access

  publishing models and provide funding or incentives for researchers to publish their work in open access journals or repositories.

- Publication facilities offer tools and services for managing bibliographic references, citation analysis, and scholarly communication networks. Research policies may encourage the adoption of citation standards and metrics that promote transparency, fairness, and rigor in academic publishing.

- Publication facilities assist researchers in tracking and assessing the impact of their publications through citation analysis, altmetrics, and bibliometric indicators. Research policies may emphasize the importance of measuring research impact as a criterion for evaluating research performance and allocating funding or resources.

25. Annual Research Awards

Annual Research Awards recognizing outstanding contributions, incentivizing excellence, and promoting best practices. These awards serve as a beacon of recognition within the research community, motivating researchers to pursue innovative and impactful work. Moreover, they provide valuable funding and resources that support further research endeavors and contribute to the advancement of knowledge. By highlighting exemplary research practices and outcomes, awards set a standard of excellence, driving continuous improvement in research quality. Additionally, the publicity and visibility generated by award ceremonies increase awareness of research achievements, garnering support from policymakers, funding agencies, and the public. Furthermore, these awards facilitate networking and collaboration among researchers, fostering

interdisciplinary partnerships and knowledge exchange. Annual Research Awards not only celebrate individual achievements but also influence research priorities and policies, shaping the direction of scientific inquiry and societal impact.

The Annual Research Awards will be presented across three distinguished categories: The **Raman Researcher** Award, **Shri Vanmali Sanskriti Samman** Award, and the **Shri Santosh Choubey Sahitya Samman** Award. These accolades, bestowed annually, will honour the exceptional achievements and contributions within academia. Three esteemed professors and three exceptional students will be recognized for their outstanding scholarly endeavours in these categories. The *Raman Researcher award* celebrates groundbreaking research and innovation, while the *Shri Vanmali Sanskriti Samman* award acknowledges significant contributions to cultural studies. Additionally, the *Shri Santosh Choubey Sahitya Samman* award highlights exemplary literary achievements. Through the recognition of both faculty and students, these awards aim to inspire and foster a culture of excellence in research and academic pursuits, furthering the advancement of knowledge and scholarship.

26. Best practices

Best practices ensuring the integrity, quality, and ethical conduct of research endeavours.

26.1. They establish guidelines and standards that researchers must adhere to, promoting transparency, accountability, and reproducibility in the research process. By setting clear expectations for research conduct and reporting, best practices help mitigate risks of misconduct, such as plagiarism, fabrication, and falsification of data, thereby upholding the credibility and trustworthiness of research outcomes.

26.2. Best practices foster a culture of continuous improvement by encouraging researchers to adopt innovative methodologies, rigorous study designs, and robust data management strategies. These practices enhance the reliability and validity of research findings, ultimately contributing to the advancement of knowledge and innovation.

26.3. Best practices support the responsible and equitable dissemination of research outcomes by promoting open access publishing, data sharing, and collaboration among researchers. By facilitating broader access to research findings, best practices maximize the societal impact of research and promote global collaboration in addressing complex challenges.

26.4. Best practices in research policy serve as a foundation for evidence-based decision-making in policymaking, resource allocation, and regulatory frameworks. By integrating empirical evidence and expert consensus into policy formulation, best practices ensure that research policies are informed, effective, and responsive to the evolving needs of the research community and society at large.

26.5. Best practices in research policy are essential for maintaining the integrity, quality, and impact of research endeavours, fostering a culture of excellence, innovation, and collaboration, and guiding evidence-based decision-making in the pursuit of scientific advancement and societal progress.

27. School-wise research priorities

27.1. They provide a framework for strategic planning and resource allocation, guiding investments in research infrastructure, faculty recruitment, and student training programs. By aligning research priorities with institutional strengths, mission, and strategic goals, schools can optimize their research efforts and enhance their competitive edge in specific fields or disciplines.

27.2. School-wise research priorities promote interdisciplinary collaboration and cross-cutting research initiatives by identifying areas of convergence and synergy across different departments or faculties. This interdisciplinary approach fosters innovation, creativity, and the emergence of novel research paradigms that address complex societal challenges from multiple perspectives.

27.3. School-wise research priorities enhance the visibility and impact of research outcomes by focusing efforts on high-priority areas with the potential for significant scientific advancement and societal impact. By concentrating resources and expertise in strategic research domains, schools can maximize their contributions to knowledge generation, technology transfer, and community engagement.

27.4. School-wise research priorities facilitate faculty development and mentorship by providing clear guidance and support for research activities, grant proposals, and career advancement opportunities. By nurturing a culture of research excellence and innovation, schools can attract and retain top-tier faculty members, graduate students, and research staff, thereby strengthening their research capabilities and reputation both nationally and internationally.

27.5. School-wise research priorities serve as a guiding framework for research policy development, implementation, and evaluation, enabling educational institutions to leverage their intellectual capital and resources effectively in pursuit of scientific discovery, scholarly excellence, and societal impact.

28. Research courses

28.1. Research courses provide comprehensive training in research methods, data analysis, and experimental design, ensuring that students develop a robust foundation in research principles and practices. By fostering a culture of research excellence and integrity, these courses promote ethical conduct, transparency, and rigor in the research process, thereby upholding the credibility and trustworthiness of research outcomes.

28.2. Research courses cultivate critical thinking, problem-solving, and analytical skills among students, empowering them to formulate research questions, develop hypotheses, and design experiments that address real-world challenges and advance knowledge in their respective fields. By fostering a culture of inquiry and innovation, these courses stimulate curiosity, creativity, and intellectual curiosity, nurturing the next generation of researchers and thought leaders.

28.3. Research courses facilitate interdisciplinary collaboration and knowledge exchange by bringing together students and faculty from diverse backgrounds and disciplines. By providing opportunities for interdisciplinary learning and collaboration, these courses promote cross-fertilization of ideas, methodologies, and perspectives, fostering innovation and driving breakthroughs in research.

28.4. Research courses contribute to the dissemination and translation of research findings into actionable insights, policies, and practices that address societal needs and promote sustainable

development. By bridging the gap between research and practice, these courses enhance the relevance and impact of research outcomes, ultimately contributing to the betterment of society.

28.5. Research courses support the professional development and career advancement of researchers by providing training in grant writing, manuscript preparation, and scientific communication. By equipping researchers with the skills and resources needed to succeed in academia, industry, or government, these courses enhance the competitiveness and employability of graduates in the global marketplace.

28.6. Research courses play multifaceted roles in research policy by promoting research excellence, fostering interdisciplinary collaboration, facilitating knowledge exchange, and advancing the professional development of researchers. By investing in research education and training, policymakers can cultivate a vibrant research ecosystem that drives innovation, fosters discovery, and addresses pressing societal challenges.

29. RIDD (Research, Innovation, Dissemination and Development Committees)

RIDD (Research, Innovation, Dissemination and Development) Committees are typically interdisciplinary bodies composed of experts from various fields, including academia, industry, government, and civil society. Their primary purpose is to provide strategic oversight, guidance, and coordination for research, innovation, and development activities.

29.1. RIDD Committees establish research priorities and strategic goals based on societal needs, economic opportunities, and scientific advancements. By identifying key research areas and thematic priorities, these committees guide investments in research infrastructure, human capital, and collaborative partnerships, ensuring that resources are allocated efficiently and effectively to address pressing challenges and opportunities.

29.2. RIDD Committees promote interdisciplinary collaboration and knowledge exchange by fostering partnerships among researchers, industry stakeholders, policymakers, and community members. By facilitating collaboration across disciplinary boundaries, these committees stimulate innovation, creativity, and the emergence of novel research paradigms that address complex challenges from multiple perspectives.

29.3. RIDD Committees play a crucial role in policy formulation and implementation by providing evidence-based recommendations to policymakers, funding agencies, and decision-makers. By integrating scientific expertise, stakeholder input, and societal values into policy development processes, these committees ensure that research policies are informed, effective, and responsive to the needs of the research community and society at large.

29.4. RIDD Committees monitor and evaluate the impact of research investments and policy interventions, assessing outcomes in terms of scientific excellence, economic growth, societal impact, and sustainability. By tracking key performance indicators and benchmarking progress against established goals, these committees enable evidence-based decision-making and continuous improvement in research policy and practice.

30. RDC

30.1. RDC, or Research and Development Councils, are instrumental bodies within institutions, organizations, or governments. These councils typically comprise experts from diverse fields, including academia, industry, government, and civil society, and they serve as advisory or decision-making bodies responsible for formulating, implementing, and evaluating research policies and programs.

30.2. RDCs play a pivotal role in setting research priorities and strategic directions based on societal needs, economic opportunities, and scientific advancements. By identifying key research areas and thematic priorities, RDCs guide investments in research infrastructure, human capital,

and collaborative partnerships, ensuring that resources are allocated efficiently and effectively to address pressing challenges and opportunities.

30.3. RDCs facilitate interdisciplinary collaboration and knowledge exchange by fostering partnerships among researchers, industry stakeholders, policymakers, and community members. By promoting collaboration across disciplinary boundaries, these councils stimulate innovation, creativity, and the emergence of novel research paradigms that address complex challenges from multiple perspectives.

30.4. RDCs provide strategic oversight and coordination for research funding and support programs, ensuring alignment with institutional or governmental priorities and objectives. By reviewing grant proposals, allocating research funds, and monitoring project outcomes, these councils promote transparency, accountability, and excellence in research funding processes.

30.5. RDCs serve as platforms for dialogue and engagement between the research community, policymakers, and other stakeholders. By facilitating discussions, consultations, and stakeholder engagement activities, these councils ensure that research policies and programs are informed by diverse perspectives and stakeholder input, enhancing their relevance, effectiveness, and legitimacy.

30.6. RDCs play a critical role in monitoring and evaluating the impact of research investments and policy interventions. By assessing outcomes in terms of scientific excellence, economic growth, societal impact, and sustainability, these councils enable evidence-based decision-making and continuous improvement in research policy and practice.

30.7. Research and Development Councils promoting excellence, collaboration, and societal impact in the pursuit of scientific advancement and economic prosperity.

31. Post Graduate Research Committee

The Post Graduate Research Committee (PGRC) is a crucial body within academic institutions, responsible for overseeing and shaping research policy at the postgraduate level. Its roles include setting high standards for research quality and integrity, formulating policies and guidelines tailored to postgraduate researchers' needs, and monitoring research progress to ensure timely completion. Additionally, the PGRC facilitates access to research resources, supports ethical conduct, and addresses challenges faced by postgraduate researchers. By promoting research excellence, integrity, and professional development, the committee plays a pivotal role in fostering

a conducive research environment and preparing postgraduate students for successful research careers.

32. Research and Development (R&D) Farm

The Research and Development (R&D) Farm plays a crucial role in serving as a platform for applied research, innovation, and knowledge transfer in agricultural sciences and related fields. R&D Farms conduct research activities aimed at addressing pressing challenges and opportunities in agriculture, such as improving crop yields, enhancing livestock productivity, and developing sustainable farming practices. By generating scientific knowledge, innovative technologies, and best practices, these farms contribute to the advancement of agricultural science and the enhancement of agricultural productivity and sustainability.

R&D Farms serve as living laboratories for testing and validating research findings and technologies under real-world conditions. By conducting field trials, demonstrations, and pilot projects, these farms provide valuable insights into the feasibility, effectiveness, and scalability of research interventions, informing evidence-based decision-making and policy formulation. R&D Farms facilitate technology transfer and knowledge exchange by disseminating research outcomes, best practices, and lessons learned to farmers, extension agents, policymakers, and other stakeholders. By bridging the gap between research and practice, these farms facilitate the adoption and uptake of research innovations, thereby enhancing their impact and relevance in addressing agricultural challenges and improving farmers' livelihoods.

R&D Farms play a crucial role in capacity building and skill development by providing training, technical assistance, and experiential learning opportunities to agricultural professionals, students, and farmers. By offering hands-on training in farm management, crop production, livestock husbandry, and agri-business, these farms empower stakeholders with the knowledge, skills, and resources needed to succeed in the agricultural sector.

R&D Farms contribute to economic development and rural revitalization by serving as engines of innovation, entrepreneurship, and value creation in rural communities. By fostering collaboration between research institutions, universities, government agencies, and private sector partners, these farms stimulate economic growth, job creation, and market development in agriculture and allied industries.

Research and Development Farms play a multifaceted role in research policy by serving as hubs of innovation, knowledge transfer, and capacity building in agriculture. By conducting applied research, validating technologies, transferring knowledge, and building skills, these farms contribute to the advancement of agricultural science, the enhancement of agricultural productivity and sustainability, and the promotion of rural development and economic prosperity.

33. Agricultural Cost Cleaning

Agricultural Cost Cleaning" ensuring transparency, efficiency, and accountability in the allocation and management of research funds within agricultural projects. This process involves systematically reviewing and refining the budgetary components of research proposals to accurately estimate the costs associated with project implementation. By meticulously analyzing expenditures, identifying cost-saving opportunities, and aligning resources with research objectives, "Agricultural Cost Cleaning" helps optimize the utilization of limited research funds

and maximize the impact of research investments. Moreover, by adhering to rigorous cost management practices and financial regulations, this process enhances the credibility and integrity of agricultural research initiatives, fostering trust among stakeholders and funders. Ultimately, "Agricultural Cost Cleaning" contributes to the effectiveness and sustainability of research policy by ensuring that scarce resources are allocated judiciously and utilized effectively to address critical challenges and opportunities in agriculture

34. Research Journal (Six Monthly) *"Raman Anusandhaniki"*

Research journals *"Raman Anusandhaniki"* are integral to serving as platforms for the dissemination of new knowledge, employing rigorous peer review processes to ensure quality, promoting research excellence, identifying emerging trends, fostering international collaboration, and advocating for evidence-based policies. Through publications of original research articles and special issues, these journals facilitate the exchange of ideas and methodologies, contributing to the advancement of knowledge across various fields. By showcasing high-quality research, they enhance researchers' reputations and influence funding priorities. Additionally, they play a crucial role in informing policy decisions, advocating for research funding, and promoting public discourse on scientific issues. *"Raman Anusandhaniki"* research journals serve as vital conduits for scholarly communication and knowledge dissemination, driving scientific progress and societal impact.

35. Web portals

Web portals play shaping by providing centralized platforms for accessing, disseminating, and managing information, resources, and services related to research activities.

35.1. web portals serve as repositories of research policies, guidelines, and regulations, providing researchers, policymakers, and stakeholders with easy access to information about research funding, ethics, compliance, and governance. By centralizing information from diverse sources, web portals enhance transparency, consistency, and accountability in research policy implementation and enforcement.

35.2. web portals facilitate communication and collaboration among researchers, policymakers, funding agencies, and other stakeholders by providing forums, discussion boards, and networking tools. Through these interactive features, web portals foster knowledge exchange, idea sharing, and collaboration, enabling stakeholders to engage in dialogue, share best practices, and co-create solutions to complex research challenges.

35.3. web portals facilitate the dissemination of research findings, publications, and datasets, enabling researchers to showcase their work, reach wider audiences, and maximize the impact of their research outputs.

35.4. web portals streamline administrative processes related to grant management, and reporting by offering online tools and applications for proposal submission, review, and tracking. By automating routine tasks and workflows, web portals reduce administrative burdens on researchers and research administrators, allowing them to focus more time and resources on conducting research and advancing knowledge.

35.5. web portals provide data analytics and reporting capabilities that enable stakeholders to monitor research activities, evaluate outcomes, and make data-driven decisions to inform research policy formulation and implementation.

35.6. web portals play a crucial role in promoting inclusivity, diversity, and equity in research policy by providing access to resources and support services for underrepresented groups, early-career researchers, and researchers from diverse backgrounds. Through targeted initiatives, web portals can address systemic barriers to participation in research and create opportunities for all researchers to contribute to scientific advancement and societal impact.

Draft for Discussion

35.7. Web portals are essential tools for centralizing information, facilitating communication and collaboration, streamlining administrative processes, and promoting inclusivity and diversity in research. By harnessing the power of technology and digital innovation, web portals empower stakeholders to navigate the complexities of research policy, engage in meaningful dialogue, and drive positive change in the research ecosystem.

36. Encouraging Doctoral Research by Faculty Member

It has been clarified in the policy for OD(ON Duty) by the University for the research scholars who are doing PhD from the university or any other university that in the three years, the research scholars will be given OD of 12 days in the first year, 12 days in the second year and 24 days in the third year for Synopsis, course work examination, RDC, pre-viva, thesis submission, mains-viva provided that the research scholar submit the credential/ Physical evidence for the aforesaid purpose to the Research and Innovation cell. In case the scholar fails to submit the physical evidence /proof of the aforesaid purpose the OD will be considered as Leave without pay. No OD will be allowed after three years. It is also to be noted that no OD will be allowed for the data collection process. For availing the facility of OD for the PhD program, scholar must take prior permission from the concerned Chair of the school, Director (Research and Innovation) and Registrar. It is to be noted that not more than 2 days continuously will be allowed for OD. No OD for the preparation of research paper or research work other than PhD.