



SARVODAY KELAVANI SAMAJ MANAGED

Shree Manibhai Virani & Smt. Navalben Virani Science College

An AUTONOMOUS COLLEGE

- Re-accredited at the 'A' Level (CGPA 3.28) by NAAC
- 'STAR College Department' Status by MST-DBT
- A College with Potential for Excellence - CPE (Phase - II) by UGC
- Accredited at the G-AAA 'A-1' Level by KCG, Govt. of Gujarat

Research Policy (2019 - 2022)

Preamble

Reputation of any educational institution depends on scholarship, research productivity and innovation. The success of a higher education institution in attaining its objectives is greatly contingent upon the alignment of the faculty with all the aspects of research initiatives, being undertaken at the institute. Therefore, the present research policy aims to help Shree Manibhai Virani and Smt. Navalben Virani Science College, (Autonomous), Rajkot and faculty achieve excellence and contribute to organization and society.

Objectives

This policy provides a broad framework to guide research at the College. The objectives of policy are as follows:

- To promote research and innovation to address local, regional, national and global issues,
- To ensure integrity, quality and ethics in research,
- To integrate teaching and research through translational and instructional research, and;
- To incentivize the generation of intellectual capital.

Promotion of Research

The College believes that researchers are free to choose the subject of their research, to seek support from any funding source for their research work, and to report their findings and conclusions. However, research shall be available for scrutiny to the College and constructive criticism of peers. Research techniques used by the researchers shall not violate established professional ethics, pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals.

The College shall create conducive environment for research. Due to limited resources, the College may not fully support all research likely to be undertaken, but it shall allocate the space, facilities, partial funding, and other resources for research programmes based on the scholarly and educational merits of the proposed research. It shall also provide development opportunities to researchers for writing research proposals and reports, publications, patent filing, etc.



Identification of Thrust Areas

Although the researchers have the freedom to choose their own topics of research, it is highly desirable to make research socially relevant. The College expects the different departments to prepare a list of research topics, with a view to be focused in their efforts. Under each discipline and department, there shall be an exhaustive list of such topics or areas, which can be called a bank of thrust areas. It shall be utilized for the following research activities and most of the topics shall be chosen from this Bank:

- The Bank can be made available to the research scholars who may use it for their doctoral thesis.
- Similarly, the faculty shall also avail the Bank for identifying the subject for their minor research projects and even for major research projects.
- Even for industry sponsored projects or for collaboration with other institutions, the Bank shall be utilized.

Research at UG and PG Level

Teaching and research are equally important in an education institute. Hence, it is thought that to promote creativity among the undergraduate and post-graduate students, some research component in the curricula, especially in the final or pre-final year of the bachelors Programme and final year in the master's Programme, is necessary. Accordingly, in the pre-final / final year of the bachelors Programme the Minor Research Project and Major Research Project are inducted where the students under the guidance of the faculty work on the decided topic of the dissertation and submit the findings periodically. The final project is submitted to the institution and also the viva is conducted. Similarly, in the postgraduate programme, research is emphasized emphatically and students are trained for robust research skills. The college shall further reinforce research training in both undergraduate and postgraduate programmes in the future.

Concept to Practice – The Idea Lab

Students have many ideas on which they want to work, but in the absence of the infrastructure, including the place and space, they are unable to work on them. Therefore, the college would encourage concept to Practice or an Idea Lab in each department and in due course of time at the college level, where the students can research on an idea. The Idea Lab also provides the opportunity to the students to ask questions in different areas of knowledge. It shall equip them with an ability to think, concretize the idea, design research study, work on it and report the findings. It shall also encourage research scholars to publish and patent their research work.



Ph.D. Programme

The first step towards doctoral programmes was commenced in 2008 in Microbiology Department. This was then followed by the same programme in Chemistry, Biochemistry, Biology and Biotechnology departments of the college. The college shall continue to encourage faculty and research scholars to get funding for attending International conferences from external agencies as a matching share so that the quality in research paper can be maintained. It shall urge research scholars to publish and patent their research work.

Minor Research Projects

From the very beginning, the college has encouraged young faculty to conduct research. Accordingly, a faculty member prepares Minor Research Project, which is submitted to a RAC at college level and on the recommendations of this committee the faculty does the modifications, if needed and applied for the funding.

To have the periodical assessment for all such research projects and with an aim to guide the researcher, the RAC meets every 3 months. It is also mandatory to send a quarterly progress report of such Minor Research Project to the RAC. The Minor Research Project helps young faculty think about research, prepare the proposal, conduct research and write a research report. It also assists them in preparing proposals for major research projects.

Major Research Projects

The college has identified some funding agencies where the faculty can submit Major Research Project proposals to these agencies. These proposals are scrutinized by RAC before submitting to a funding agency. The college provides all kinds of infrastructure facilities needed for conducting a Major Research Project. The college monitors the progress of Major Research Projects funded by an external agency, maintain its accounts and submit the utilizing certificate in time to the funding agency as per its requirement.

Collaborative Research Projects

The Institution-Industry Interaction is the demand of the day. If we want to contribute to the society at large, the college has to closely work with industries and different organizations. Industries and business organizations are facing different kind of problems and many of them would like to have the help from the education institution with an aim to find the solutions to their problems. For that, the college has planned to have the following activities:

- **Industry Sponsored Research Project:** An organization can sponsor a project and the experts of the institution concerned can conduct research on this project for which the financial support may come from the organization. As a result, if any patent is



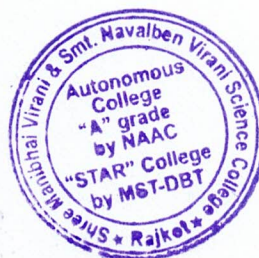
registered, there shall be a sharing of income coming out of the patent among the industry, researcher and institution. This will lead to three kinds of benefit:

- a) the researcher will get exposures to the concerned area of research;
- b) the industry will get solutions to its problem; and,
- c) the researcher, Institute and Industry can earn money and at the end, the society ultimately will benefit.

- **Interdisciplinary Research:** The interdisciplinary research is a must in today's world. No department, institution, researcher or a scholar can address a research problem in which more than one discipline is involved and unless they get together and conduct interdisciplinary research no fruitful findings can be arrived at. Therefore, the college has decided to have exercise in interdisciplinary research activities for which the following steps will be taken:
 - a) Identify the interdisciplinary area.
 - b) Identify the different experts from concerned disciplines who can work together.
 - c) Study the requirement of the infrastructure to conduct the concerned interdisciplinary research.
 - d) Explore possibilities to find resources for such interdisciplinary research.
- **Collaborative International Research:** We live in a global village. Knowledge is being produced in the different parts of the world. Collaborative international research is essential to facilitate mutual learning and expertise sharing. The college plans to have the MoUs with prominent research institutions abroad, for conducting research jointly in the areas of common interest. It will be the function of RAC to constantly explore the possibilities of having such collaborative or joint research in terms of thrust areas, decide the modus operandi of conducting such research and attend to other relevant aspects.

Training for Research and Publications

Generally, faculty are eager to conduct research, but because of the lack of expertise to write a research proposal or having insufficient research skills, they are unable to channelize their effort effectively. Hence, in many cases, a research proposal is rejected by a funding agency. Even for publication of papers, because of the lack of knowledge about how to write a paper and in which format it should be submitted, sometimes the papers are not accepted. Therefore, the college shall organize rigorous training programmes for researchers in the identified areas.



Publication of Papers and Journals

Publication of papers is critical for the effectiveness of the research. Faculty must publish continuously in quality journals. Therefore, the college plans to encourage the publication of papers by the faculty with a targeted aim. A faculty member shall be expected to publish certain number of research papers in refereed journals at national and international levels. These journals shall be identified by respective institutes.

Research papers to be published in identified journals and to be presented at national and international conferences shall be scrutinized and guided by members of RAC. Each department shall be encouraged to publish in a quality journal and organize research conference, seminar or symposium from time to time to boost research activities in the college and to contribute to the existing body of knowledge.

Patent and IPR

The college would like to strengthen the research, leading to filing of patents for which the guideline is already available. If any innovation is done, the college shall encourage the researchers and scholars to patent it. However, when a scholar files for a patent, a thorough scrutiny will be carried out.

The college will also extend financial support for filing application for patent. If the patent is commercialized the sharing of earning is to be done between researcher and the college as per the guideline which will be developed from time to time.

The college shall create awareness about intellectual property rights among faculty, researchers, scholars and students from time to time.

Centre of Excellence

The college would like to create an environment for each department where work in a specific research area is conducted and be known as a specialist department or organization. Through these efforts, the college shall promote a particular department as the Centre of Excellence in due course for a specialized thrust area.

Incentives for Outstanding Research

The institution would like to encourage quality research in different thrust areas. For this purpose, outstanding research contributions done by faculty, researcher, and research scholar shall be recognized. The incentives are identified as under:

- a) Incentive in terms of providing State of the Art laboratory, sophisticated instruments, required consumables and access to library and its data bases as And when needed,
- b) Incentive in terms of awards/prizes
- c) Incentive in terms of undertaking MoUs for starting a new project or to facilitate ongoing



research

d) Incentive in terms of certificate or giving more weightage for the career advancement Scheme, etc.

Responsible conduct of Research – (RCR)

Any research in an institution must abide to the code of Conduct for a responsible research as set by the institution in its policy. The faculty and students at Shri M. & N. Virani Science College (Autonomous) Rajkot shall follow the major domains of RCR, namely: Animal welfare, Collegiality, Institutional integrity, Protection of human subjects, Scientific integrity, and social responsibility.

Research Misconduct and Research ethics

The college believes that the occurrence of misconduct is a threat to the basic principles of research. The college defines research misconduct as:

- Any fabrication, falsification or plagiarism in proposing, performing or reviewing research or in the reporting of research results.
- Research misconduct does not include an honest error or differences of opinion, authorship disputes that do not involve plagiarism, and violations of other college policies (e.g., gender bias, sexual harassment policy, etc.).

Misconduct in research damages the integrity of the profession and undermines the credibility of scholars. It is also antithetical to the values the college strives to maintain and promote. The college shall take all allegations of misconduct very seriously and shall ensure that the procedures for the inquiry, investigation and adjudication of any misconduct are well defined and just for all parties involved.

Review of the Policy

The policy will be reviewed after a period of three years.

Reads: RESEARCH POLICY HANDBOOK - (UGC-Atmanirbhar Bharat- 2022)

Six domains of research ethics. A heuristic framework for the responsible conduct of research

Coordinator



Chairman

Principal
Shri Manibhai Virani and
Smt. Navalben Virani Science College
(Autonomous) Rajkot.