



# **SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE**

**(An Autonomous Institution)**

**Puducherry - 605 107**



## **CODE OF ETHICS FOR RESEARCH**

## Introduction

Sri Manakula Vinayagar Engineering College (SMVEC) believes in a judicious combination of teaching and research for the benefit of the student community at large. The Institution envisages innovation and technological development through its R&D cell. It has plans to cultivate academic and research collaborations with national and international universities, government agencies and industries to meet the immediate needs of society and the industry. The Institution has a focused research policy and the research facilities are updated using the funds received from Government and Private Agencies.

Code of Ethics in Research sets for the general principles of ethical conduct to guide scholars towards the ideas of scholarly Research. The principles represent goals and standards that should direct Researchers to an ethical course of action. They are consonant with the vision, mission and values of the institution. Also, the Ethics in Research applies to all members of the institution, thus the principles are stated broadly in order to apply to all scholars in various disciplines using various methods of inquiry, and their specific application may vary with the context of the Researcher.

The Research and Development cell of the institution functions based on the following objectives.

- To motivate faculty to pursue Doctoral and Post-Doctoral assignments at various national and international universities and organizations of repute.
- To encourage faculty to undertake research projects in thrust areas in science and engineering funded by various national and international agencies.
- To explore new horizons of knowledge and ensure its practical implementation through collective efforts and quality research work.
- To provide a creative atmosphere, complemented by adequate facilities and resources in which higher studies and research thrive amongst the faculties and students.
- To establish Centers of Excellence in thrust areas.
- To set up the Incubation Centers to motivate innovations and start-ups.
- To adopt Collaborative Research with IITs, NITs, premier research laboratories and industries.
- To mentor the academic and industry-based research projects.
- To encourage faculty to publish the research works in renowned journals through suitable appraisal policy.
- To motivate and mentor students to participate in various Hackathons and International contests.
- To develop products and file IPR.
- To provide the faculty members with Seed Money for research activities in-order to enable them to obtain research projects from various government bodies.

### RESEARCH ADVISORY COMMITTEE

S. No.	Name	Designation	Position
1.	Dr.V.S.K. Venkatachalapthy	Director cum Principal, SMVEC	Chairman & Convenor
2.	Dr.H.Prathap Kumar Shetty	Professor, Department of Food Science and Technology Dean, School of Life Sciences Pondicherry University,	Member/External
3.	Dr.R. Nakkeeran	Professor & Head Dept of Electronic Engineering Pondicherry University.	Member/External
4.	Dr. G. Zayaraz	Professor, Department of Computer Science Engineering, Puducherry Technological University (PTU).	Member/External
5.	Shri. K. Vijay Ganesh	Managing Director Poclain Hydraulic Pvt Ltd Puducherry.	Member/External
6.	Shri. M. Sendhil Mourougane	Senior Manager – Technology Microchip Chennai (Software and Hardware) Tamil Nadu.	Member/External
7.	Dr. K. Velmurugan	Professor & Dean Research Dept of Mechanical Engineering, Dean Research, SMVEC.	Member/Internal
8.	Dr. S. Anbumalar	Professor & Dean Academics Department of Electrical and Electronics Engineering, SMVEC.	Member/Internal
9.	Dr.A.A.Arivalagar	Professor & Dean Academics Department of Mechanical Engineering, SMVEC.	Member/Internal
10.	Dr. N.S.N. Cailassame	Professor & Dean Placement Department of Management Studies, SMVEC.	Member/Internal



11.	Dr. R. Raju	Professor & Head, Dept of IT, SMVEC	Member/Internal
12.	Dr. K. Premkumar	Professor & Head, Dept of CSE, SMVEC	Member/Internal
13.	Dr. L.M.Varalakshmi	Professor & Head Department of Instrumentation and Control Engineering, SMVEC.	Member/Internal
14.	Dr. G. Bala Muruga Mohanraj	Professor and Head, Department of Mechatronics, SMVEC	Member/Internal
15.	Dr. S. Sundararaman	Professor and Head, Department of Civil Engineering, SMVEC	Member/Internal
16.	Dr. G.G. Sozhamannan	Professor and Head, Department of Mechanical Engineering, SMVEC	Member/Internal
17.	Dr. P. Jamuna	Professor and Head, Department of EEE, SMVEC	Member/Internal
18.	Dr. N. Danapaquime	Professor and Head, Department of CSBS, SMVEC	Member/Internal
19.	Dr. V. Bharathi	Professor and Head, Department of CCE, SMVEC	Member/Internal
20.	Dr.D.Saravanan	Professor and Head, Department of Management Studies, SMVEC	Member/Internal
21.	Shri. R. Ramakrishnan	Professor and Head, Department of MCA, SMVEC	Member/Internal

## Academic Research

### A. Academic Freedom, Integrity and Responsibility

Academic freedom is the freedom to teach, study and pursue knowledge and research without unreasonable interference or restriction from law, institutional regulations or public pressure. Its basic elements include the freedom of scholars to inquire into any subject that evokes intellectual concern, to present findings, to publish data and conclusions without control or censorship and to teach in the manner they consider professionally appropriate.

At the same time, integrity, accountability and responsibility in conducting academic research form the cornerstone of any academic enterprise and violations of widely-recognized academic research standards represent serious offences to the entire academic community at the Institute and are considered injurious for its credibility and authority as an institution that promotes excellence in academic research in India.

Academic integrity requires that academic research follows elevated professional standards, including appropriate research design and frameworks, adheres to high levels of research ethics and abides by the requirements set out by professional and regulatory research guidance and research ethics frameworks issued in appropriate areas.

### Principles and Values of Academic Integrity

Academic integrity is defined in terms of the commitment to the values of honesty, trust, fairness, respect, responsibility, legality and dissemination.

**Honesty:** The institution should advance the quest for truth, knowledge, scholarship and understanding by requiring intellectual.

**Trust:** The institution should foster a climate of mutual trust

to encourage the free exchange of ideas and enable all to reach their highest potential.

**Fairness:** The institution should seek to ensure fairness in institutional standards, practices and procedures as well as fairness in interactions between members of the community.

**Respect:** The institution should promote respect among students, staff and faculty: respect for self, for others, for scholarship and research, for the educational process and intellectual heritage.

**Responsibility:** The institution should uphold high standards of conduct in learning, teaching and research by requiring shared responsibility for promoting academic integrity among all members of the community.

**Legality:** The institution should observe valid legal norms related to the conduct and publication of research particularly in relations to copyright, the intellectual property rights of third parties, the terms and conditions regulating access to research resources and the laws of libel.

**Communication:** The institution should seek to make the results of its research as widely and as freely available as possible.

### B. Institutional Responsibilities

The Principal, Coordinator for Research and Development, the Heads of Departments, together with the teaching staff, are responsible for promoting and endorsing a transparent academic environment conducive to the application of the high professional and ethical criteria of good practice for academic research. Professors are expected to create and sustain a climate of mutual co-operation that facilitates the open exchange of ideas and researchers, in accordance with the nature of the individual academic discipline and associated mode of research.



The Institute is committed to the provision of appropriate direction of research and supervision for researchers. Supervisors are expected to adhere to the Code of Practice for Doctoral Supervision, which delineates the supervisory relationship, the assessment of research progress, and the procedures to resolve problems in the supervisory relationship.

### **C. Training**

The Academic Departments should ensure that all researchers undertake appropriate training in research design, methodology, regulatory and ethics approvals and consents, equipment use, confidentiality, data management, record keeping, data protection and publication, the appropriate use of licensed research resources and respect for the intellectual property rights of third parties.

The Institute is also committed to preparing its administrative and support staff involved in record keeping and the implementation of Data Protection Policy and expects them to fully respect the principles and rules of the Code of Ethics in Academic Research.

### **D. Publication Practice and Authorship**

The Institute encourages the publication and dissemination of results of high-quality research. It also expects that researchers will engage in the process of publishing and dissemination of their work responsibly and with an awareness of the consequences of any such dissemination in the wider media.

Results should be published in a form appropriate to the academic discipline. The Institute requires that all individuals listed as authors accept responsibility for the contents of the publication and can identify their contribution to it. Authors should have participated sufficiently in the research to take public responsibility for the content. The institute does not recognize the practice of honorary authorship.

## **The Ethics Committee**

### **A. Tasks of the Ethics Committee**

- To provide advice and guidance to the academic community on all matters pertaining to academic research ethics
- To advise the Academic Council on compliance with the 'Code of Ethics in Academic Research' of the various academic activities at the Institute
- To provide guidance and academic support to scholars on ethical issues in respect of teaching, research and other academic activities. On an entirely voluntary basis, researchers may ask the Ethics Committee for consultation on ethical aspects of their research.
- To confirm to external parties on behalf of the Institute compliance with ethical standards in respect of research projects undertaken at the Institute. The Committee is only convened at the explicit request of scholars needing an assessment of the ethical dimensions of a research project.
- To advise the Executive Committee and the Academic Council of any policies that may be required in relation to accepting funds from particular sponsors of research

- To act as an investigative/consultative body for any disputed matter concerning research ethics and conduct
- To make recommendations to the internal Disciplinary Committee on what action, if any, should be taken as a result of the investigations.

#### B. Appointment and Composition of the Institutional Ethics committees (IEC)

The Institutional Ethics committees is appointed by the Academic Council upon nomination by the Director cum principal.

**Ethics Committee**

S. No.	Name	Designation	Position
1.	Dr.V.S.K. Venkatachalapthy	Director cum Principal, SMVEC	Chairperson
2.	Dr.K. Velmurugan	Dean Research, SMVEC	Convenor
3.	Dr.S.Jayakumar	Controller of Examinations, SMVEC.	Member
4.	Dr.P.Raja	Professor & Head, Dept of ECE, SMVEC.	Member
5.	Dr.J. Madusudhanan	Professor & Head Dept of Artificial Intelligence and Data Science, SMVEC.	Member
6	Dr. D. Jaichithra	Professor & Head, Dept of English, SMVEC.	Member

The nomination of faculty members of the Committee should endeavor to cover all the disciplines of the Institute.

In case of conflict of interests, members of the Ethics Committee shall be temporarily replaced by substitutes nominated by the Director cum Principal.



## Misconduct in Academic Research

### A. Misconduct in Research

Misconduct in academic research implies (and is not limited to) fabrication, falsification, plagiarism or deception in proposing, carrying out or reporting results of research and deliberate, dangerous or negligent deviations from accepted practice in carrying out research. It includes failure to follow an agreed protocol if and when this failure results in unreasonable risk or harm to persons, the environment, and when it facilitates misconduct in research by collusion in, or concealment of, such actions by others.

Misconduct also includes any plan or attempt to do any of these things. It does not include honest error or honest differences in interpretation or judgment in evaluating research methods or results, or misconduct unrelated to research processes.

Misconduct includes (and is not limited to) the following acts: **Plagiarism:** The deliberate copying of ideas, text, data or other work (or any combination thereof) without due permission and acknowledgement.

**Privacy:** The deliberate exploitation of ideas from others without proper acknowledgement  
**Abuse of Intellectual Property Rights:** Failure to observe legal norms of copyrights and the moral rights of authors.

**Abuse of Research Resources:** Failure to observe the terms and conditions of institutionally licensed research resources.

**Defamation:** Failure to observe relevant legal norms governing libel and slander.

**Misinterpretation:** The deliberate attempt to represent falsely or failed to understand or interpret something correctly.

**Personation:** The situation where someone other than the person who has submitted any academic work has prepared (parts of) the work; **Fabrication and Fraud:** The falsification or invention of qualifications, data, information or citations in any formal academic exercise.

**Sabotage:** Acting to prevent others from completing their work. This includes stealing or cutting pages out of library books or otherwise damaging them; or willfully disrupting the experiments of others; or endangering institutional access to licensed research resources by willfully failing to observe their terms and conditions.

**Professorial misconduct:** Professorial acts those are arbitrary, biased or exploitative.

**Denying access to information or material:** To deny others access arbitrarily to scholarly resources or to deliberately and groundlessly impede their progress.

**Misconduct in formal examinations:** Includes having access, or attempting to gain access during an examination, to any books, memoranda, notes, unauthorized electronic devices or any other material, except such as may have been supplied by the invigilator or authorized by the Academic Department.



It also includes aiding or attempting to aid another candidate or obtaining or attempting to obtain aid from another candidate or any other communication and conversations that could have an impact on the examination results.

## **B. Identifying levels of violations of good academic practice:**

Two levels of violations of good academic practice can be distinguished.

### **1. Minor Violations:**

Minor violations may occur because of inexperience or lack of knowledge of the principles of academic integrity and are often characterized by the absence of dishonest intent on the part of the person committing the violation. They may result from:

*a. weak procedures and methods which may jeopardize the integrity of the research but are not undertaken deliberately or recklessly*

*b. weaknesses which present no major risks to either subjects or policies which they may influence*

On the whole, these minor violations can be seen as failings which may reflect only poor, rather than unacceptable practices and therefore mainly require further training and development rather than any formal disciplinary action.

#### ***Examples of minor violations include:***

- *Minor plagiarism* defined as a small amount of paraphrasing, quotation or use of diagrams, charts etc. without adequate citation. Minor plagiarism may result from poor scholarship (i.e. when a student, through inexperience or carelessness, fails to reference appropriately or adequately identify the source of the material which they use).
- *inaccurate claims to experience, qualifications or contributions in a context where the person committing the violation cannot expect major benefits (such as winning a competition for a prize or job)*
- *inaccurate representation of findings without deliberate distortion*
- *lack of diligence in declaring relevant conflicts of interest*

Such violations may present no risks to subjects, the wider community or the environment, but they may warrant some penalty or sanction at institutional level.

### **2. Major Violations:**

Major violations are breaches of academic integrity that are more serious in nature or that affect a more significant aspect or portion of the academic work compared with minor violations.

Key examples are:

*a. Deliberate, reckless or grossly negligent conduct which would clearly pose a significant risk in one form or another to the integrity of the research.*

*b. Conduct that may pose risks to subjects, the wider community, the environment, or to the research reputation of the institution and research in general.*

*c. Major plagiarism defined as:*

- *extensive paraphrasing or quoting without proper citation of the source;*
- *lifting directly from a text or other academic source without reference;*
- *the use of papers (or parts thereof) from essay banks, either downloaded from the internet or obtained from other sources;*
- *presenting another's designs or concepts as one's own;*
- *continued instances of what was initially regarded as minor plagiarism despite warnings having been given.*

The Institute is committed to fully investigate serious violations of academic misconduct by any academic member.

#### Plagiarism:

Plagiarism represents unethical scientific behavior which is never acceptable. Proper acknowledgement of the work of others used in a research work must always be given. Further, it is the obligatory on part of each author to provide prompt corrections or errors in published work.

#### Degrees of Plagiarism:

1. Invalid source
2. Secondary source
3. Duplication
4. Paraphrasing
5. Repetitive research
6. Replication
7. Misleading attribution
8. Unethical collaboration
9. Verbatim plagiarism
10. Complete plagiarism

#### Possible nature of Ethical violations:

- Conflict of Interest: Any action that may result in a conflict of interest must be fully disclosed. When impartiality and effectiveness cannot be maintained, the activity should be avoided or discontinued.
- Disputes about authorship: Proper authorship representation is usually a matter for the involved parties to resolve
- Duplicate Submission: Duplicate submission is unprofessional and unacceptable. It misuses the resources of all affected journals, including the valuable time of editors, reviewers and staff
- Fabrication of data or results: Any incidence of fabrication shall be considered to be an extremely serious breach of professional conduct, with potentially severe ethical and legal consequences. The institution checks the plagiarism of research thesis online sources.

#### Plagiarism Checker Software:

##### 1. Turnitin

#### Action/Penalty against defaulters:

Any violation of the rule and other issue, complaints regarding plagiarism attracts disciplinary action to be imposed by committee within one month from the day of complaint. Depending on the type of acts and violation of code of ethics, suitable penalty or punishment against defaulters shall be recommended by the review committee.

### C. Procedures for Investigation of Research Misconduct

#### 1. Investigation of proceedings

Without prejudice to the right and duty of Departments to address and assess issues of plagiarism in the course of the regular assessment of a paper presented by a researcher, any person may submit a complaint about academic misconduct to the Director cum Principal. Such complaints need to be supported by sufficient evidence.

The Director cum Principal will decide whether the allegation is serious enough to warrant an investigation by the Institutional Ethics Committee (IEC). If the allegation concerns a Ph.D researcher, the Principal may also delegate this task to the Head of the Department (s). The initiator of the allegation shall be asked to set out in writing the basis of the allegation.

The Ethics Committee may carry out:

- a preliminary investigation to ascertain whether there is sufficient substance to the allegation as to warrant a more thorough investigation;
- a formal inquiry which may include the consultation or involvement of external experts when needed.

#### 2. Investigation

Where possible, the investigation will include examination of all relevant documentation, including, but not limited to: relevant research data; laboratory notebooks; computer files; other materials; proposals; publications; correspondence; and memoranda, insofar as this is necessary for the investigation and compatible with the Institute Data Protection Policy.

The Chair of the Institutional Ethics committees may invite internal or external experts who are



not involved in the disputed matter and who are not members of the Committee to attend meetings.

Interviews shall be conducted with the complainant and the respondent. Other individuals involved in making the allegations and individuals who might have information regarding key aspects of the allegations may also be heard by the Committee.

The respondent has the right to be assisted or represented by a member of the Institute of his/her own choice. Details of the allegations and the investigation will be made available only to the Ethics Committee. All individuals interviewed during the investigation will be asked to respect the confidential nature of the investigation.

### 3. Investigation report and recommendations

The Ethics Committee will produce a report stating: the procedures under which the formal investigation was conducted; how and, where appropriate, from whom information was obtained; the findings of the committee and the basis for these; a summary of the views of the respondent; and a description of any recommendations made by the committee.

The respondent will receive a copy of the investigation report and have an opportunity to comment on it. Comments may be submitted to the Ethics Committee and will be attached as an addendum to the investigation report. If disciplinary actions are recommended, the Institutional Ethics committees will communicate to the internal Disciplinary Committee what action, if any, should be taken as a result of the investigation.

Based on the investigation report and recommendations of the Institutional Ethics committees, the Disciplinary Committee may decide on sanctions (when considered appropriate).

### D. Sanctions

Sanctions, as recommended by the Institutional Ethics committees and as decided by the Disciplinary and/or Disciplinary Appeals Committee, may include (but are not limited to):

- resubmission of an assignment or academic work
- a failing grade for the examination or specific assigned exercise; or a failing grade for the course as a whole, depending on the importance of the work to the overall course grade
- a letter of reprimand, issued by the chair of the Disciplinary Committee, which may or may not be recorded on the scholar's file.



