

Academic Integrity

Academic Integrity is more than a policy to uphold the institution that entails the enactment of educational values through behaviours such as avoidance of cheating, plagiarism, contract cheating as well as the maintenance of academic standards; honesty and rigor in research and academic publishing. Research Integrity, a significant component of academic integrity, is the active adherence to the ethical principles and professional standards essential for the responsible practice of research. "For individuals, research integrity is an aspect of moral character and experience. It involves above all a commitment to intellectual honesty and personal responsibility for one's actions and to a range of practices that characterize responsible research conduct". It applies to the whole research lifecycle, from the preparation and submission of grant and project proposals to the publication and dissemination of findings. The practices should be conflict of interest, responsible authorship, policies for handling misconduct, data management, data sharing, and policies regarding the use of human and animal subjects.

The ability of the University to achieve its goals depends upon the quality and integrity of the academic work that its faculty, staff, and students perform. Academic freedom can flourish only in a community of scholars which recognizes that intellectual integrity, with its accompanying rights and responsibilities, lies at the heart of its mission. Observing basic honesty in one's work, words, ideas, and actions is a principle to which all members of the community are required to subscribe.

In all academic matters, students and scholars are governed by the presumption that their academic work is held to the highest standards of research and scholarship, and all forms of academic fraud, including plagiarism, multiple submissions, false citations, and the use of false data, are regarded as serious violations and will be subjected to disciplinary action. This document will also be binding to the existing PhD regulations of the University.

Guidelines on Academic Ethics

Preamble

Cochin University of Science and Technology expects all its students to uphold the highest standards of academic ethics. Extremely rigorous, scientific, and responsible efforts through research and innovation are needed in the pursuit of truth, and for creating or presenting new

and authentic scientific information, to contribute to socio-economic benefits for the global community. It is critical to ethically increase quality while also preventing academic misconduct, including plagiarism. Following the catastrophe of the "Fabrication, Falsification, and Plagiarism" crises, serious worries about bogus information have been raised for many years, particularly with the increasing tendency of publishing research papers in international journals. Faculty, scientists, and other stakeholders must take a strong stance against such developments. The growing prevalence of compromised publication ethics and eroding academic integrity is a global issue that reflects poorly on all aspects of academia.

This document will act as a reference for implementing these standards in all the departments on the University campus as well as the institutions affiliated with Cochin University of Science and Technology. This was prepared by taking into account different contexts of academic life such as teaching, conducting research, publishing papers and books, training, and administration. A range of instances in which unintentional or intentional misconduct may occur are discussed. In the event of any allegation or possibility of misconduct having occurred, the appropriate remedial and/or disciplinary procedures are outlined below. It is recommended that all academic members (including faculty, postdoctoral or project researchers, and students at all levels) get acquainted with its contents.

This document has been conceptualized based on the existing UGC guidelines and ethics policies of other academic and research institutions in India.

1. Academic Teaching

1.1 Recruitment and Evaluation of the Students

The Recruitment of students at all levels at Cochin University of Science and Technology should follow a just and fair procedure that is clearly outlined in advance. When assessments include interviews, as in the selection of Ph.D. students, it must be understood that subjective academic judgments are involved. However, caution must be exercised to avoid factors irrelevant to the student's merit, as well as conflicts of interest.

1.2 Ethics in Teaching and Learning

The permanent faculty, contractual teachers, and visiting academicians should strive for excellence in course content and teaching methodology. The procedure for assessing a course should be made clear to students at the outset as described in the CUSAT Act 1986. Subjective academic judgments are unavoidable when evaluating projects and theses based

on seminars/interviews, however as previously said, care must be made to prevent incorporating extraneous issues. Sensitive student-related issues, such as records and communications, should be disclosed only when necessary and with the appropriate persons. The dignity of the classroom or laboratory atmosphere must be maintained at all times. Students, for their part, are expected to commit to each course with complete honesty and a genuine desire to participate and learn. Assignments, examinations, and other related activities must be completed strictly following the provided guidelines. Attempting to utilize unauthorized materials or information, including copying or stealing from another student or any other source, is unethical and will result in the application of penalties as described below. As part of their orientation, students in the University Departments will be expected to watch a training video / online presentation as soon as they are admitted. Where needed, additional ethical training tailored to specific research or study activities will be provided.

2. Conduct of Research

2.1. Responsibilities for the ethical conduct of Research

It is critical to conduct research responsibly and to protect ethics and academic integrity in scientific research. Compromised publication ethics and deteriorating academic integrity are contaminating all domains of research. Unethical, and deceptive practices in publishing have increased the number of dubious/predatory journals globally. Academic misconduct, including plagiarism in academic writing, must be avoided by students, faculty, researchers, and staff.

Usually, in research projects/dissertations there is a Principal Investigator (PI)/Research Supervisor or a set of co-PIs/co-guides who lead the project/guide the dissertation. They should keep an eye on the research procedures and develop policies for collecting data and compiling outcomes. The University/Department should act as a facilitator to make aware of these policies for the students, researchers, and other contributors. The PI should take extra care to ensure the supervision and mentorship of young researchers, including students, PhD scholars, and postdoctoral fellows. Regardless of the above, all personnel involved in a research project are responsible for their conduct and must ensure that they are consistent with, and uphold high ethical standards. In particular, younger researchers such as students and Ph.D. scholars must carefully follow ethical principles in their research. Their unethical behaviour cannot be condoned by the claim that they were following a mentor's instructions.

2.2 Data management

Data must be appropriately analyzed, although inappropriate analysis may not always constitute misconduct. However, fabrication and falsification of data do constitute misconduct.

2.3 Ownership

Physical materials emerging from research projects conducted at the University such as lab notebooks, data sets, computer peripherals, equipment, and so on, will remain the property of Cochin University of Science and Technology unless specifically agreed otherwise. The same holds for commercial valuable software and processes.

2.4 Effective management of funds

The utilization and management of research funds necessitate adherence to financial policies and regulations of Cochin University of Science and Technology as well as the policies of the respective funding organizations. This applies to both funds received from University and other granting sources. Efforts should be taken to ensure the reasonable and efficient use of resources through transparent and equitable processes.

2.5 Sharing of Equipment/facilities and other resources

Equipment/facilities and other resources installed at Cochin University of Science and Technology are expected to be shared with colleagues who need access for their study, as long as such access does not interfere with the original objective for which the equipment/facilities were created. In such cases, the PI/Head of the Department can make collective decisions on who runs the equipment and when, as long as sharing is actively facilitated and transparent protocols are in place.

2.6 Experiments involving cell lines, microorganisms/animals/ human beings

All experiments involving cell lines, animals, or human research subjects require ethical permission and approval. Experiments involving the use of animals come under the purview of the Institutional Animal Ethics Committee (IAEC), CUSAT which operates under the standards of the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) <http://cpcsea.nic.in/>

Adoption of “Regulations and Guidelines for Recombinant DNA Research and Biocontainment, 2017” by the Department of Biotechnology, Govt of India shall be binding

pan India for all public and private organizations involved in research, development, and handling of GE organisms (organism includes microorganisms, animals, plants, arthropods, aquatic animals, etc.) and non-GE hazardous microorganisms (microorganism includes parasites, protozoa, algae, fungi, bacteria, virus, prions, etc.) and products produced through exploration of such organisms.

Experiments involving cell lines, stem cell research and human beings come under the purview of the Institutional Human Ethics Committee (IHEC), CUSAT which operates based on the regulations of the Indian Council of Medical Research (ICMR).

2.7 Safety and Environment

All members of Cochin University of Science and Technology are expected to incorporate safety and environmental issues into their research practices. For the handling, storage, or disposal of hazardous materials, environmental rules, regulations, and laws must be followed, and proper licenses, permits, and clearances must be obtained. Cochin University of Science and Technology and PIs share joint responsibility for ensuring that the work location is safe and that the group's research practices do not jeopardize the research team, visitors, or the public. In this regard, the PI is expected to urge team members to receive adequate training to maintain safety and environmental standards, as well as to notify the Institute on any necessary safety measures. Precautionary methods should be taken by the researchers especially female scholars, before handling laboratory equipment commonly used in conjunction with radiation/hazardous chemicals.

2.8 Responsibilities of a Research Supervisor

Research supervision is a multifaceted interaction between a research supervisor and a research scholar. The collaboration between the two plays an important role in influencing the excellence of supervisory practices. 'Supervision' is the process of training, guiding, counseling, coaching, mentoring, and leading the research scholar to successfully carry out research activities. The researcher aims to be recognized with the award of a doctoral research degree. Supervision is a vital element of research studies. The expectations of a research scholar and the supervisory style of the supervisor or research guide shape the quality of the supervisory process. This is crucial in creating and building a stimulating and productive research environment. Research supervision has two important aspects: Style of supervision and Quality of supervision. The relationship between these two is most important.

- Style of supervision is identified as how a supervisor executes the supervisory process, considering his or her understanding of the research scholar's research needs. Because such needs vary between students, there is no fixed formula for good supervisory practice.
- Quality of supervision evolves when the supervisory process is adapted to meet the specific needs of the research scholar in question.

Research supervision enables learning ethical issues in research, both internal (pertaining to aspects within the research framework) and external (aspects related to relationships with colleagues, funding agency, and authorship). Ethical aspects also feature in the supervisor-research scholar relationship. How the supervisor fulfills his or her responsibilities is a matter of ethics and one that has not been adequately addressed in the realm of research ethics.

A research supervisor gives direction and motivation by bringing in a clear, transparent, and inspiring vision into a research scholar's participation and clear communication. Supervisors need to play different roles with their research scholars. Each role depends primarily on the prevalent situation as well as the research scholar's capacity and needs.

- Leadership role: is situational and helpful in dealing with the inconsistencies in supervision, and in improving the flexibility and self-awareness of a research scholar
- Managerial role: provides clarity regarding objectives, expectations, and procedures and helps the research scholar to take up the responsibilities by focusing on autonomy, competence, and connectedness.
- Role as a coach: emphasizes dialogue with the scholar for arriving at collective solutions supported by the mechanism of providing feedback. It helps to create a positive working environment and learning opportunities to focus on the talent of the research scholar. The supervisor needs to take due care of the scholar's well-being by being accessible, empathetic, and supportive. The supervisor should support the passion, ambition, and career development of the research scholar within or outside academia.
- Entrepreneurial role: supervisors are expected to vigorously encourage innovation and creativity to ensure value-driven outcomes of the research activities. They should also look for potential opportunities for mobilizing financial resources using collaborations and connectivity from funding agencies, industry, and Government sources.

2.9 Patent and IPR

The IPR facilitation cell of the Inter University Centre for IPR studies, CUSAT facilitates the research community to file for patents arising out of their work free of cost. The University shall create awareness about intellectual property rights among faculty, researchers, and scholars from time to time through training programs.

3. Publications

3.1 Selection of Journals

In light of the proliferation of journals, some journals have come under increased scrutiny recently with terms such as questionable, predatory, pseudo, deceptive, unscrupulous, illegitimate, or dishonest, used to describe these journals. Transparency from the journal as to its aim and scope, the editorial board, indexing status, the peer review process, reputation, and policies for authors are among the key indicators of quality journals. These criteria can help identify quality journals suitable for publication.

3.2 Authorship

There is no universally agreed definition of authorship, although attempts have been made. As a minimum, authors have to take responsibility for a particular section of the study.

Authorship has to balance the intellectual contributions to the concept, design, analysis, and writing of the study against collecting data and other routine work. If no task can reasonably be attributed to a particular individual, then that individual should not be credited with authorship.

To avoid disputes over attributing academic credit, it is helpful to decide early in the planning of a research project who will be credited as authors, and contributors, and who will be acknowledged.

All authors must take public responsibility for the content of their papers. The multidisciplinary nature of much research can make this difficult, but this can be resolved by disclosing individual contributions.

In light of current uncertainties, it is advisable to carefully read the “Guide for Authors” of the target journal.

3.3 Conflicts of Interest

Conflicts of interest comprise those, which may not be fully apparent, and which may influence the judgment of authors, reviewers, and editors. They have been described as those which, when revealed later, would make a reasonable reader feel misled or deceived. They may be personal, commercial, political, academic, or financial. 'Financial' interests may include employment, research funding, stock or share ownership, payment for lectures or travel, consultancies, and company support for staff.

1. Researchers, authors, and reviewers must declare such interests, where relevant, to the editors.
2. Editors should also disclose relevant conflicts of interest to their readers. If in doubt, disclose. Sometimes editors may need to withdraw from the review and selection process for the relevant submission.

3.4 Redundant/Duplicate Publication

Redundant publication occurs when two or more papers, without full cross reference, share the same hypothesis, data, discussion points, or conclusions.

1. Published studies do not need to be repeated unless further confirmation is required.
2. Previous publication of an abstract during the proceedings of meetings does not preclude subsequent submission for publication, but full disclosure should be made at the time of submitting a paper.
3. Re-publication of a paper in another language is acceptable, provided there is full and prominent disclosure of its source at the time of submission.
4. At the time of submission, authors should disclose details of related papers, even if in a different language, and similar papers in the press.
5. Authors should follow the guidelines of COPE (Committee on Publication Ethics), which is committed to educating and supporting editors, publishers, and those involved in publication ethics to move the culture of publishing towards one where ethical practices become a normal part of the publishing culture.

3.4.1 Penalties for Duplicate Publication

- i. If redundancy is recognized before publication, manuscripts are rejected

- ii. If redundant articles have already been published, the visible penalties are publication of a notice of duplicate publication in both journals, notification of the authors' employers, and notation in indexes such as PubMed
- iii. In extreme cases, one of the redundant articles might be retracted, even after publication
- iv. Editors usually ask authors for a written statement about the redundancy to be published with the notice of duplicate publication

3.4.2 Curbing duplicate publication

- i. Do not replicate content from any of your other published papers
- ii. Do not offer preliminary reports about the published papers to any company without the permission of the journal
- iii. When quoting data from your published work, include only a few sentences, place the text in quotation marks & cite the source
- iv. If you write more than one manuscript by using a single dataset, ensure each manuscript addresses separate and important questions.
- v. Inform the journal editors about this in a cover letter, while submitting your paper to the journal editor, provide copies of your published and related papers for complete transparency

3.5 Simultaneous/multiple/dual submission

The practice of submitting the same manuscript to two or more journals at the same time without informing the respective scientific journal can result in more than one journal publishing that particular paper. Hence, avoid submitting the same manuscript to more than one journal

- I. If you wish to submit a paper that is "under consideration" at one journal to another journal:
 - i. Get written consent from your co-authors
 - ii. Inform the first journal editor asking about the paper withdrawal

- iii. Do not submit unless you get a formal notification from the first journal editor regarding the paper's withdrawal
 - iv. Submit this notification to the second journal along with your paper
- II. If you have written two related papers and wish to submit them to two different journals:
- i. Disclose the details of each paper to both the journals
 - ii. Inform both editors that you have a similar paper under review at another journal (even if they are in different languages)
 - iii. Enclose the copies of both papers along with your submission

3.6 Plagiarism

Plagiarism ranges from the unreferenced use of others' published and unpublished ideas, including research grant applications, to submitting under 'new' authorship of a complete paper, sometimes in a different language. It may occur at any stage of planning, research, writing, or publication: it applies to both print and electronic versions of any media.

All sources should be disclosed, and if large amounts of other people's written or illustrative material are to be used, permission has to be taken.

3.6.1 Text-Plagiarism or Cut-and-paste Plagiarism

One must be generous and give credit wherever it is due, rather than paraphrase and avoid giving credit.

3.6.2 Self-plagiarism There is also a possibility of repeating a string of one's words when one is pursuing a novel idea and doing a series of research projects. This is termed as self-plagiarism. This is different from multiple publications of the same research work. We must take special care when we report some results at a Conference and then include them in a subsequent submission to a journal.

3.6.3 Curbing Plagiarism

1. CUSAT shall declare and implement the technology-based mechanism using appropriate software to ensure that documents such as thesis, dissertation, publications, or any other such documents are free of plagiarism at the time of their submission.

2. The mechanism as defined in (a) above shall be made accessible to all engaged in research work including students, faculty, researcher and staff, etc.
3. Every student submitting a thesis, dissertation, or any other such documents to CUSAT shall submit an undertaking indicating that the document has been prepared by him or her and that the document is his/her original work and free of any plagiarism.
4. The undertaking shall include the fact that the document has been duly checked through a Plagiarism detection tool approved by the University
5. CUSAT shall develop a policy on plagiarism and get it approved by its relevant statutory bodies/authorities. The approved policy shall be placed on the homepage of the CUSAT website.
6. Each supervisor shall submit a certificate indicating that the work done by the researcher under him/her is plagiarism free.
7. CUSAT shall submit to INFLIBNET soft copies of all Master, and Research program dissertations and theses within a month after the award of degrees for hosting in the digital repository under the “Shodh Ganga e-repository”.
8. CUSAT shall create an Institutional Repository on the website which shall include dissertation/thesis/paper/publication and other in-house publications.
9. Similarity checks for exclusion from Plagiarism
The similarity checks for plagiarism shall exclude the following:
 - i. All quoted work reproduced with all necessary permission and/or attribution.
 - ii. All references, bibliography, table of content, preface, and acknowledgments.
 - iii. All generic terms, laws, standard symbols, and standards equations.

Note: The research work carried out by the student, faculty, researcher, and staff shall be based on original ideas, which shall include abstract, summary, hypothesis, observations, results, conclusions, and recommendations only and shall not have any similarities. It shall exclude common knowledge or coincidental terms, up to fourteen (14) consecutive words.

3.6.4 Levels of Plagiarism

Plagiarism would be quantified into the following levels in ascending order of severity for its definition:

Level 0: Similarities upto 10% - Minor similarities, no penalty

Level 1: Similarities above 10% to 40%

Level 2: Similarities above 40% to 60%

Level 3: Similarities above 60%

1. **Detection/Reporting/Handling of Plagiarism** If any member of the academic community suspects with appropriate proof that a case of plagiarism has happened in any document, he or she shall report it to the Departmental Academic Integrity Panel (DAIP). Upon receipt of such a complaint or allegation, the DAIP shall investigate the matter and submit its recommendations to the Institutional Academic Integrity Panel (IAIP) of the University. The authorities of CUSAT can also take Suo Motu notice of an act of plagiarism and initiate proceedings under these regulations. Similarly, proceedings can also be initiated by the CUSAT based on the findings of an examiner. All such cases will be investigated by the IAIP.

2. Departmental Academic Integrity Panel (DAIP)

- i. All Departments in CUSAT shall notify a DAIP whose composition shall be as given below:
 - a. Chairman - Head of the Department
 - b. Member - Senior academician from outside the department, to be nominated by the head of the University.
 - c. Member - A person well versed with anti-plagiarism tools, to be nominated by the Head of the Department. The tenure of the members in respect of points 'b' and 'c' shall be two years. The quorum for the meetings shall be 2 out of 3 members (including the Chairman).
- ii. The DAIP shall follow the principles of natural justice while deciding about the allegation of plagiarism against the student, faculty, researcher, and staff.
- iii. The DAIP shall have the power to assess the level of plagiarism and recommend penalty(ies) accordingly.
- iv. The DAIP after investigation shall submit its report with the recommendation on penalties to be imposed to the IAIP within 45 days from the date of receipt of the complaint/initiation of the proceedings.

3. Institutional Academic Integrity Panel (IAIP)

- i. University shall notify an IAIP whose composition shall be as given below:
 - a. Chairman - Pro-VC/Dean/Senior Academician of the University.
 - b. Member - Senior Academician other than Chairman, to be nominated by the Head of the University.
 - c.

Member - One member nominated by the Head of the University from outside the University d. Member - A person well versed with anti-plagiarism tools, to be nominated by the Head of the University. The Chairman of DAIP and IAIP shall not be the same. The tenure of the Committee members including the Chairman shall be three years. The quorum for the meetings shall be 3 out of 4 members (including the Chairman).

- ii. The IAIP shall consider the recommendations of the DAIP.
- iii. The IAIP shall also investigate cases of plagiarism as per the provisions mentioned in these regulations.
- iv. The IAIP shall follow the principles of natural justice while deciding about the allegation of plagiarism against the student, faculty, researcher, and staff of the University.
- v. The IAIP shall have the power to review the recommendations of the DAIP including penalties with due justification.
- vi. The IAIP shall send the report after investigation and the recommendation on penalties to be imposed to the Head of the University within 45 days from the date of receipt of the recommendation of DAIP/complaint/initiation of the proceedings.
- vii. The IAIP shall provide a copy of the report to the person(s) against whom the inquiry report is submitted.

3.6.5 Penalties

Penalties in the cases of plagiarism shall be imposed on students pursuing studies at the level of Masters and Research programs and on researchers, faculty & staff of the University only after academic misconduct on the part of the individual has been established without doubt, when all avenues of appeal have been exhausted and individual in question has been provided enough opportunity to defend himself or herself fairly or transparently.

3.6.5.1 Penalties in Case of Plagiarism in the Submission of Thesis and Dissertations

Institutional Academic Integrity Panel (IAIP) shall impose a penalty considering the severity of the Plagiarism.

- i. Level 0: Similarities up to 10% - Minor Similarities, no penalty.
- ii. Level 1: Similarities above 10% to 40% - Such a student shall be asked to submit a revised script within a stipulated time not exceeding 6 months.

- iii. Level 2: Similarities above 40% to 60% - Such a student shall be debarred from submitting a revised script for one year.
- iv. Level 3: Similarities above 60% -Such student registration for that program shall be canceled.

Note 1: Penalty on repeated plagiarism- Such a student shall be punished for the plagiarism of one level higher than the previous level committed by him/her. In case where plagiarism of the highest level is committed then the punishment for the same shall be operative.

Note 2: Penalty in case where the degree/credit has already been obtained - If plagiarism is proved on a date later than the date of award of degree or credit as the case may be then his/her degree or credit shall be put in abeyance for a period recommended by the IAIP and approved by the Head of the Institution.

3.6.5.2 Penalties in Case of Plagiarism in Academic and research publications

- I. Level 0: Similarities up to 10% - Minor similarities, no penalty.
- II. Level 1: Similarities above 10% to 40% i) Shall be asked to withdraw the manuscript.
- III. Level 2: Similarities above 40% to 60% i) Shall be asked to withdraw the manuscript. ii) Shall be denied a right to one annual increment. iii) Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Student/scholar for two years.
- IV. Level 3: Similarities above 60% i) Shall be asked to withdraw the manuscript. ii) Shall be denied a right to two successive annual increments. iii) Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Student/scholar for three years.

Note 1: Penalty on repeated plagiarism - Shall be asked to withdraw manuscript and shall be punished for the plagiarism of one level higher than the lower level committed by him/her. In case where plagiarism of the highest level is committed then the punishment for the same shall be operative. In case the level 3 offense is repeated then the disciplinary action including suspension/termination as per service rules shall be taken by the University.

Note 2: Penalty in case where the benefit or credit has already been obtained - If plagiarism is proved on a date later than the date of benefit or credit obtained as the case

may be then his/her benefit or credit shall be put in abeyance for a period recommended by IAIP and approved by the Head of the Institution.

Note 3: University shall create a mechanism to ensure that each paper publication/thesis/dissertation by the student, faculty, researcher, or staff of the University is checked for plagiarism at the time of forwarding/submission.

Note 4: If there is any complaint of plagiarism against the Head of the University, a suitable action, in line with these regulations, shall be taken by the Controlling Authority of the University.

Note 5: If there is any complaint of plagiarism against the Head of Department/Authorities at the institutional level, a suitable action, in line with these regulations, shall be recommended by the IAIP and approved by the Competent Authority.

Note 6: If there is any complaint of plagiarism against any member of DAIP or IAIP, then such member shall excuse himself/herself from the meeting(s) where his/her case is being discussed/investigated.

3.7 Use of Generative AI in scientific writing

Those who use generative artificial intelligence (AI) and AI-assisted technologies like ChatGPT in the writing process, should only use these technologies to improve readability and language. Applying the technology should be done with human oversight and control, and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete, or biased. AI and AI-assisted technologies should not be listed as an author or co-author, or be cited as an author. Authorship implies responsibilities and tasks that can only be attributed to and performed by humans. Presenting something generated by an AI tool could be considered plagiarism since it is not the author's work in any conventional sense.

3.8 Responsibility of Referees

Faculty members who are asked to review a manuscript or a research proposal have a responsibility to ensure that they do not misuse their advanced access to the information and ideas in these documents. The use of such advance access to publish a competing work, or carry out research that pre-empts the proposed project, would be highly unethical.

3.9 Thesis writing

A thesis typically involves collecting a large amount of material, both previously established and original. The manner of presentation must be such as to make clear what has been taken from other sources with appropriate acknowledgment and permissions if required, and what is the original content. For a student, thesis writing is often the first major occasion that requires taking personal responsibility to handle ethical issues. Guidance should be imparted by the supervisor to make sure that data is presented appropriately and plagiarism, even inadvertent, is avoided. Similarity to one's own published data in the thesis is acceptable only if it is within the period of research. Any thesis with similarity to external content more than the limit prescribed above (section 3.6.1) shall not be processed for evaluation.

3.10 Violations of Academic Integrity

Violations of academic integrity are considered to be acts of academic dishonesty and include but are not limited to cheating, plagiarizing, fabricating, denying others access to information or material, and facilitating academic dishonesty. The lack of knowledge of appropriate citation procedures is an unacceptable explanation for plagiarism.

Since academic dishonesty takes place whenever anyone undermines the academic integrity of an institution or attempts to gain an unfair advantage over others.

- i. **Attempting to commit academic dishonesty:** Attempting or preparing to cheat, fabricate, or plagiarize, even if the attempt is discovered before it is completed.
- ii. **Cheating:** using unauthorized materials, information, or study aids in any educational exercise.
- iii. **Denying others access to information or material.**
- iv. **Fabrication:** falsifying or inventing any information or citation in an educational exercise.
- v. **Facilitating academic dishonesty:** assisting others to cheat, plagiarize, and/or fabricate information.
- vi. **Plagiarism:** representing the ideas or language of another as one's own in any educational exercise.

4. Confidentiality

Several aspects of academia require the maintaining of strict confidentiality. The proceedings and Minutes of certain meetings, as also assessments for hiring and promotion, are not to be discussed publicly. It is particularly important for the health of Cochin University of Science and Technology that candidates about whom positive or negative comments are made in confidence by specific members should not hear about these in a way that can create resentment or an inappropriate sense of obligation. Unauthorized circulation of confidential Minutes or other privileged communications, within or outside Cochin University of Science and Technology, amounts to a serious breach of academic ethics. For this purpose, it is best to consider all official emails and communications on such matters to be confidential unless it has been expressly clarified to the contrary.

5. Management of Academics

5.1 Evaluations: hiring, promotion, awards

The assessment of candidates for hiring, granting of tenure, promotion, and awards is a regular activity at Cochin University of Science and Technology. While this necessarily involves some degree of subjective judgment, an assessor must take great care to eliminate personal biases and extraneous considerations and proceed in a manner that is timely, visibly fair, and balanced. The general criteria for hiring, assessment, and awards should, as far as possible, be laid down in advance. It is inappropriate to introduce new criteria, not previously agreed upon, during an assessment process purely to favor or disqualify specific candidates. When referee evaluations are used, they should be sought in writing.

5.2 Technology and materials transfer

Research conducted at Cochin University of Science and Technology is based on the principle of the free dissemination of knowledge, and this also applies to collaborative research between Cochin University of Science and Technology and industry. Cochin University of Science and Technology subscribes to the principle that all inventions and discoveries emerging from publicly funded research should be made available for public benefit through appropriate technology transfer. Whenever inventions are patented or technology emerging from Cochin University of Science and Technology research is licensed for commercial use, care must be taken that the principle of free dissemination of scientific knowledge remains paramount. When conducting research activities supported by external

granting agencies or jointly with other research institutions, Cochin University of Science and Technology members must consider entering into clear agreements (formal or informal but explicit) which cover the nature of the collaboration, materials, and technology transfer (whenever relevant), authorship of resulting publications and ownership of patentable inventions these agreements must be consistent with the principles enunciated above. Memorandum of Understanding (MOUs) are essential for collaboration with industry and for certain public institution-funded research. They should clearly state the manner of sharing of proprietary data, timelines to avoid delay of publications and procedures to be followed for patentable data. Potentially patentable inventions that arise from collaborative research with industry carried out at Cochin University of Science and Technology are to be subject to stipulations of the MOU between the industry and University, set in place before the commencement of the research.

5.3 Bias and Discrimination

People of different ethnicities, socioeconomic strata, genders, ages, affiliations, backgrounds, and sexual orientations enrich the Cochin University of Science and Technology's academic community. There must be no direct or indirect bias or discrimination against any individual based on the above categories. Cochin University of Science and Technology aims for the full and equal participation of women in all academic activities. It is everyone's responsibility to foster a gender-neutral and supportive environment to achieve this goal.

5.4 Bullying and Harassment

In academia, it is essential to promote an atmosphere of free and frank debate and exchange of ideas. In this context, any form of bullying including cyberbullying or harassment by individuals or pressure groups is not acceptable. Ragging of students, whether by other students or any University staff, is strictly prohibited and will invite punishment following the Government of India and Supreme Court guidelines. For more information, see the Cochin University of Science and Technology homepage: <https://cusat.ac.in/student/antiragging.php> as well as the University Grants Commission site: <http://www.ugc.ac.in/page/Ragging-Related-Circulars.aspx>.

5.5 Interaction with the Public and Media

Statements made to the media should be as objective, fair, and balanced as possible. The same holds for scientific information conveyed to the public. Faculty members and

researchers are expected not to use the media to promote their image or create a false or exaggerated impression of their achievements.

7. Reporting of misconduct

Suspected ethical misconduct at Cochin University of Science and Technology must be reported to the Vice-Chancellor. There will be no reprisal for complaints made in all sincerity and good faith, even if they later turn out to be unfounded. However, complaints that turn out upon investigation to have been falsely made with deliberate intent to malign the accused will be treated as a serious form of ethical misconduct. Duly signed complaints carrying the full name and address of the complainant can be made by anyone, not necessarily a University member. Some relevant documentation must be supplied along with the complaint for the Vice Chancellor to be able to decide whether there is a prima facie case. The complainant should not give wide publicity to the complaint at this stage. Such publicity, if it occurs, can be treated as ethical misconduct even if the complaint is found to have merit and continues to be investigated.

8. Mechanism to address complaints

The Vice-Chancellor will appoint an Apex Committee on Academic Ethics for a pre-determined duration whose task is to investigate ethical complaints and also impart ethical training from time to time. The Vice-Chancellor may also consult a Faculty level Advisory Committee on ethical issues that involve Deans, Heads of Department, Senior Professors, and Scientists/academicians outside the University with good academic standing.

8.1 Course of action

Upon receiving an ethics complaint, the Vice Chancellor should decide whether there is prima facie merit in the allegations. Finding such merit does not imply that the complaint has been upheld but only that it has not been found invalid or frivolous. To decide this, the Vice Chancellor may consult the Apex Ethics Committee. If the Vice-Chancellor is satisfied that the complaint merits investigation it should be passed on in full, including supporting documents, to the Faculty level Ethics Committee. Simultaneously the Vice Chancellor should communicate it to the subjects of the complaint, informing them that an investigation will take place with which they are required to cooperate fully. Their response to the complaint should be invited and passed on to the Faculty level Ethics Committee. The Vice-Chancellor should also inform the complainant that the complaint has been referred to a

Committee for investigation. During the investigation period, both the complainant and the subjects of the complaint may submit information or documents to the Vice Chancellor, who shall forward these (if relevant) to the Faculty level Ethics Committee. During this period, they should not communicate with the Committee except when invited to do so, and should also minimize their communications with the Vice Chancellor on this matter. The Faculty level Ethics Committee should investigate the complaint carefully and with due discretion. During this period, it should try to hold a face-to-face meeting with both the complainant and the subjects of the complaint if possible. At the end of its investigations, it will submit a written report to the Vice Chancellor of Cochin University of Science and Technology indicating the extent to which merit has, or has not, been found in the complaint, and suggesting punitive actions depending on the gravity of the misconduct. The Committee must not publicize the report at this stage. On receiving the report, the Vice Chancellor should communicate it in full both to the complainant and to the subjects of the complaint and invite their response. Thereafter the Vice Chancellor in consultation with the Apex Ethics Committee may decide to accept the report in full and implement it, accept it partially, or reject it. In each case, this decision should be communicated to the Faculty level Ethics Committee. The final verdict on the case, including any redressal required, will take the form of a written statement by the Vice Chancellor communicated to the complainant, the subjects of the complaint, and the Faculty level Ethics Committee. The Faculty-level Ethics Committee report may be attached to this statement in full or part, if relevant. Any attempt to interfere with the functioning of the Ethics Committee in any manner, or refusal to cooperate with the investigation, constitutes an ethical violation by itself. This should be reported by the Committee to the Vice Chancellor for appropriate action.

8.2 Time frame

The investigation of an ethics complaint cannot easily be assigned a time frame. However, for relatively simple cases the first report should be submitted within 1-2 months. More complex cases, particularly those requiring detailed investigation of scientific issues, can take as long as six months to a year or even more.