10.RESEARCH POLICY

10.1. BRIEF STATEMENT

SRMIST is committed to the pursuit of excellence in research and is aiming to lead the national agenda across the spectrum of Science and Technology, Humanities and Social Responsibilities. Our commitment to the range of our interdisciplinary work is reflected in the sustenance of both applied research and basic research which may yield a long-term impact. SRMIST ensures that all the core and inter disciplines flourish in research by adopting the highest norms and standards of a scholarly undertaking. This document provides the information of research policy and promotional activity of SRM IST. This document outlines the principles that should be taken into account while planning and conducting research. The principles that should be followed strictly while recording, reporting and applying the results produced are emphasised.

10.2. OBJECTIVES

Our core strategies are to tackle few of the pressing challenges of the 21st century in areas that are vital to the technological advances, human health, and environment through extensive core and multi-disciplinary research. Our university has made strenuous efforts to line up its research focus with the national importance of achieving technological self-reliance.

Our specific objectives are:

- Provide excellent research culture and infrastructure
- Create a culture for inter –disciplinary/multi-disciplinary collaborations and a platform for knowledge sharing
- Publish papers in high-quality journals of international repute, file patents and transfer technologies by identifying potential corporate to implement the same
- Create quality human resources for scientific research
- Promote research collaborations involving active and mutually beneficial R&D projects in the industrial arena
- Aim to stand among the top-notch Universities across the globe
- Promote globalization of research and education

10.3. ACADEMIC RESEARCH GUIDELINES:

- SRMIST has its own Ph.D. Regulations in compliance with UGC regulations that comprises all the rules and regulations for both Ph.D. students as well as Ph.D. supervisors to follow, starting from the registration of the candidate, for all aspects of the research until awarding the degree to the candidate.
- The University Research Council has been established in SRMIST comprising of 5-8 eminent Scientists, Professors and Industrialists from external research bodies (IITs, IISc, Industries etc.) along with the Vice Chancellor, the Pro-Vice Chancellors, the Registrar, the COE, the Director (Research) and the Heads of the various departments.
- The committee governs and shall convene to discuss any issues related to the R&D activities of SRMIST, give suggestions, views and approve norms in the Ph.D. regulations from time to time.
- Graduate and undergraduate candidates are admitted to carry out research as part of their curriculum in the fundamental streams of study. PhD scholars are supported by fellowship directly from SRMIST for a maximum period of 3 years to help the research scholars to carry out the research.
- SRMIST usually motivates faculty members by providing incentives for publishing articles in indexed journals based on the impact factor, granted patents and also for the externally funded projects.

10.4 PATENT POLICY

The institute recognizes the need for encouraging the practical applications and economic uses of results of the research carried out in the Institute for the benefit of the society and therefore the Institute has brought forth Intellectual Property Rights policy (IPR policy) to protect the intellectual work and its outcome from the research work carried out in SRMIST.

10.5 SPONSORED RESEARCH

Research work is supported by funding bodies, external to SRMIST which may arise from sources inclusive of, but not limited to state, national or international governments, industrial collaborations, consultancy projects, shared consultancy projects and joint ventures of two institutional organizations.

10.6 RECRUITMENT OF JRFs FOR THE SPONSORED PROJECTS

- An advertisement may be released calling for eligible Junior Research Fellows (JRFs) following which suitable candidates will be shortlisted.
- Interview is to be conducted for the shortlisted candidates and Minutes of the Meeting is to be prepared for the same. The enclosure for the Minutes of Meeting must include a list of the students that were shortlisted but were not selected.
- The expert committee will be constituted by the principal investigator of the sponsored project keeping the aim and deliverables in focus.
- The selected student has to join within 2 weeks and a joining report is to be submitted to the concerned authorities at the Directorate of Research.
- In case a selected candidate cannot join within 2 weeks, he needs to take late joining permission from the Principal Investigator [PI]. The PI can also decide to select the next most suitable candidate from the waiting list (i.e., shortlisted but were not selected).
- In cases wherein the JRF leaves within the first 6 months of selection, the students in the waiting list may be called upon in order to take their place. However, if more than 6 months have passed since the JRF left then the procedure needs to be redone from the beginning.
- The JRFs who have been appointed to carry out the work under a sponsored project are encouraged to register for Ph.D. at the earliest from the submission of his/her joining report but only after getting due permission from the Principal Investigator of the sponsored project.

10.7 CONSULTANCY PROJECTS IN RESEARCH AREA

The Institute has expertise in various research areas to provide knowledge and intellectual inputs which are of interest to the industry. It encourages its faculty to undertake consultancy work which is an important tool for the industrial growth of the country.

Guiding notes:

- A consultancy project/task/work is one, where faculty and research staff provide knowledge and intellectual knowledge to industry (within India/outside India), primarily for their purposes. This is effectively a contract work in which all outputs belong to the sponsor.

- It is desirable that payments for consultancy be routed through the Institute. This means that whenever payments are done, they should come in the name of the Institute, so as to comply with the statutory laws and then give the honorarium to the faculty/staff, as the case may be.
- Distribution of earned consultancy fee amount by the faculty member would be distributed in the ratio of 30% and 70% between SRMIST and PI/Co-PI respectively.
- The requirement originates from the industry concerned. The faculty is expected to estimate the time and cost required to accomplish the task.
- While taking up consultancy projects PI has to give undertaking that he/she will not compromise with his/her teaching and academic research responsibilities. He/She has to submit a yearly report to the concerned Deans of the faculty without fail. In some cases teaching responsibility can be relaxed with due permission for a period of time.
- Preparation and submission of the proposal in case of a consultancy project, normally based on the requirement, is prepared by the PI. It should specifically mention the breakage of funds, and the consultancy fee as the primary component. It may also have a budget for supporting manpower, equipment, travel contingency and other such costs to execute the consultancy project. At the stage of proposal submission, the budget will reflect project costs (X), 25% overheads (0.25X) and applicable taxes if any. If the funds are received in foreign currency, we have to adhere to the norms stipulated by the Government of India then and there. In case, the equipment is to be returned to the funding agency/organization after the completion of the project, either the sanction letter or the MoU/proposal should clearly spell out the treatment of equipment's purchased for the project.

10.8 INTERNATIONAL PROJECT

- The research collaboration of SRMIST with other overseas party/funding agency should be in conformity with the laws of both the countries and/or International laws as the case may be.
- A MoU/agreement that satisfies all the terms and needs to be executed as per the conditions stipulated mutually by the funding agency with the institute. Any deviation from the norms (e.g. reduction of overhead) will have to be discussed

and explicitly approved. The approving authority for any relaxation is the Vice-Chancellor, the Registrar in consultation with the Director/Dean.

- The softcopy of the proposal will be sent to the office for records.
- IPR issue: All IPR related issues are agreed between the Institute and the funding agency. Preferably, IPR will be jointly shared by SRMIST and the funding agency.
- When MoU is clear from all angles and acceptable to both the parties, it is sent to the Institute Head for approval along with the note file (summary of the MoU, The Registrar is authorized to sign on behalf of the University).
- Before approval, the Registrar shall discuss with PI/HOD//Dean/Director to give the final output of the MoU.
- Project responsibility: These projects are headed by a Principal Investigator (PI), and may have Co-Principal Investigators (co-PIs)/administrative PI (to operate the project, in case PI is out of station) and the deliverables are the responsibility of the PIs. The Institute provides necessary support to the PIs.
- After completion of the project, a final report should be submitted to the funding agency.
- A completion certificate should be obtained from the funding agency for the successful completion of the project based on which the project account will be closed.
- Function of the Office of R & D: The office acts as a liaison between the Institute and the Industry / Government Bodies to undertake consultancy projects with specific problems, which are generally of short duration.
- Short-term hiring of research assistant(s) or project staff for consultancy projects based on the designated project objectives will be the responsibility of the Principal Investigator. The Institute will not be responsible for any financial support in this regard.
- Travel for Principal Investigator and hired staff for site visit/project related activities will be treated as on-duty with due permission from the Dean/Director of the respective faculty.

10.9 RESPONSIBILITIES OF THE PRINCIPAL INVESTIGATOR (PI) AND CO-PI AFTER RECEIVING THE FUND

- Each funding agency has their own set of guidelines and regulations, which both the PI and Co-PI must ensure that they are being strictly followed.

- The Principal Investigator and Co- Principal Investigator must strictly adhere to the objectives mentioned in the proposal that has been approved by the funding agencies. Even small changes in work that deviate from the sanctioned work cannot be considered, without the knowledge of the sponsoring agencies.
- The Principal Investigator and Co Principal Investigator should open a new savings bank account for the monetary transactions related to the particular funded project jointly with the concerned higher authority of the respective faculty in the Institute.
- Funds directed towards non-recurring costs are to be used only for the purchase of instruments sanctioned in the project. It is not to be spent for any other instruments/recurring costs and the remaining unspent amount (if any) is to be returned promptly**.** PI/Co-PI has to get prior approval from the Registrar for DSIR certificate while purchasing the instrument for tax reduction
- Recurring charges including expenses for manpower, consumables, travel (domestic, international), contingency and administrative overheads are to be sent appropriately and according to the norms of the funding agency.
- Overhead charges are to be credited to SRMIST.
- A proper registry should be maintained for all project related to financial transactions with the signatures of PI.
- During the closure of every financial year, a Utilization Certificate (UC), Statement of Expenditure (SoE) and project report has to be submitted, according to the guidelines of the funding agency and uploading/updating of the same in their respective PFMS portal in EAT Module are mandatory. The same should also be certified by the internal auditor or Charted Accountant before submitting to the Registrar of SRMIST.
- Following are the documents that need to be maintained for Industrial Projects in the Research Arena:
  i. Terms and conditions approval by SRMIST and partner industry
  ii. Interim reports as required by industry
  iii. Completion report

  In case the industry project requires an extension, they must do so without any financial support.
- Upon the completion of the project, lab instruments purchased under major equipment head with cost above 2 Lakh in the funded projects should be handed

over to the respective department. However, priority may be granted to the PI's work over others.

- Upon the completion of the project, lab instruments and equipment purchased out of project fund shall be the property of funding agency and it is at the discretion (with the prior approval) either to give it to the institution or to dispose.

10.10 IN CASE OF DEPARTURE OF PI

- In the event of the PI leaving SRMIST to another institution/ organization/ establishment for any reason within the period of the project, the PI may transfer the project to his/her new place of work, upon obtaining prior approval from the concerned funding agency.
- If the project is on the verge of completion, the Co-PI is authorized to manage the project and see it forward until its completion.

10.11 PROJECTS WITH INDUSTRIAL COLLABORATION

- Based on mutual agreement, a Memorandum of Understanding (MoU) has to be executed between SRMIST and the corresponding industry.
- The MoU must clearly enlist all deliverables including all shared publications, shared expenditures, manpower cost, property rights, and royalties etc., acknowledging both organizations in proportion to the shared expenses, before the commencement of any related work.
- The industry academia research projects are welcomed. Industrial PI/Co-PI are encouraged to visit SRMIST and similarly SRMIST faculty PI/Co-PI can visit the industry. During the visits, the PI/Co-PI from both the organizations have to meet the local expenses from the project funds.
- During these collaborative research visits, SRMIST and the collaborating industry will provide salary only to their respective employees involved in the project. However, in case the industrial visitor also disseminate industry oriented knowledge to the faculty and the students through lectures or seminar series, a suitable remuneration will be provided by SRMIST to such eminent experts from industry. Similarly, Industry is also expected to support the stay of SRMIST faculty by means of remuneration from its end.

10.12 JOINT PROJECTS UNDER TWO INSTITUTIONS

- Based on mutual agreement, a Memorandum of Understanding (MoU) has to be entered into between SRMIST and the other Institution.
- The MoU must clearly enlist all deliverables including all shared publications, shared expenditures, manpower, property rights, royalties etc. acknowledging both organizations in proportion to the shared expenses, before the commencement of any related work.
- All activities carried out must strictly adhere to the norms of the both organizations involved and should undertake all the objectives mentioned in the approved proposal.

10.13 PROMOTION OF RESEARCH ACTIVITY

- SRMIST has initiated several research-intensive programs to support the research activities of the students, scholars and faculty members. The Faculty Abroad Programme and Student Abroad Programme have been executed with an aim to allow them to visit, study and work for 3-6 months in highly reputed institutions of the developed countries and world-renowned laboratories. This in turn provides exposure and hands on experience, imparting a greater interest towards state-of-the-art research activities in niche areas of social relevance.
- Visiting Professorship program, wherein Professors from different developed countries are invited to teach and conduct research in their area of expertise intended to upgrade and promote research activities.
- All the expenses for the visiting Professorship is taken care of by the SRMIST. This program provides a chance for the scholars, students and faculty members to interact with eminent scientists and researchers, so as to learn and understand recent developments in their research domain. This will help in reorienting and focusing on the important aspects of their area of research, having prospects in terms of high quality journal publications, National and International collaborations.
- Inviting international experts for research collaboration and to deliver lectures in futuristic or advanced areas of research through government funding proposals like VAJRA (SERB) is highly encouraged.
- National and International meetings (Workshops/Conferences etc.) are supported throughout the year to bring all researchers together on a common platform. In this

connection, a yearly event budget for each academic year is prepared and approved by the management. In the event budget, it must be clearly stated about the contribution of SRMIST and also about each event held during the specified period.

- Since 2012, for about a decade, Research day (Science Day) has been organized every year to inculcate research interest in the young minds of undergraduate, post graduate students and research scholars. They are encouraged to present their research interests and findings. The best paper presentations are awarded gold and silver medals as a token of appreciation and encouragement.
- Workshops, Open day, Industrial entrepreneurships, Industrial visits, Seminars, Funds for Young Researcher, Aarush and Colloquiums like DPRC which are exclusive for Ph.D. students (for more than 3000 students) are conducted in order to help the students understand the recent research activities in various disciplines that are being pursued within the department as well as within SRMIST. This paves the way to identify interdisciplinary areas of research and initiate internal collaborations based on the expertise available within SRMIST.
- Research fellowship of is also provided by SRMIST for full time research scholars for a maximum period of 3 years. This helps the institution to attract the best and talented candidates to pursue Ph.D. at SRMIST. Furthermore, the Institute supplements an additional amount as regular fellowship for GATE and CSIR/UGC qualified candidates. This is done with an intention of raising the quality of research scholars being inducted and to promote interest among the students to succeed in the competitive exams like GATE and CSIR/UGC. The Institute foresees the fact that the quality of the students also ensures the research quality.
- Double degree programmes (DDP) have also been offered by SRMIST to encourage Ph.D. scholars to work in SRMIST as well as in an institution abroad and acquire research knowledge on par with international standards. International tie-ups of SRMIST have paved the way for the students to carry out research in both the institutions and will be awarded Ph.D. degrees from both the Institutes. DDP goes beyond a regular exchange programme by providing an enriched experience for the candidates.
- SRMIST also promotes the research interests of faculty members and research scholars by providing special awards for best researcher, best publications in top impact factor journals, publications in Nature indexed journals, securing projects such as SCHEME FOR PROMOTION OF ACADEMIC RESEARCH

COLLABORATION (SPARC), top consultancy projects etc., annually during the Research day.

- Several research activities that involve societal applications such as Unnat Bharat Abhiyan and medical care/support to the neighbourhood are highly encouraged by SRMIST along with research assistance.

10.14 SHARED- ACADEMIA INDUSTRY POSITION

- Faculty members of SRMIST have been encouraged to undertake shared-academia positions wherein the faculty member is allowed to hold a simultaneous position in industry to undertake research activity with relevant applications for industrial interests.
- This joint venture helps faculty members to directly address and understand issues faced by industries and tailor the research work accordingly to provide solutions to the Industrial challenges.
- All outcomes of projects on which SRM faculty will work during this shared position, such as Patents, Intellectual Property Rights (IPR), product development, research publications, proof of concept, etc. are to be credited to both SRMIST and the supporting industry in proportion to the expenses related to the projects shared by both the organizations.
- These shared expenses towards a specific project will include the salary provided to the SRMIST faculty for working on that shared project. During the shared position the faculty members will be provided full or basic of the gross salary by SRMIST based on the nature of involvement and expected outcome of the project undertaken.
- Experts from Industries are also encouraged to give lectures and share their experience with our faculty members to explore possibilities, for joint appointment, to have future collaboration through addressing their issues, product developments, etc. to mutually benefit from the programme. For such lectures, eminent industrial experts will be given honorarium at par with eminent scientists and Professors in IIT's on hourly or day basis.

10.15 INDUSTRY SPONSORED LAB

- SRMIST encourages to establish industry sponsored venture labs to promote innovation and research such as those that have been established already. BOSCH

Testing lab, WABCO IOT lab, Hyundai facilitated lab, Bentley Supported computer lab, Ford lab, RADMIC lab, ZOLLER tool management solution lab, NEC Japan collaborative facility, Hydrogen Energy Research Center in collaboration with Integral Coach Factory on Hydrogen powered rail, Jal-Janak etc. to name a few.

10.16 INSTITUTE RESEARCH GRANT

- SRMIST provides in-house seed grants to financially support the execution of innovative ideas of faculty members of SRMIST through Selective Excellence Research Initiative Programme (SERIP) to reach the proof-of-concept level for enabling them to attract external grants from various funding bodies.
- Incubation Centre is a platform that has been setup by SRMIST to provide financial support for entrepreneurial startups of the students as well as faculty members.

10.17 INSTRUMENTATION FACILITIES

- Central Research Facilities have been established to include research instruments available in various departments in SRMIST under one single portal and offer centralized governance in order to provide unprecedented support to all researchers (SRM group of institutions as well as outsiders). The mission is to provide a conducive research environment by way of extending the research resources established in SRMIST. This will facilitate access to all sophisticated instruments in the following categories:

1) State-of-the-art facilities (For instance, HPCC, HR-TEM, XPS, NMR, FESEM, RAMAN Spectroscopy, Medical Simulation Centre, Next- Generation Sequencing Machine etc)
2) Major Research Facilities are also provided. (For instance, XRD, Photo Luminescence, Electrochemical workstation, Seebeck measurement, Thermal conductivity UV-VIS-NIR, 3D printing, Sanger sequencer, Live Animal Imaging, Micropulse LIDAR etc.)
3) One single online portal (http://srmonline.net/) comprising of SRM Central Instrumentation Facility (SCIF), Nanotechnology Research Facility (NRC) and SRM-DBT platform provides a consolidated list of research facilities available in SRMIST and allows direct booking by the users for usage.

a. INDO – FOREIGN MUTUAL VISITS

- Mutual visits are encouraged by SRMIST between students and faculty of international universities. Local accommodation expenses shall be borne by SRMIST for foreign students and faculty members visiting SRMIST.

b. FABRICATION LAB (FAB LAB)

- SRMIST FAB LAB is a unique and advanced infrastructure that houses a platform of all kinds of engineering facilities for translating ideas of engineers into reality, by promoting Innovation and Entrepreneurship. Fab lab contains the latest and the best equipment for digital fabrication of various mechanical, electrical, automobile, and other engineering projects.
- Faculty members and or students can incubate their start-ups in the FAB LAB upto 3 years.

10.18 PLANNING THE RESEARCH

All research projects should be conceived, designed and implemented according to the highest standards.

- Clear documentation of the rationale for the study and any subsequent modifications, either in laboratory notebooks or in the project files. Each key document and any changes should be signed with date by the researcher responsible, to establish the provenance of the study and to protect intellectual property rights.
- Adherence to the current safety practices and ethical standards.
- Securing all necessary ethical and regulatory approvals.
- Assessment of the resources needed to ensure the study is viable within the available means.
- The economy in use of resources: - for example, not purchasing excess consumables than that are needed for the planned sample size and regular review for determining when to stop the experiments.
- Regular review of the research progress is essential to identify new findings that can be taken into account and the project plan shall be modified accordingly

10.19. CONDUCTING THE RESEARCH

- The legal and ethical requirements relating to human participants, animals and personal information should be familiar to each person involved in the study and they should know to whom to turn for advice.
- Equipment used to generate data should be suitable for the purpose, of appropriate design and of adequate capacity. It should be calibrated and serviced regularly by trained staff so that the performance is optimal and the results can be trusted.
- A Standard Operating Procedure (SOP) should be maintained for each piece of equipment. There should be easily accessible instructions for the safe shutdown of equipment in case of emergency.
- The SOP should be documented for all routine methods to ensure that data are collected consistently. It should be written in simple language, readily accessible and ideally in a standardized format.
- There should be clarity at the outset of the research programme to the ownership and use of, wherever relevant:

  Data and samples used or created in the course of research

  The results of the research

The responsibility and procedures for the storage and disposal of data and samples should be made clear at the commencement of any project. Any research collaboration agreement relating to the research should contain some clauses describing necessary arrangements. Researchers should keep clear and accurate records of the procedures followed and the approvals granted during the research process, including records of the interim results obtained as well as the final research outcomes. This is necessary not only as a means of demonstrating proper research practice but also in case questions are subsequently asked either about the conduct of research or the results obtained. Properly maintained notebooks may be used as evidence when establishing the ownership of inventions.

Data should be stored in a way that permits a complete retrospective audit, if necessary. Data should be stored safely, with appropriate contingency plans. Original data/images should be recorded and retained. This is particularly important when data/images are subsequently enhanced. Both original and enhanced data/images should be stored. Over-enhancement or over-interpretation of images must be resisted. Confidentiality is also important if there is a potential for commercial exploitation.

Retention of accurately recorded and retrievable results is essential for research. Primary research data must be retained in their original form within the institute. Researchers who are leaving the institute and would like to retain data for personal use must get permission from the Registrar through their team leader or through the head of the department. Publication of data does not negate the need to retain source data.

All raw data should be recorded and retained in indexed laboratory notebooks with permanent binding and numbered pages or in an electronic dedicated notebook. Machine printouts, questionnaires, chart recordings, autoradiographs etc. which cannot be attached to the main record should be retained in a separate ring-binder/folder that is cross-indexed with the main record. Records in notebooks should be entered as soon as possible after the data is collected. The recorded data should be identified by the date of the record and/or date of collection. The supervisors should regularly review and "sign-off" notebooks of researchers to certify that records are complete and accurate. Computer generated data should be backed-up regularly; duplicate copies should be held on a disc in a secure but readily accessible archive. Wherever feasible, a hard copy should be made of important data. The copies of relevant software, particularly the version used to process electronic data, must be retained along with the raw data to ensure future access.

10.20 OPENNESS

Whilst recognizing the need for researchers to protect their own academic and Intellectual Property Rights (IPR), the institute encourages researchers to be as open as possible in discussing their work with other researchers and to the public. The aim of disseminating research is to increase knowledge and understanding: its purpose should not be primarily to seek publicity for the researcher or the institute or the sponsor.

Once the results have been published, the institute expects the researchers to make the relevant data and the materials available to other researchers, on request. However it should be reliable with any ethical approvals and consents which cover the data and materials, and any Intellectual Property Rights associated with those publications. Procedures for managing the transfer of material in and out of the institute are outlined separately. It is recognized that publication of the results of research may need to be delayed for a reasonable period in order to protect the intellectual property rights/issues that may arise from the research. Any such periods of delay in publication should be kept to a minimum and this should normally be not more than 3 months.

Researchers should be careful when discussing work that is not complete or has not been published, particularly if it has not undergone peer review. The exchange of confidential information by e-mail is not recommended, especially if patent applications are anticipated.

10.21 PROFESSIONAL GUIDANCE AND LEGISLATION

Where available, the institute expects all researchers including students, trainees etc. to observe the standards of research practices set out in the guidelines published by scientific and learned societies, and other relevant professional bodies.

All researchers should be aware of the legal requirements, which regulate their work noting particularly health and safety legislation and data protection.

10.22 LEADERSHIP AND COOPERATION

The Head of the institute and senior colleagues should ensure that a research atmosphere of mutual cooperation is created in which all the members of a research team are encouraged to develop their skills and in which the open exchange of ideas is fostered.

10.23 SUPERVISION

The Institute provides an appropriate direction to research and looks into the fact that research leaders are trained in supervisory skills. Research supervisors supervise all stages of the research process, including outlining or drawing up a hypothesis, preparing applications for grants and aids, protocol design, data recording and data analysis.

10.24 TRAINING

The institute will plan periodic courses to enable the students and researchers to understand and adopt best practices in research as quickly as possible. The supervisors should encourage students and colleagues to attend relevant courses whenever offered as a part of their overall career development. Some of the indicative courses are:

- Research design
- Regulatory and ethics approvals and consents
- Equipment use
- Record keeping
- Data protection
- Management of intellectual property, including confidential information

- Use of materials requiring statutory registration such as radioisotopes, pathogenic and GM organisms
- Data management
- Using animals for experiments
- Regulations involving human subjects

10.25 PRIMARY DATA/SAMPLES/EQUIPMENT

Data generated in the course of a research should be kept securely in paper or electronic format, as appropriate. Backup records should always be kept for data stored on a computer.

Researchers should report any changes in the direction of sponsored research to the sponsoring agency or any other relevant body. Best practice would be to discuss any change in direction of the research with the sponsoring agency prior to its implementation.

10.26. INTELLECTUAL PROPERTY

The researchers must inform the Intellectual Property Cell (Coordinator of the program or the Director) of any intellectual property rights that may arise from an externally funded research. Researchers must also inform the sponsoring agency if they have been recommended to do so.

The institute's research as well as the funding from government agencies is done for public benefit and not for direct commercial or private gain. However, industrially sponsored research programs with definite objectives of finding solutions may have commercial gains. The public benefit may arise from education, i.e., gain of knowledge that is placed in the public domain, or the case of biomedical research, improvement in the treatment or care of patients or in the prevention or cure of diseases. The government funding or charities cannot be solely for the purpose of a commercial gain although commercial benefit from the exploitation of the results of the research may accrue to their inventors, the institute and by agreement to any sponsor of the research.

10.27 DISSEMINATION AND PUBLICATION OF RESULTS

The institute encourages publication of and dissemination of results of high-quality research but believes that researchers must do this responsibly and with an awareness of the consequences of any such dissemination in the wider media.

The institute tries to ensure that sponsors understand that researchers must have academic freedom and sponsors should not discourage the publication or the dissemination of research or research findings. The Institute recommends that every effort should be made to inform the sponsors of any potential publication or dissemination of the research findings. This will enable the sponsor in question to have adequate time and accurate information to protect any intellectual property rights that may arise or plan their own public relations, in conjunction with the Institute. Publicity may be important to industrial sponsors and to fund-raising agencies and is increasingly important to institute itself.

The researchers should take into account the following guidelines when publishing or disseminating their research or research findings, including any plans they may have to publish or publicise the research in conferences or in websites.

a) The sponsoring agency should be notified in advance when the research might be published, publicised or disseminated.
b) Researchers should make every effort to make sure that the research is peer reviewed prior to it being published, publicized or disseminated. If the research is placed in the public domain before peer review has been undertaken, the researcher must mention it.
c) All funding sources must be acknowledged in any publication or publicity.
d) The results of the research should be published in an appropriate form, usually as papers in refereed journals.
e) Anyone listed as an author on a paper should accept the responsibility for ensuring that he or she is familiar with the contents of the paper and can identify his or her contribution to it. The practice of honorary authorship is unacceptable.
f) The contributions of formal collaborators and all others who directly assist or indirectly support the research should be both specified and properly acknowledged.
g) Work should normally be published as a coherent entity rather than a series of small parts unless there is a legitimate need to demonstrate first discovery by publishing preliminary data.
h) Quality rather than quantity is paramount; the proliferation of multi-author papers to increase quantity should be discouraged.
i) Authors must not publish the same data in different journals.

j) If an error is found that degrades the worth of the published findings, the principal author must take efforts to publish a correction as soon as possible.
k) Where the findings are found to be in serious doubt, a retraction should be published promptly.
l) Where fraud is suspected it should be dealt with the procedures dealing with "Misconduct in Research".

10.28 INTEGRITY

SRMIST provides an adequate structure to promote and promulgate good research practices, emphasizing integrity and rigor in research and expects that the researchers adhere to the highest standards of integrity. Researchers should be ethical and honest to their own course of actions while pursuing research and their responses to the actions of other researchers. This applies to the whole range of research activities including designing of experiments, generating and analysing data, publishing results, reviewing the work of other researchers and applying for grants. The direct and indirect contributions of colleagues, collaborators and others contributors should be appropriately acknowledged. Researchers are accountable to the society, their profession, the institutes where the research is taking place, the staff and students involved and in particular, the sponsoring bodies. Jeopardising research integrity can collapse the advancement of knowledge, society and human health. Hence researchers are expected to understand and apply the following principles:

Plagiarism, deception, fabrication or falsification of results are regarded as serious offenses which entitle disciplinary action.

Researchers are encouraged to report cases of suspected misconduct and to do so in a responsible and appropriate manner.

10.29 CONFLICT OF INTEREST

A conflict arises when a person's judgment concerning a primary interest, such as scientific knowledge could be unduly influenced by financial gain or personal advancement. Researchers must pay as much attention to the perceived and potential conflicts of interest as to actual conflicts. The manner of how it is perceived and acted upon influences the attitude and action of others, and the credibility of scientific research to a larger extent. Researchers should declare and manage any real or potential conflicts of interest, both financial and professional. The areas of potential conflict include:

- where researchers have an existing or potential financial interest in the outcome of the research.
- where there is a personal or private practice benefit, significantly dependent upon the outcome of research.
- where the researcher's professional and personal gain arising from the research may be more than usual for research?

10.30 ABOUT MISCONDUCT

10.30.1 Principles

a) This policy is designed to support the research activity of SRMIST.

b) The Institute is committed to ensure that investigations are carried out as expeditiously as possible, at the same time ensure the utmost degree of thoroughness.

c) Where time limits are indicated these will be regarded as maximum limits and that all parties will work to ensure the prompt progression of the procedure.

d) Employees accused of Scientific Misconduct ("Respondents") will be provided with a copy of this procedure and will be informed in writing of the details of the allegation.

e) Incase a respondent resigns from or otherwise leaves the Institute, the complaint is nevertheless investigated as far as possible according to this procedure.

f) The Institute will take disciplinary action against any individual who attempts to influence, victimize or intimidate the individual making the allegation of Scientific Misconduct (the "Complainant") or witnesses.

g) The Institute is committed to protecting its employees from malicious accusations and will take action against any individual(s) responsible for such allegations.

h) Individuals shall cooperate in the review of allegations and the conduct of assessments and investigations. They have an obligation to provide relevant evidence to the Director or such other person who, in the Director's absence, is designated to receive and enquire on behalf of the institute into the allegations of Scientific Misconduct.

i) Proven misconduct in research is considered as a serious or gross breach of ethics and normally leads to merit dismissal.

10.30.2 What Constitutes Misconduct?

Research misconduct or fraud in science refers to the fabrication, falsification, plagiarism and deception in proposing, carrying out or reporting results of the research and deliberate, dangerous or negligent deviations from accepted practice in carrying out research. It includes failure to follow established protocols leading to unreasonable risk or harm to humans, other vertebrates or the environment. It shall also include facilitating of misconduct in research by collusion with or in the concealment of such actions by others, and any plan or conspiracy or attempt to do any of these things.

Misconduct does not include honest error or honest differences in interpretation or judgment in evaluating research methods or results, or misconduct unrelated to the research process.

a) Fabrication – reporting of experiments never conducted
b) Falsification – Misrepresentation or suppression of data to project the desired result
c) Plagiarism – reporting another's data as one's own
d) Fraud – Deliberate and willful suppression of previous work in publications to claim originality or to avoid quoting previous publications that are contrary to present results.
e) Breach of confidentiality, i.e., misusing data obtained from privileged access to original grants, manuscripts etc., and presenting as one's own ideas is also considered a misdemeanor in the same category.

10.30.3 Reporting of cases of Scientific Misconduct

a) All employees or individuals working within SRMIST are required to report observed, suspected or apparent Scientific Misconduct to the Director in accordance with this policy.
b) If an individual is not sure whether a suspected incident of misconduct falls within the definition of scientific misconduct, he or she should discuss this with the Director informally.
c) SRMIST will endeavour to organize seminars and workshops at regular intervals to create awareness among the research workers on issues related to integrity in the conduct of research. The website will provide access to articles, debates and examples of such misconduct to sensitize research workers about the nature of questionable research practices.

10.30.4 Reporting and Evaluation of the Complaint

The charge of misconduct has serious implications for all concerned. Therefore, investigation related to the review of alleged misconduct will be kept confidential to the maximum extent possible. While investigating an allegation of misconduct, caution will have to be exercised to distinguish between differences in interpretation or unintended errors from the misrepresentation of information. Thus, the procedure adopted to address the issue of misconduct will perforce have to be flexible and determined on a case-to-case basis.

a) Reports of alleged misconduct are to be made directly to the office of the Director (Research), SRMIST
b) If a complainant makes an allegation to a Director (Research) informally, the Director (Research) may ask them to submit such allegation in writing.
c) Misconduct may be reported by either a staff of the SRMIST or anyone else. The identity of the complainant will not be revealed at this time.
d) The Director (Research) shall, either himself/herself or through an officer delegate the responsibility and shall cause to investigate (a) assess the allegations of research misconduct to determine if they fall within the definition of research misconduct and warrant an inquiry on the basis that the allegation is sufficiently credible and specific so that potential evidence of research misconduct may be identified, and (b) oversee enquiries and investigation.
e) A preliminary evaluation of the complaint will be made by the Director (Research) which may include consultation with other colleagues either independently or through the constitution of a committee and if the findings indicate that there are no reasonable grounds for the allegation, the complaint will be dismissed.
f) Written report stating the reasons for the dismissal shall be policy documented and maintained in the office of the Director (Research), but will not enter the subject's confidential file. The complainant will also be informed of the decision.
g) If the preliminary evaluation indicates that the allegation of misconduct warrants a full investigation, the following processes will be initiated with the appropriate records of procedures.

10.30.5 Investigation

a) The person against whom the complaint is being made (respondent) will be informed of the allegation.
b) The Director will appoint a committee to conduct a full investigation into the allegations of misconduct.
c) The committee will comprise of a Chairman, and 2 members, at least two of which will be experts from outside. The committee will be invested with complete confidentiality and will not be permitted to interact with press or other faculty members individually during the course of the investigation. The committee is expected to function within the full cognizance of the rights of the respondent as well as the complainant.
d) The scope of the committee shall be:
    i. To investigate the accuracy of charge of misconduct.
    ii. To assess the extent and nature of alleged misconduct.
e) The relevance of any other material or information revealed during the course of the investigation into the alleged instance of misconduct.

10.30.6 Process of Enquiry

The committee will be given access to material that is required to complete the investigation with due diligence and accuracy which will include grant approvals, reports, primary data, electronic records, manuscripts and any other material requested and considered relevant to the investigation. The committee will be given access to the laboratory and will be permitted to interview the complainant, the respondent and any other laboratory staff which the committee considers necessary for the purpose of gathering information. The committee is expected to complete the investigations and submit the report within a period of 60 (sixty) days to the Director (Research).

10.30.7 Outcome of the Investigation

a) The committee will submit its report with a recommended course of action to the Director within 60 days, explaining the modalities of the investigation, the source and method of obtaining information relevant to the investigation and the conclusions arrived at.
b) A copy of the report will be provided to the respondent and an opportunity will be given to him to comment in writing on the report and its findings within 15 days.

c) The Director will examine the report along with the comments of the individual. If the faculty against whom the complaint was lodged is found guilty of research misconduct, the Director will forward the records to the Registrar to take appropriate action. The misconduct / punishment will be entered in the personal file and service book.

d) The individual may appeal to the Appellate Authority within 30 days against the decision of the Registrar.

10.30.8 Safeguard against False Allegations

Efforts should be made to safeguard the interests of the complainant. If it is established that the complaint itself was false and was done with malafide intention, the Director will formulate an appropriate action against the individual who lodged the false complaint.