# Procedures and policies for maintaining and utilizing physical, academic and support facilities

#### JAI HIND COLLEGE AUTONOMOUS

- To ensure proper allocation and utilization of the available financial resources for maintenance and upkeep of different facilities, regular meetings of various committees constituted for this purpose are held and grants received by the college are utilized according to requirements which best benefits the interest of students.
- Laboratory: Record of maintenance account is maintained by lab technicians, Lab In-charge and further supervised by HODs of the concerned departments. The final details are then submitted to the Accounts department which is audited at the end of the financial year.
- **Maintenance of laboratories** are as follows:The calibration, repairing and maintenance of sophisticated laboratory equipment are done by the technicians of related owner enterprises.
- Library: -
  - 1. The requirement and list of books is taken from the concerned departments and HOD's who are involved in the process. The finalized list of required books is duly approved and signed by the principal.
  - 2. Other issues such as weeding out of old titles, schedule of issue/ return of books etc. are chalked out / resolved by the library committee.
- **Sports:** The College Gymkhana in charge is responsible for maintenance of all sports equipment. The Gymkhana committee carried out this procedure of maintenance and upkeep of all Sports Facilities through active coordination with three additional faculty members. They were also responsible for monitoring the participation of students in sports activities.
  - Computers: -
    - 1. Establishment of centralized computer laboratory to enrich the learning experience of students.
    - 2. Use of a software to maintain all relevant details of faculty and students.
    - 3. Availability of computer in ever department to cater to their requirements.
    - 4. Internet and WIFI-enabled campus.
  - Classrooms: -

- 1. The college has various committees for maintenance and upkeep of infrastructure. At the departmental level, HODs submit their requirements to the Administration-in-charge regarding classroom furniture or any other problem related to infrastructure. Each floor of the College has a register for record of such problems which is kept in custody of the Floor peon who submits it on a fortnightly basis to the Administration-in-Charge.
- 2. Vice Principals of the college are in charge of all academic requirements of students.

## • Additionally: -

- a. Every Science department has a lab assistant who maintains the stock register by physically checking the items throughout the year
- b. Department wise annual stock verification is done by the concerned Head of the Department.
- c. Regular maintenance of Computer Laboratory equipment's are done by Laboratory Assistant along with Laboratory attendant and they are headed by the faculty in charge. The regular maintenance of the Computer Laboratory is also carried out by the Laboratory Assistant along with the Laboratory attendant under the supervision of the faculty-in-charge.
- d. Water tanks are cleaned routinely, garbage is disposed of as per Municipal norms, pest control is administered, landscaping is performed, and lawns are maintained by employees of the Institute.
- e. Maintenance of the college campus is monitored through regular inspections.
- f. Outsourcing is done for maintenance and repairing of IT infrastructure such as computers, internet facilities including Wi-Fi and broadband.
- g. Updating of software used is done by the Resident Engineer along with the Lab Assistants.
- h. Outsourcing is done for the maintenance of wooden furniture, electrification, and plumbing.
- i. Water coolers and water purifiers are regularly maintained.
- j. The maintenance of the reading room and stock verification of library books is done regularly by library staff.

Principal

# Research Policy Jai Hind College

#### Preamble-

The purpose of the Research Policy is to create a vibrant atmosphere of research both among faculty and students in Jai Hind College Autonomous. The policy shall serve as an overall framework within which research activities may be carried out. Jai Hind college has prepared this research policy and guidelines to ensure that these activities are conducted with integrity and due regard for health, environmental safety and privacy of everyone concerned. The present research policy aims to help Jai Hind College and its faculty achieve excellence and contribute to the research culture of the organisation and to the society as a whole.

# **Policy statement**

Jai Hind College (Autonomous) aims to become the ideal platform for academicians to

transform their innovative ideas into a measurable outcome which will strive to have a positive impact on the

immediate community, and possibly at t the national and global level, in the long run. The institution is

committed to research in all streams of studies in a progressive, responsible and ethical

manner. It also aims to disseminate the outcomes of research to reach the research community comprising students, faculty, industry, and policy makers, and any other, so as to maximize its transformative potential.

# Scope and Applicability

- ❖ The policy applies to all the faculty / staff, research scholars and students of Jai Hind College who are engaged in any form of research activity
- ❖ In pursuance of bringing a culture of research, innovation and industry connect at Jai Hind College, all the faculty members are hereby encouraged to undertake research activities in addition to their teaching and administrative responsibilities.
- ❖ An effort should be made to seek external funding for undertaking research although college also extends support for various research activities, if and when required.

❖ All research activities shall be undertaken in compliance with the guidelines prescribed by various statutory bodies., funding agencies, and the Research policy of the institution, keeping in mind regulatory and ethical considerations.

# **Objectives**

This policy provides a broad framework to promote research pertaining to, innovations, start-up ideas and similar to build intellectual capital at the institution. The objectives of policy are as follows:

- ❖ To instill and foster a culture of research amongst the members of faculty, staff, scholars and students.
- ❖ To encourage cooperation between researchers for interdisciplinary and multi-disciplinary research
- ❖ To ensure the integrity, quality and ethics in research at every stage to be taken care of by the researcher
- ❖ To maintain and enhance the quality of research undertaken
- ❖ To enhance the participation of faculty members in both government-funded and private activities beyond this campus, by undertaking academic and professional activities including public service and consulting that may ultimately benefit the institution.
- ❖ To align and integrate research activities undertaken by the undergraduate, postgraduate and doctoral students with the research focus of the institution and in accordance with the thrust areas chosen by the institution
- ❖ To facilitate a conducive environment for conduct of high-quality original research by all individuals and provide effective support for pursuit of research activities by easing procedures for submitting utilisation details etc
- ❖ To foster a framework for the conduct of research in a transparent, socially responsible and ethical manner
- ❖ To contribute for societal good by translating new knowledge, innovations, technologies and tools emerging out of research conducted at the institution
- ❖ Encourage Patents and registration for Intellectual Property (IP) for research on those lines conducted at the institution
- ❖ To encourage and facilitate research collaborations with reputed Institutes, Universities and Research Organizations both in India and abroad

- ❖ Through collaborations with international universities and institutes of repute at the national level, College would try to explore mutually beneficial Exchange Programs for the Faculty and Students
- ❖ College will endeavour to bring Faculty Development Programs and courses to promote enhanced teaching-learning, upgradation and research among the faculty in partnership with affiliated institutions of repute or by utilisation of internal pool of faculty

#### **Promotion of research**

The college aims to provide a vibrant atmosphere of research in all faculties and motivate faculty members and young students to pursue research to contribute significantly towards academic, societal, national and global development. We believe that transmission of knowledge and conduct of scholarly inquiry is central to academic pursuit and therefore, we are committed to promote research and innovation in all walks of life and to enable the college to become an epitome of skill, knowledge, technologies and culture with a futuristic outlook.

The research policy of the college promotes scientific temper and research aptitude among all learners and expects them to innovate continuously. It also envisages integrating research activities undertaken by the undergraduate, post-graduate and doctoral students with the research focus to embrace the emerging trends and technologies. For this, opportunities for exchange of ideas among the faculties and students from undergraduate level to PhD students are provided with suitable facilitation mechanisms such as research meets, exhibitions, seminars and conferences. Creation of cohorts provides students to express free and independent research deliberations and develop tangible research problems.

The process of managing and implementation of our research strategy is based on system of interconnected supporting mechanism which seeks to

- ❖ Encourage faculty members to realize their own research abilities
- ❖ Motivation for undertaking high quality research activity of contemporary significance
- ❖ Encourage faculties through research seed money grant, training and infrastructure necessary for undertaking research
- Encourages active participation of faculties in national / international seminars, conferences and workshops.
- Promote academic and research integrity as well as publication culture and patent filing
- Create a platform for exchange of ideas and promote collaborations and interdisciplinary research projects with various internal departments and external agencies
- Encourage faculty members to explore funding opportunities from various recognised funding institutions
- ❖ Promote academia-industry collaborations for larger benefit to society

- ❖ Ensure and create research framework for conduct of research in a transparent, socially responsible and ethical manner
- \* Encourage a culture of entrepreneurship

The policy is central to ensure that individual scholars are free to select their broad and narrow disciplines, or interdisciplinary perspectives to narrow down the subject matter of their research, they are also free to form their own opinion, theories, explanations, findings in their research report where they draw certain conclusions.

The institution is committed to provide equal opportunities to all faculties and students to pursue research activities. The policy ensures a suitable mechanism to address any concerns of the stakeholders.

#### **Identification of Thrust areas**

The institute encourages socially-relevant research in all domains/ faculty of studies. The departments prepare a list of research topics to be examined by a screening committee.

Collaborations with renowned institutions and national and international universities, and involvement of students, creates a research culture. The current thrust areas are....

### Research at UG and PG level

Teaching and research are equally important in a university. To promote creativity among the undergraduate and post-graduate students, some research component in the curricula, especially in the final or pre-final year of the bachelors programme and final year in the master's programme, is necessary. Accordingly, in the pre-final final year of the bachelors programme the Research Project is inducted where the students under the guidance of the faculty work on the decided topic of the dissertation and submit the findings periodically. The final project is submitted to the institution and also the viva is conducted. Similarly, in the postgraduate programme, research was emphasised emphatically and students were trained for robust research skills.

#### Ph.D. Program

The college shall boost doctoral research and earmark appropriate budget for scholarship and research facilities. It shall also recognise the worthy R&D organisations for doctoral research and build bridges with them. The college shall continue to encourage faculty and

research scholars to get funding for attending International conferences from external agencies as a matching share so that the quality in research paper can be maintained. It shall urge research scholars to publish and patent their research work.

Authorship shall be granted to all those who have made an intellectual contribution that is substantial enough for him/her to take public responsibility in the conception, design, analysis and drafting of the research report. Under the principle of accountability, all authors must give their final approval of the report before it is submitted for publication or presentation. In research work, carried out as a part of curricular activity or as a part of dissertation or for doctoral degree, primary authorship will remain with the guiding teacher or the mentor unless otherwise mutually agreed upon by the guiding teacher and the student researcher.

# **Minor Research Projects**

The Minor Research Project Scheme helps young faculty think about research, prepare the proposal, conduct research and write a research report. It also assists them in preparing proposals for major research projects. The University shall continue to encourage young faculty to take up minor research projects and shall earmark appropriate budgets for this purpose. From the very beginning, the institute encouraged young faculty to conduct research. According to this scheme, a faculty member prepares a Minor Research Project, which is submitted to the funding bodies. To have the periodical assessment for all such research projects and with an aim to guide the researcher, the departmental or institutions level committee is constituted. It is also mandatory to send a quarterly progress report of such a Minor Research Project to the University.

## **Major Research Projects**

The University has identified a list of more than 150 funding agencies. Faculty can submit Major Research Project proposals to these agencies. These proposals are scrutinized before submitting the same to a funding agency. The University provides all kinds of infrastructure facilities available for conducting a Major Research Project. The University plans to evolve a mechanism through which it shall monitor the progress of Major Research Projects funded by an external agency, maintain its accounts and submit the utilization certificate in time to the funding agency as per the requirement of the funding agency. The University shall provide funding on its own to certain important Major Research Projects where the funding from the outside agency is not possible. It shall earmark appropriate budgets for this purpose.

# Collaborative research projects

Collaborative research refers to research undertaken by faculty at Jai Hind College who are sharing knowledge and working with researchers from outside Jai Hind College, to realise shared goals. Jai Hind College encourages its faculty to collaborate with other researchers and institutions outside the college under the general principles of the UGC for 'Responsible Conduct of Research'.

# a) Industry sponsored projects

A sponsored research project may be initiated either by the faculty member of the college submitting a proposal to the sponsoring agency or an industry seeking the help of the faculty. The sponsored programme can be taken individually by individual faculty or collectively by a group of investigators. One of the investigators must be the principal investigator (PI) while others are the principal co-investigators.

#### **Formal Agreement**

A written agreement with the collaborating institution is required to formalise the process and should be in place prior to the project commencement. The formal agreement between Jai Hind College faculty and the collaborating institution(s) should include details of the concerned institution(s) to check if they meet the reporting requirements.

#### **Commercial Returns**

If it is anticipated that there will be commercial returns resulting from a collaborative research project, the formal agreement between partner institutions to the project must include details about returns and the distribution of those returns.

#### **Confidentiality**

The nature and scope of confidentiality requirements must be agreed upon by the collaborating researchers and documented in the formal agreement between institutions and all confidentiality requirements under relevant professional standards must be met.

#### **Access to Materials**

The arrangement for shared access to research materials and data must be negotiated prior to the commencement of the research project.

Publications arising from the research work shall include the faculty affiliation of the college and acknowledge the facilities used from the college.

#### **Conflict of Interest**

Researchers involved in collaborative research projects need to be aware when a potential conflict of interest may arise and are required to disclose and manage conflicts of interest arising in such collaborative research.

### b) Interdisciplinary research projects

The interdisciplinary research brings together researchers from various research areas, to work together to find answers to some of society's most challenging questions.

- ❖ An interdisciplinary research should start with identification of the interdisciplinary area
- ❖ Identification of the experts from concerned disciplines who can work together.
- ❖ to study the infrastructure requirements to conduct such research
- ❖ A written formal agreement with details of principal investigator and co investigator, confidentiality, commercial returns, conflict of interest, authorship of the research publication should be in place before the commencement of the project.

#### Collaborative International Research-

Jai Hind College plans to have MoUs with prominent research institutions abroad, for conducting research jointly in the areas of common interest. For this purpose, a Task Force shall be constituted that will constantly explore the possibilities of having such collaborative or joint research in terms of thrust areas, decide the modus operandi of conducting such research and attend to other relevant aspects.

#### **Training for research Publications**

The policy of the college encompasses provision of training and education for research and publications. It is devised to promote responsible research conduct and assists all researchers and those in other relevant roles to follow the institution's authorship policies and other relevant research policies. The budding researchers from the undergraduate courses including postgraduate classes are provided support to acquire sufficient skill and additional knowledge required to become successful researchers. For this purpose, the policy mandates to provide the following;

- Training / Workshops (Research communication, publications ethics, project writing)
- ❖ Lab modules & instrumentation training
- **♦** Additional courses
- Discussion clubs
- Skill development

# **Publication of papers and Journals**

The institutional research and innovation goals are in alignment with "Quality Mandate" of the University Grants Commission (UGC) which emphasizes importance of promoting

high quality research and creation of new knowledge by faculty members as announced vide the UGC's notification of 14 January 2019. Researchers are expected to put effort to ensure academic research work appears only in globally recognized and acceptable journals and desist from publishing in predatory/dubious/deceptive journals.

Publication of Papers in Journals: Faculty members shall ensure to publish their research in refereed national and international journals. Except in case of Indian languages, it is expected that the journals are indexed in SCOPUS (Elsevier) and/or Web of Knowledge (Clarivate Analytics) or recommended under UGC Consortium for Academic and Research Ethics (CARE).

The following unethical publication practices should be avoided:

Fabrication	Making up data or results without fieldwork or experimentation and reporting as true.
Falsification	Manipulating research data or results and presenting it as genuine and represented in the research record/publication/thesis etc.
Plagiarism	Adoption of ideas, data, processes, results, or words already in public domain without giving appropriate credit.
Misrepresentation of data	Suppressing or manipulating data knowingly, irresponsibly or by gross negligence presenting a flawed data interpretation to appear as genuine.
Multiple submissions	Submissions of the same manuscript to multiple journals at the same time
Overlapping publication	Publishing of a paper which overlaps considerably with one already published
Redundant publications	Dividing of experimental/investigative/literature data from a large study, which could have been reported in a single paper, into different pieces and publishing them in two or more articles.

Inappropriate	Authorship is not appropriately assigned based on the author's
authorship	contributions.
practices	

### The order of author credits to be given as below:

Authorship confers credit and has important academic, social, and financial implications. Authorship also implies responsibility and accountability for published work. The following recommendations are intended to ensure that contributors who have made substantive intellectual contributions to a paper are given credit as authors, but also that contributors credited as authors understand their role in taking responsibility and being accountable for what is published.

# **Principles of author credits:**

Principal authorship and other publication credits accurately reflect the relative scientific or professional contributions of the individuals involved, regardless of their relative status. Mere possession of an institutional position, heading an academic division, chairing a particular internal/external/social/community committee does not justify authorship credit.

Providing the laboratory space for a project or furnishing a sample used in the research is not sufficient to be included as an author, though such contributions are to be recognized in a footnote or acknowledgments section.

Authorship conferred such as "honorary," "guest," or "gift" dilutes the credit due the people who actually did the work, inflates the credentials of the added authors, and makes the proper attribution of credit more difficult. Similarly, "ghost" authorship, where a person who writes a paper or contributed is not listed among the authors is against ethics. Faculty/researchers should all work to avoid such practice.

The college policy demands "first-last-author-emphasis" norm (FLAE). In following FLAE, it is suggested that the first author should get credit for the major impact, then the last author, and the credit of the other authors is the remaining impact credits divided by the number of all authors as defined under Credits Calculation.

The general rule is that the name of the principal contributor should appear first, with subsequent names in order of decreasing contribution. The research guide/mentor names come at the end as corresponding author with an asterisk mark.

A student is usually listed as principal author on any multiple-authored article that is based primarily on the student's investigational work, dissertation or thesis. Faculty advisors are expected to discuss publication credit with students as early as feasible and throughout the research and publication process as appropriate.

In larger collaborations of multidisciplinary nature, depending upon the project contributions or based on whatever has been previously agreed upon, there can be co-first authors and co-corresponding authors. The sharing of credits based on contributions need to be explicitly mentioned in the footnote/acknowledgements.

Impact factor of the Journals to be determined as per Thomson Reuters list

- Two authors: 70% of total value of publication for each author.
- More than two authors: 70% of total value of publication for the First/Principal/Corresponding author and 30% of Total value of publication for each of the joint authors.

#### **IPR & Patents**

- ❖ The College would like to strengthen the research leading to filing of patents. for which an IPR Committee, comprising of the experts and some faculty from research cell will be there to guide
- ❖ When a scholar would like to file for a patent, a thorough scrutiny will be carried at three levels namely:
  - 1. The concerned Department at the institution level
  - 2. At the committee level, which would have experts
  - 3. Will be vetted by a lawyer in the concerned field, associated with the institution

- ❖ College would bear all expenditure for filing application for patent. Once the patent is commercialised, the sharing of earning is to be done between the researcher and the College as per the guidelines given by the College.
- ❖ The college shall create awareness about intellectual property rights among the faculty, researchers and scholars periodically.

#### **Center for Excellence**

The college strives to excel in the academic research domain and the policies are shaped to eventually place the departments conducting research as "centres of excellence". The college aspires to prove a good track record of skill training and academic excellence, cutting edge research in the skill development sector, as indicated by publications, research projects, consultancy assignments and should have a close industry connect. The institution is already known for its diverse talent pool in various knowledge disciplines. The policies are in support to conduct research and development in related fields and disseminate the results of the R&D and other activities through filing of patents and transforming them into sustainable business proposals/solutions. The college wishes to foster relations across countries, between governments, workers, chambers of commerce, academia, industry and other Industrial associations in establishing collaborations of various projects of institute/organizations to ensure capacity building.

# **Incentives for outstanding research**

The Institution encourages quality research in different thrust areas. Outstanding research contributions by faculty, students, and joint collaborations are recognized. Incentives to researchers include financial support, library and laboratory assistance, awards, and weightage for the career advancement scheme.