

Asansol Engineering College

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Policy for Research & Development (W.e.f Session 2016-17)

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1. PREAMBLE

At Asansol Engineering College, the domain of research and innovations remains as the fulcrum around which the processes of teaching and learning revolve. The research policy aims to provide a higher edge to the existing stage of research and excellence and to document the information and promotional activities of the institute on the same.

2. OBJECTIVES

The objectives of the policy include:

- 2.1 To provide the required infrastructure for the essential ambiance and culture to support research and innovation.
- 2.2 To create a platform for knowledge sharing and several collaborations.
- 2.3 Publication of papers in highly esteemed journals and publications, filing of patents, and extending the innovative and original applications of technology to the relevant industries.
- 2.4 Provision for Research and Development projects including industrial collaborations.
- 2.5 To ensure the quality and maintenance of ethics in research and to inculcate the passion for curiosity-driven ambiance for the teaching-learning process.
- 2.6 To ensure the justified incentives bearing in mind the interests and limitations of the institute.

3. PROMOTION OF RESEARCH

The innovators are free to choose their field of research according to their will and may also appeal for funding to the esteemed source if required. However, the institute will retain the complete right to review the papers and attempt for constructive peer review, to persistently enhance the level of research and pace forward without discrimination. The process and procedures of the research must abide by the rules of ethics and must not be intended to cause any means of harm or humiliation to others.

The institute will be pleased to provide all sorts of assistance for continuing the journey of research within its boundaries, and will also encourage the filing of patents and publication of research papers in journals, etc.

3.1 Establishment of Research & Development Cell:

The Research & Development Cell was established in 2012 as per the decisions taken by the Management. The R&D Cell comprises the following members.

- 3.1.1 Dean (R&D)- Chairman (ex officio member).
- 3.1.2 Head of all Academic Departments (ex officio member)
- 3.1.3 Faculty members- Principal nominee

3.1.4 Members from Industry/Academia/ Research Institution

3.2 Responsibilities of R&D Cell:

The R&D Cell is responsible for the promotion of research which includes the development, review, and monitoring of achievements under the research & development of the institute. The Cell takes into consideration the following features:

- 3.2.1 The development and enhancement of the institute's research capacities.
- 3.2.2 Motivate all faculty members to pursue research in their respective areas of expertise.
- 3.2.3 The protection and commercialization of the Institute's intellectual property.
- 3.2.4 The provision of research and development opportunities for academic staff to maintain enthusiasm, awareness of current scholarship, and relevant teaching and other Institutional activities.
- 3.2.5 The development of infrastructure conducive to promoting the quality and quantity of research and development.
- 3.2.6 Disbursement of institute research funds to established researchers, both individually and in groups, seeding grants to beginning researchers, and research initiatives across the departments.
- 3.2.7 Monitor the application of research funds to ensure that the funds are properly and formally accounted for.
- 3.2.8 Promote emerging areas of research and development.
- 3.2.9 Development of mechanisms conducive to the best possible ways of engaging and motivating research staff.
- 3.2.10 To foster the development of multi-disciplinary research endeavors across faculty members and departments.
- 3.2.11 To foster the development of multi-disciplinary research endeavors across faculty members and departments.
- 3.2.12 Monitor the research and development performance of individuals and groups to encourage excellence and productivity by maintaining a database of research and development activities.
- 3.2.13 Oversee the application of the Code of research ethics for the responsible practice of research.
- 3.2.14 To formulate incentive schemes for promoting research activities with teachers and students.

4. IDENTIFICATION OF THRUST AREAS

The research may belong to any chosen domain, but it must be relevant to society. The various collaborations of the institute with relevant industries and other institutes aids in the quality of the research and facilitates the understanding of the subject on a deeper level for both UG and PG students. Each department of the institute must maintain a record of all the upcoming and ongoing research works categorized under several disciplines, which is to be referred to as a bank of thrust areas.

5. RESEARCH AT UG AND PG LEVEL

For the undergraduates, a major and a minor project are to be successfully completed under the guidance and mentorship of the faculty members, in the pre-final and final years of the course. Finally, the project is to be submitted with a concluding chapter of the viva. The ambiance of research is also nurtured with great care for the postgraduate students.

6. MINOR RESEARCH PROJECT

In the vision of pursuing research works by the budding researchers and faculty members, the institute should allocate funds for the implementation of research activities. According to the decision of the Research and Development Cell, the funds will be allocated.

7. MAJOR RESEARCH PROJECT

The institute has to ensure collaborations with certain funding agencies to support major research projects conducted by both faculty members as well as students. The research works are subject to be scrutinized by the funding agency itself and the fund is to be provided as per their terms and conditions.

8. COLLABORATIVE RESEARCH PROJECT

The institution intends to make several attempts to bridge the gap between industries and institutes. The Institute-Industry interactions will ensure a better provision for research and development in a more rational environment. To make the endeavor successful, some initiatives are to be taken by the Institution.

9. TRAINING FOR RESEARCH AND PUBLICATIONS

To ensure that the faculty & staff members can channelize their efforts to bear its fruit, rigorous training has to be provided to them for pursuing excellence in the domain.

Conducting sound research work is not enough to receive funding from external organizations or the publication of the paper. The way in which the paper is written leaves a deep impact and can turn out to be one of the most important factors to get selected for the mentioned purposes.

10. PUBLICATION OF PAPERS IN JOURNALS

To maintain and enhance the effectiveness of research works in the institute, the faculty members are to be instructed to publish research papers in reputed journals and present the papers in national and international conferences regularly to promote the culture of research in wide horizons_

At Asansol Engineering College, the consistent publication of quality research papers in identified journals and conferences are always in trend, and incentives might be granted to the faculty members and scholars whenever applicable.

11. PATENT AND IPR

The researchers are to be always encouraged to file a patent for the research which they have successfully conducted. To do so, the paper must pass the review boards at the departmental level, the committee entitled for the purpose, and the Institute level where a lawyer will also be present to check the legal points. The process is governed and monitored according to the guidelines of the Intellectual Property Rights Policy.

12. CENTRES OF EXCELLENCE

Each of the departments of the institute should frame methods regularly to excel in the domain of research in specific areas of study, and the organization of the experts in that particular area under study will be titled the Centre of Excellence to encourage and honor the process.

13. INCENTIVES FOR OUTSTANDING RESEARCH

To recognize the efforts that the researchers spend in their project the institute should make provisions to grant them incentives either in terms of money, awards, funding for ongoing projects, or certificate for the advancement of their career.

14. ESTABLISHMENTS OF RESEARCH CHAIRS

To encourage the young learners and benefit the teaching-learning process, very senior and respected scientists or professors are to be appointed for chairs periodically to research in their field of excellence.

15. ESTABLISHMENT OF DEAN RESEARCH

The responsibility to monitor and support the research projects in the institute lies with the Dean of Research and Developments section.

16. POLICY TO CHECK ACADEMIC MALPRACTICES AND PLAGIARISM

To check the originality of the research, work the following steps have to be undertaken:

16.1 Plagiarism is to be monitored using various software including Ithenticate software.

16.2 The supervisor should also check the Overall Similarity Index (OSI) before stepping further.

16.3 The OSI must remain under 20% for researchers The individual Source Similarity Index (ISI) must lie below 5% for all sources.

Violation of any of these conditions may lead to the cancellation of the project for the semester or may even lead to the cancellation of registration for the course.

17. CODE OF ETHICS FOR RESEARCH

All the students, faculty members, and concerned authorities must abide by the following code of ethics and conduct:

- 17.1 All the research works must be competent enough and conducted following the principles and guidelines of the concerned authorities.
- 17.2 The research work must be original in all aspects, to get published in reputed journals, publications, etc.
- 17.3 The data obtained from the research must be justified and errorless in terms of originality.
- 17.4 Refrain from deluding affirmations or derivations which may lead to confusion.
- 17.5 Any content or pieces of information must not be plagiarized.
- 17.6 It is mandatory to give proper acknowledgments and citations.
- 17.7 The paper must be written in a clear context so that every point remains realizable to the reviewers, editors, and readers.

18. REVIEW OF THE POLICY

The policy may be changed whenever required.

19. RESEARCH INITIATIVE FOR FACULTY

To encourage the faculty members of this institute, to indulge in research work in increasing numbers, the following initiatives have to be taken.

- 19.1 It is always acceptable to participate or organize more and more conferences and workshops related to the same.
- 19.2 Every faculty member must attend national and international conferences / symposiums / workshops / FDPs in each year.
- 19.3 In the case of an international conference/symposium/workshop, the institution will pay the registration fee and TA (**Maximum Rs.10000/ for National Conference, Rs. 20000/ for International Conference, for Workshop and FDP Rs 5000/**) depending on applicability. Assistance from external agencies like AICTE etc. will be accepted.
- 19.4 Financial incentives will be provided to faculty members as per norms.
- 19.5 The institute will provide incentives to an individual or a team if the patent is granted. There is no maximum limit to appeal for the patent in a year.
- 19.6 Consultancy can be provided by maintaining all the norms of the institution.
- 19.7 Seed money will be provided by the institute to the faculty members for initiating research.
- 19.8 Faculty members must be encouraged to take membership in professional bodies.

20. RESEARCH INITIATIVE FOR STUDENTS

20.1 Students must always be encouraged to present their research works at conferences and other platforms.

20.2 Students who are pursuing research works should attend national and international conference/symposium/workshop in a year.

20.3 Awards and incentives will be awarded to the students as per the rules and norms of the institution.

Approved By BOG
No. 43 Dated: 04.02.2017
Under Agenda No. 7

Amendments in Research & Development Policy (2017)

Updated and approved by BOG on 04.02.2017 agenda no. 7

The Research & Development policy has been amended in Si. No. 7 which is to be read as

7. MAJOR RESEARCH PROJECT

The institute has to ensure collaborations with certain funding agencies to support major research projects conducted by both faculty members as well as students. The research works are subjected to be scrutinized by the funding agency itself and the funds are to be provided as per their terms and conditions. All research proposals need to be scrutinized and approved by the R & D Committee.

The leave policy for carrying out research activities outside college campus has been amended as SI, No. 21. The amended policy has been stated below.

21. LEAVE POLICY FOR CARRYING OUT RESEARCH ACTIVITIES OUTSIDE THE INSTITUTE'S CAMPUS

21.1 Leave Policy for Attendance at FDPs/Conferences/Workshops at Other Institutes

Regular employees participating in FDP/Conferences/Workshops in other institutes may be granted on-duty academic leave as per the discretion of the competent authority.

21.2 Leave Policy for Expert Lecture/Keynote Speech/Session Chair/Resource Person

On-duty academic leave may be granted to regular employees at the discretion of the competent authority for delivering expert lectures/keynote addresses/invited talks/chairing the session at a conference organized by any reputed organization other than Asansol Engineering College.

21.3 Leave Policy for Ph.D.-Work

Regular employees (pursuing a Ph.D. degree) may be granted weekly one day on-duty academic leave for Ph.D. work at the discretion of the competent authority. An employee availing himself/herself of such on-duty academic leave shall undertake that she/he will serve the institution for a continuous period of at least three years after obtaining the Ph.D. degree. The proforma of the undertaking to be furnished by an employee for availing on-duty leaves in connection with his/her Ph.D. degree can be availed from the R&D Committee.

21.4 Leave Policy for Long-Term Study Leave

A regular employee may be granted a long-term study leave for a maximum period of three years without any payment of his/her salary for advanced study and research-related activities, provided the concerned employee has put in at least five years of continuous service at the institute and is not due to retire within five years of his/her return from such leave. The study leave granted to an employee shall be deemed to have been cancelled if it is not availed within six months of its sanction. An employee availing of study leave shall undertake that she/he shall serve the institution for a continuous period of at least three years, to be calculated from the date of his/her resuming duty on the expiry of the study leave.

Approved By BIR
No. 48 Date: 30.06.2018
Under Agenda No. 48.5

Amendments in Research & Development Policy (2018)

Updated and approved by BOG on 30.06.2018 agenda no. 48.5

The **SI. No. 8 (COLLABORATIVE RESEARCH PROJECT)** of the Research & Development Policy will have two subheadings as:

8.1 Industry-sponsored research project:

The experts of the institution would be there to support and conduct research with students, along with the opportunity to receive funding from external industry organizations. If the project gets honored with a patent, then the income will be shared among the institute, external organization, and the researcher in this case.

8.2 Interdisciplinary research:

The institute would organize for the proper requirements to meet the dire need for conducting interdisciplinary research. The experts from each of the fields available would be there to support the research.

Approved By BOG
No. 50 Dated: 08.12.2018
Under Agenda No. 50.7

Amendments in Research & Development Policy (2019)

Updated and approved by BOG on 08.12.2018 agenda no. 50.7

The Research & Development policy has been amended in SI. No. 10 which is to be read as

10. PUBLICATION OF PAPERS IN JOURNALS

To maintain and enhance the effectiveness of research works in the institute, the faculty members are to be instructed to publish research papers in reputed journals and present the papers in national and international conferences regularly to promote the culture of research in wide horizons.

At Asansol Engineering College, the consistent publication of quality research papers in identified journals and conferences are always in trend, and incentives might be granted to the faculty members and scholars whenever applicable.

The faculty members would be required to publish two to four papers annually in indexed journals (SCI, Scopus, Web of Science, Thomson Reuters).

The Award policy for carrying out research activities amended as SI, No. 22. The amended policy has been stated below.

22 AWARD POLICY FOR PUBLICATION IN JOURNAL

For Indexed Journal publication the faculty member will be awarded by cash of Rs. 5000/- per paper

Amendments in Research & Development Policy (2019)

Updated and approved by BCC on 11.01.2020 agenda no. 25.6

The **SI No. 17** **CODE OF ETHICS FOR RESEARCHERS** of the Research & Development Policy will have two more addendums as

(1) The proper format of writing must be followed and as feasible attempt to change them wherever required.

(2) The privacy of the utilized sources must be respected and maintained.

62
Under Agenda No. 62.5
25.05.2022

Amendments in Research & Development Policy (2022)

Updated and approved by BOG on 25.05.2022 agenda no. 62.5

The subheading 19.3 under the **SI. No. 19 (RESEARCH INITIATIVE FOR FACULTY)** is amended and will be read as

19.3 In the case of an international conference/symposium/workshop, the institution will pay the registration fee and TA (**Maximum Rs.12000/ for National Conference, Rs. 25000/ for International Conference, for Workshop and FDP Rs 6000/**) depending on applicability. Assistance from external agencies like AICTE etc. will be accepted.

In **SI. No 22 (Award policy for journal publication)** of Research & Development Policy, award for patent, book and student publication have been included and modified as

22 AWARD POLICY FOR JOURNAL/ BOOK/ PATENT/ STUDENT PUBLICATION

The faculty members are awarded through cash for Journal/Book/Patent publication as follows

1. For Indexed Journal publication the faculty member will be awarded by cash of Rs. 5000/- per paper
2. For book publication the faculty member will be awarded by cash of Rs. 25000/- per book
3. For patent publication the faculty member will be awarded by cash of Rs. 2500/- per patent
4. For patent grant the faculty member will be awarded by cash of Rs. 5000/- per patent
5. For student publication the faculty member will be awarded by cash of Rs. 1000/- per paper

For all the above-mentioned cases, an application must be duly submitted to the head of the institute one week prior to the leave along with corroborating documents. In general, on-duty academic leave can be taken for up to 14 days in academic calendar year. However, in the event of any conflict or situational urgency, the competent authority is entitled to exercise the discretionary power to make the final decision on granting on-duty academic leave.

The Work load relaxation for carrying out research activities amended as SI, No. 23. The amended policy has been stated below.

23 WORK LOAD RELAXATION FOR CARRYING OUT RESEARCH ACTIVITIES.

If the HOD finds a faculty member's research performance to be very good, they may reduce that faculty member's academic load by 20%