[RCOEM/R&D Policy (2023) Rev 1]

Research & Development Policy

[wef March 23, 2023]



R&I Cell Shri Ramdeobaba College of Engineering and Management, Nagpur

Contents

1.	Preamble
2.	Research Incentive Policy4
3.	Conference/Workshop/STTP/FDP Policy
4.	Internal Funding Policy for Research9
5.	External Funding Policy for Research & Development
6.	Academic Research Quality Policy11
7.	Intellectual Property (IP) Policy12
8.	Policy on College Affiliation in Publications
9.	Policy Norms for Pursuing Higher Studies16
10.	Faculty Recognition Policy
11.	RCOEM Ph.D. Scheme19
12.	Honorarium to Experts for Ph.D. Progress Seminar
13.	Policy for completing Six month / One-year specialized courses by faculty members of RCOEM

1. Preamble

We at Shri Ramdeobaba College of Engineering and Management (RCOEM) strongly believe that our service is to disseminate knowledge through teaching and create new knowledge through research. For this it is necessary to foster a research culture amongst the faculty members and students along with necessary infrastructure and support facilities.

The R&D Cell is constituted with the following aims:

- 1. To cultivate strong research culture amongst faculty members and students.
- 2. To embed research in all levels of academic activity (undergraduate, postgraduate and PhD).
- 3. To increase the quantity and quality of our research outcomes.
- 4. To increase the sources of external research funding in order to build capacity, create knew knowledge and research quality.

Following document viz. R&D Policy is the collection of all the policies which are constituted for achieving our aims and objectives.

2. Research Incentive Policy

2.1 Incentives for Publications in Journals / Book Chapters / External Research Grants

- 2.1.1 Incentives shall be applicable to papers which are published in journals indexed by SCOPUS/WOS.
- 2.1.2 In case of multiple authors, <u>including students</u>, in the same paper from RCOEM, the incentive shall be shared equally by all the authors.
- 2.1.3 The incentives shall be applicable to only those papers where the author's affiliation is 'Shri Ramdeobaba College of Engineering and Management' (Refer Policy on College Affiliation in Publications).
- 2.1.4 Incentive of Rs. 5,000/- per paper for publications in journals indexed by ESCI (WOS)
- 2.1.5 Incentive of Rs. 5,000/- per Book Chapter published in Edited Books Indexed by SCOPUS / WOS.
- 2.1.6 Incentive of
 - Rs. 5000/- for 1st paper published in journal indexed by Scopus
 - Rs. 10,000/- for 2nd paper published in journal indexed by Scopus
 - Rs. 20,000/- for 3rd and subsequent papers published in journal indexed by Scopus within an academic year
- 2.1.7 Incentive of Rs. 20,000/- for each paper published in journals indexed by SCI/SCIE/SSCI (WOS) within an academic year
- 2.1.8 Incentive equal to 10% of the total amount of each external Research Funding fetched for Research work

2.2 Incentives for attending Conference/ Workshop/ STTP/FDP/MDP/ Seminars/Training in India

2.2.1 The faculty members of RCOEM shall be eligible for sponsorship in the form of registration fees, travel allowance (To & Fro Rail fare by AC II tier to the nearest rail head and / or Bus fare up to the venue of the conference) and duty leave as per norms. Full registration fees shall be sponsored for

conference paper presentation (online / offline mode) where the proceedings are indexed in Scopus / WOS. For Workshop/FDP/MDP/STTP/Seminar/training in India, 50% of the registration fees may be sponsored to university-approved faculty for attending the aforementioned events at NIRF 100 Ranked Institutes. The incentives shall be applicable to only those papers where the author's affiliation is 'Shri Ramdeobaba College of Engineering and Management' (Refer Policy on College Affiliation in Publications).

2.3 Incentives for presenting paper in Conference abroad

- 2.3.1 The university approved faculty members of RCOEM shall be eligible for sponsorship, in the form of full conference registration fees, duty leave as per norms, train fare by AC II tier (To & Fro) from Nagpur to the city of embarkment (from where the international flight is scheduled) and one-way airfare from the city of embarkment to the conference destination, once in two years.
- 2.3.2 The incentives shall be applicable to only those papers where the author's affiliation is 'Shri Ramdeobaba College of Engineering and Management' & for the conferences where the publications are indexed in Scopus / WOS (Refer Policy on College Affiliation in Publications).
- 2.3.3 Refer Conference/Workshop/STTP/FDP Policy for guidelines.

2.4 Incentives for Patents

- 2.4.1 Incentives shall be applicable to patents which are filed jointly with RCOEM.
- 2.4.2 Incentives for each granted patent shall be Rs. 10000/-.

(Refer Intellectual Property Policy)

2.5 Incentives for pursuing Part Time PhD

- 2.5.1 The University approved faculty members of RCOEM pursuing part-time PhD at RCOEM or Institutes of national repute like IITs/IISc/IIITs/NITs/IIMs and other reputed Institutes / Universities consistently ranked among top 100 in NIRF only shall be eligible for reimbursement of annual PhD fees, up to maximum equal to institute applicable fees. Other terms and conditions shall be applicable as per R & D policy of the college. (Refer Policy Norms for Pursuing Higher Studies).
- 2.5.2 The University approved faculty members of RCOEM those are pursuing Part-Time Ph.D. at RCOEM or Institutes of national repute like IITs/IISc/IIITs/IIMs/NITs and other reputed Institutes / Universities consistently ranked among top 100 in NIRF may get up to three months full salary study leave or six months half salary study leave for Ph.D. work. The above-mentioned condition is applicable for the period of five years from the date of Ph.D. registration. Study leave may be availed in parts and maximum up to three parts.

2.6 Incentives to Students for Publications in Journals

2.6.1 Students of RCOEM shall also be entitled for the incentives as per the clause 2.1 Incentives for Publications in Journals.

2.7 Incentives to Faculty for having good Citations for their publications in Journals

- 2.7.1 Incentives shall be applicable to faculty for having good citations for papers published in SCOPUS and Web of Science Journals per year.
- 2.7.2 Incentive of Rs. 5,000/- for Citations above 50 in SCOPUS and /or WOS
- 2.7.3 Incentive of Rs. 10,000/- for Citations above 100 in SCOPUS and / or WOS

2.8 Incentives to Students for participating in Technical Events / Conferences

- 2.8.1 Students of RCOEM shall be provided incentives for participating in Technical Events at reputed institutions like IIT/NIT/IIIT/IIM or Institutions with NIRF rankings less than 100 or reputable industries.
- 2.8.2 Students of RCOEM shall be eligible for sponsorship in the form of registration fees for the event plus travel allowance (To & Fro Rail fare by Sleeper Class to the nearest rail head and / or Bus fare up to the venue of the event) with a maximum of Rs. 20,000/- per event per team of up to 10 students, on case to case basis based on the achievement.
- 2.8.3 Students of RCOEM shall be eligible for sponsorship in the form of registration fees for conference held in India where the proceeding are indexed in Scopus / WOS plus travel allowance (To & Fro Rail fare by Sleeper Class to the nearest rail head and / or Bus fare up to the venue of the event) for one student per paper. The incentives shall be applicable to only those papers where the author's affiliation is 'Shri Ramdeobaba College of Engineering and Management' (Refer Policy on College Affiliation in Publications).
- 2.8.4 Students availing the incentive has to submit a report of the event duly signed by the Head and Faculty coordinator for the event.

3. Conference/Workshop/STTP/FDP/ Training Policy

3.1 Conference/Workshop/STTP/FDP/MDP/Seminars/Training in India

- 3.1.1 For attending Workshop/STTP/FDP/MDP/Seminars/Training or for presentation of research papers in conferences, the RCOEM faculty members shall be sponsored to attend aforesaid events within the country.
- 3.1.2 **Incentives:** The faculty members of RCOEM shall be eligible for sponsorship as per the Research Incentive Policy.

3.2 Conferences Abroad

- 3.2.1 For presentation of research papers in conferences abroad, the University approved faculty members of RCOEM shall be eligible to attend one conference in every two years along with the duty leave.
- 3.2.2 **Incentives:** The University approved faculty members of RCOEM shall be eligible for sponsorship as per the Research Incentive Policy.
- 3.2.3 The faculty member availing of this incentive has to submit the proposal to the Principal at least two months in advance from the last date of registration of the conference.
- 3.2.4 It is mandatory for the faculty member availing the sponsorship for conference abroad, to submit Travel Grant application to at least one external funding agency i.e. AICTE, DST, SERB, etc, before applying to the college for the same.

4. Internal Funding Policy for Research

4.1 Research Fund for Young Faculty Members

- 4.1.1 The seed money of up to Rupees Two Lakhs shall be allotted to faculty member applicant for carrying out his / her research which leads to some tangible outcome such as new and significant theoretical or experimental advances, formulation of new hypothesis, or breakthrough science which shall lead to new technologies. This may be then converted to an SCI publication, patent, a product for commercial use or consultancy / testing opportunities.
- 4.1.2 Eligibility and Selection Criteria:

The Selection Committee shall select proposal for the scheme. Criteria for selection shall be:

- Age of the faculty member should be less than 45 years with PhD (Awarded/Submitted).
- 2. The grant is provided for equipment, consumables and contingencies in an appropriate proportion.
- 3. The proposal shall be assessed thoroughly evaluating the scope, potential and feasibility of targeted outcome.

(Refer RCOEM - Young Faculty Research Funding Scheme (YFRF)-2017)

4.2 R&D Fund for Departments

4.2.1 The annual departmental R&D fund allocated to every department every year may be utilized for departmental R&D activities e.g. UG projects, PG Projects, and deputation of faculty members to STTPs / Workshops / FDPs / MDPs / Guest Lectures to reputed institutes/industries etc. as per

External Funding Policy for Research & Development

5.1 Research Funding Proposals

.

5.1.1 It is mandatory for every department to submit at least one proposal per five faculty per year to any external funding agency like DST/UGC/AICTE/SERB etc.

(Refer External Funding Agencies Information Manual)

6. Academic Research Quality Policy

6.1 Publications by PhD Scholars

- 6.1.1 Each Full-Time Ph.D. scholar must publish at least four papers, before presubmission seminar as follow:
 - I. Two Papers in journals indexed by SCI / SCIE
 - II. Two Papers in Reputed International Conferences with proceedings indexed in Scopus or Web of Science
- 6.1.2 Each Part Time Ph.D. scholar must publish at least four papers, before presubmission seminar as follow:
 - I. Two Papers in journals one of which is indexed by SCI / SCIE and other in Scopus
 - II. Two Papers in Reputed International Conferences with proceedings indexed in Scopus or Web of Science

The RCOEM affiliation is compulsory in all Publications.

Acceptance for the publication will also be considered in case there is delay from publishers' side.

(Refer Policy on College Affiliation in Publications).

6.2 Publications by M.Tech Students

6.2.1 Each MTech student must publish at least one research paper in SCOPUS indexed journal / Conference Proceedings with RCOEM affiliation, before the award of degree. For this acceptance for the publication will also be considered.

(Refer Policy on College Affiliation in Publications).

7. Intellectual Property (IP) Policy

7.1 Ownership

- 7.1.1 No RCOEM student/faculty members/staff can apply for personal Intellectual Property Rights (IPRs). Even after leaving RCOEM student/faculty member cannot apply for IPRs on projects carried out during their stay in RCOEM.
- 7.1.2 All IPs should be filed through IPR Cell only. The application shall be a joint application in which first applicant, and hence the owner, shall be RCOEM, whereas the second applicant shall be inventor/s (viz. faculty member/staff/student/alumnus of RCOEM). The names of the inventors (students, staff members, research scholars or collaborating faculty members) from other institutes may also be included under inventors of the patent.

7.2 Revenue Sharing

7.2.1 The revenues generated through technology transfer or licensing of the patent shall be shared by the RCOEM and Inventors. The ratio of revenue sharing (after deducting processing and other expenses) shall be decided mutually and governed by a separate agreement between RCOEM and the inventors.

7.3 Incentives

7.3.1 Incentives shall be applicable as per the Research Incentive Policy.

7.4 Cost of Protecting the IPRs

7.4.1 The fees for copyright registration shall be paid by RCOEM.

7.4.2 The fees for filing the patent shall be paid by RCOEM.

7.5 Role of IPR Cell

- 7.5.1 IPR Cell shall provide guidance, support and resources to all the faculty members, staff and students of RCOEM and facilitate protection and deployment of intellectual property.
- 7.5.2 R&D Cell shall create the IP policy and IPR Cell shall implement it so as to achieve the objectives of the college. However, R&D Cell shall periodically review the policy to improve upon any shortcomings.
- 7.5.3 IPR cell shall prepare a roadmap for the college's intellectual property and shall closely monitor the progress and take appropriate measures to achieve the set objectives.
- 7.5.4 IPR Cell shall create awareness about the importance and role of IP Rights. It shall also facilitate the training of faculty members, staff and students regarding IPRs.
- 7.5.5 IPR cell shall assist the faculty members, staff and students of RCOEM in drafting, filing, registering and maintaining the intellectual property.

8. Policy on College Affiliation in Publications

8.1 Purpose

- 8.1.1 This policy is designed to ensure the correct and consistent use of our college affiliation in research outputs. This will ensure that the college receives the academic prestige and acknowledgement in citations of the publication by other authors, which contributes to bibliometric assessment of the college research outputs.
- 8.1.2 The policy applies to all faculty members and students whose research outputs derive from the use of college resources and facilities during their tenure in the college.

8.2 Policy

- 8.2.1 All RCOEM authors must cite **Shri Ramdeobaba College of Engineering and Management** as their affiliation in research articles, conference papers and other publications, irrespective of whether the affiliation actually appears in the publication or not.
- 8.2.2 Wherever possible, depending upon the required style of the publication, **'Shri Ramdeobaba College of Engineering and Management'** should appear as the first element in recording affiliation. Other elements such as Department, Designation can be listed as second or third element, as appropriate. Listing of college name first ensures that the college receives credit. Where this is not possible, college name must appear prominently and, in any event, not later than the third element within the citation. Otherwise, there is a risk that the college will not be credited in any external machine-readable analysis of bibliometric data.
- 8.2.3 The college name must be correctly spelled out in full (Shri Ramdeobaba College of Engineering and Management). The use of the acronyms is not permitted in publications, nor is any other form of abbreviation of the

college's name. 'and' in the college name should not be spelled as '&".

8.2.4 All the privileges and benefits such as incentives, sponsorships, duty leaves, reimbursements, etc. shall be applicable only if the college affiliation is mentioned in the publication as per this policy.

9. Policy Norms for Pursuing Higher Studies

9.1 Part-Time PhD

- 9.1.1 The University approved faculty member of RCOEM may be allowed to pursue Part-Time Ph.D. at RCOEM or at an Institute/University of National Repute like IITs/IIITs/ IIMs /NITs or at top 100 NIRF ranked Institute/University.
- 9.1.2 The University approved faculty members of RCOEM those are pursuing Part-Time Ph.D. at afore mentioned Institutes/Universities may get up to three months full salary study leave or six months half salary study leave for Ph.D. work. The above-mentioned condition is applicable for the period of five years from the date of Ph.D. registration. Study leave may be availed in parts and maximum up to three parts. However, the decision regarding this shall be taken by Hon'ble Chairman on a case to case basis.
- 9.1.3 Those staff members availing the above facilities shall have to give an undertaking that he/she shall work at RCOEM for minimum five years after the award of Ph.D. degree. Failing to do so, the faculty members have to refund all the expenditure incurred (paid leaves, registration, registration fees, retention fees, tuition fees, examination fees, etc.) on them by RCOEM during the period of study.
- 9.1.4 The University approved faculty members of RCOEM pursuing part-time PhD at RCOEM or Institutes of national repute like IITs/IISc/IIITs/ IIMs/NITs and other reputed Institutes / Universities consistently ranked among top 100 in NIRF only shall be eligible for reimbursement of annual Ph.D. fees. Other terms and conditions shall be applicable as per R&D Policy of the college.
- 9.1.5 The Non-Engineering University approved faculty members of RCOEM may be allowed to pursue Part-Time PhD from any recognized University / Institution other than those mentioned in clause 9.1.1. However, they shall

not be eligible for benefits applicable to those pursuing Part-Time PhD at RCOEM or at Institute/University of National Repute like IITs/IIITs/NITs or at top 100 NIRF ranked Institute/University as per clause 9.1.2 and 9.1.4 above. They will also be required to give an undertaking that he/she shall work at RCOEM for minimum five years after the award of PhD degree.

(Refer Research Incentive Policy)

10. Faculty Recognition Policy

10.1 Research Awards

- 10.1.1 In order to recognize the research contributions of the faculty members following awards have been instituted:
 - 1. Researcher of the Year Award
 - 2. Young Researcher of the Year Award
- 10.1.2 Research award shall be in the form of Trophy or Plaque with Citation.

(Refer Research Award Guidelines)

10.2 List of Honour

10.2.1 In order to identify the promising faculty members having research acumen a List of Honour shall be created every year.

(Refer Research Award Guidelines)

11. RCOEM Ph.D Scheme

Institute is recognized as Place of Research and Higher Learning by RTM Nagpur University Nagpur in the following major disciplines Civil Engineering, Computer Science and Engineering, Electronics Engineering, Electrical Engineering, Mechanical Engineering, Business Administration & Business Management. Through these research centers, institute is offering PhD programs in the above major disciplines in the following categories:

- 1. Ph.D. (Part-Time) Self Sponsored
- 2. Ph.D. (Full-Time) Self Sponsored
- 3. Ph.D. (Full-Time) Teaching Assistantship

4. Ph.D. (Full Time) – Project / Technical / Research Fellowship (PF/TF/RF) The institute envisages to create a research-innovation eco-system and foster the research activities through the engagement of full-time research scholars.

The scheme is applicable to the interested candidates fulfilling the criteria's laid down by RTM Nagpur University for admission to Ph.D., presently in force, for **Ph.D. Full Time with Teaching Assistantship** /**Project** / **Technical** / **Research Fellowship**. The **Fellowship stipend amount will be Rs. 20,000/per month** and the scholar will be eligible for 15 days paid leaves excluding Sunday and official holidays, after he/she is duly approved by the RTM Nagpur University for Admission.

Following procedure is applicable in line with the Procedure for Processing the Stipends of Full-Time Ph.D. scholars in all Existing Schemes/ Research Staff of R&D projects office order no. RCOEM/GAD/RND/2021/70773 dated 14-09-2021.

Procedure to be followed in Ph.D. Full Time with Teaching Assistantship / Project Fellowship / Technical Fellowship / Research Fellowship

- PhD Scholars may receive financial assistance in the form of a Teaching Assistantship / Fellowships (referred to as Institute Assistantship / Fellowship). Assistantship / Fellowship will be awarded on semester-tosemester basis for a period of up to three years (extendable up to 6 years).
- Performance of Ph.D. Scholar will be reviewed after every semester for award of Assistantship / Fellowship. At any point of the time it is found

that the performance is unsatisfactory, the Assistantship / Fellowship will be revoked.

• The stipend for the Assistantship / Fellowship will be paid at the approved rates as per the recommendations of Staff Selection Committee/RRC

The following commitments are expected from a PhD Scholar registered under the above schemes:

- 1. Every semester, as soon as the allocation list of Research Scholars is announced, each Scholar is expected to immediately report to his/her supervisor and Head of the Department.
- 2. A Research Scholar is expected to be regular in his/her duties, as assigned by the supervisor and Head of the Department.
- A Research Scholar must mark his/her attendance in the Institute ERP on every working day as per office order no. RCOEM/GAD/RND/2021/70773 dated 14-09-2021.
- 4. Each supervisor and Head of the Department is required to submit the Performance Evaluation form on or before the Last day of each month.

12. Honorarium to Experts for Ph.D Progress Seminar

RCOEM has Six Ph.D. programs in the department of Computer Science and Engineering, Civil Engineering, Electronics Engineering, Mechanical Engineering, Electrical Engineering and Master of Business Administration. To evaluate the performance of Research Scholar, research centre organizes SIX monthly PhD progress seminars. Experts from IITs/NITs/IIITs/IIMs/Other Premier Institutes appointed by research center and those from Research Advisory Committee (RAC), appointed by RTM Nagpur University, attend these seminars.

- 1. To maintain uniformity across all the Places of Research of RCOEM, following Honorarium shall be applicable for the external members.
 - a) External Experts not below the rank of Associate Professor from IITs/NITs/IIMs: 2000 per scholar subject to maximum of Rs. 5000/- per visit.
 - b) External Experts not below the rank of Associate Professor from other Premier Institutes (NIRF Ranking less than 100): 1500/- per scholar subject to maximum of Rs. 4000/- per visit.
 - c) Other Experts: 3000/- per visit.
- 2. Expenses related to travel and stay for outside experts shall be borne by the institute.
- 3. Departments are expected to utilize the presence of experts from IITs/NITs/IIITs/IIMs/Other Premier Institutes by engaging them in fruitful interaction with students and faculty members of the department.

Policy for completing Six month / One-year specialized courses by faculty members of RCOEM

Purpose

The Policy is designed to ensured upgradation of skill set among the faculty which will eventually lead to knowledge upgradation, better Research outcomes and percolation of new knowledge to students.

Policy

This Policy is applicable to all the regular faculty members of RCOEM who wish to pursue valued added course, apart from degrees, during their tenure in the college.

The policy is applicable only for the courses from reputed institutions like IITs, IIMs or Institutions with NIRF Ranking less than 50.

The faculty desirous of pursuing the short-term course, should apply and seek approval for pursuing the course. The application should clearly spell out the benefits of pursuing the course and how it can contribute to activities like Research and Consultancy.

On getting approval for pursuing the course, the faculty may be entitled for up to 50% of the total fees, as incentive for completion of course, from the college on case to case basis as per college requirement and approved by management. The faculty member, after getting approval, shall submit an undertaking to the college for timely completion of the course and commitment of realization of benefits and other activities as outline in the application.

For points 1-12 above, however the final decision shall be taken by the Management.

Dr. D. S. Adane Dean R&I

Dr. Rajesh Pande Principal

[RCOEM/R&D Policy (2023) Rev 1]

Page 22 of 22