



# Indian Institute of Technology (Indian School of Mines), Dhanbad Jharkhand-826004, India

**IIT (ISM), Dhanbad – Curtin University, Australia**

## **Advertisement for Collaborative Doctoral Programme**

Applications are invited for Collaborative Doctoral Programme (CDP) between IIT (ISM), Dhanbad and Curtin University, Australia from full-time IIT (ISM) Junior Research Fellows under Indo-Australian collaborative scheme.

### **Outline of the Doctoral Programme:**

The Collaborative Doctoral Programme is a joint effort made by both IIT (ISM) Dhanbad (home institution) and Curtin University (Host institution) for the award of Doctoral degree. The student will follow a program of doctoral research supervised by the researchers from both Institutions. It is expected that the student will meet the entry standards of both Institutions and have concurrent enrolment. The candidates will spend one (minimum) to two years (maximum) at Curtin University (Perth, Western Australia). The final thesis submitted (written in English) will be examined by both Institutions for a Joint Award degree.

**Areas of Research (not restricted to):** Energy and Minerals: Mine Safety, Rock Excavation, Clean coal technology, coal beneficiation, combustion, carbonization, gasification, Engineering Asset Management and Smart Cities

**Supervisors:** Supervisors will be assigned both from IIT (ISM) Dhanbad and Curtin University. During the research periods, the students will collaborate with both supervisors at all times through electronic communication. There will be two supervisors, one from the home University and the other from the Host University. In case of Inter disciplinary subject, there may be co-supervisors in addition to the main **Two supervisors**. The area of research will be decided based on mutual discussion amongst the supervisor of the home Institute, the supervisor of the host Institute/University and the Ph.D. scholar.

**No of Fellowships:** Five

**Scholarship:** As per IIT (ISM) JRF rules, Rs. 31000/- month will be provided during their stay at IIT (ISM) Dhanbad. During their stay in Australia, the scholarship will be paid by Curtin University as per [https://scholarships.curtin.edu.au/current/pg\\_pay\\_rates.cfm](https://scholarships.curtin.edu.au/current/pg_pay_rates.cfm). This will be AU \$ 25,000/- plus per year.

### **Eligibility Criteria:**

1. The candidate shall be a full-time research scholar enrolled in IIT (ISM).
2. The candidate shall fulfill the eligibility requirements of both IIT (ISM) JRF and Curtin University as per <http://futurestudents.curtin.edu.au/research/application/entry/>

3. The candidate must have cleared all the pre-thesis course requirements prior to his mobility.
4. The candidate must have high academic and research credentials.
5. The candidate must propose a top-quality research project with clear milestones to be achieved at IIT (ISM) and Curtin University. The roles of the supervisors shall be clearly identified.

**Tuition Fees:** Enrolled students will pay the annual tuition fees and other relevant fees applicable at the home Institute as per the prevailing norms of the Ph.D programme

### **Salient Features of the Collaborative Doctoral Programme**

(i) **The name of the Programme:** JOINT DOCTORAL PROGRAMME of IIT (ISM), Dhanbad and CURTIN UNIVERSITY, Australia

(ii) **Award of degree:**

Two separate degree certificates may be awarded for one thesis by the respective partner institutions under a specific Memorandum of Understanding (MoU) while maintaining the template of their own institute. However, the joint nature of the degree and the name of the partner institution must be mentioned in both certificates.

In case of two separate degrees for the same thesis, on fulfillment of all academic requirements, the degree certificate will be awarded by the host as well as home institutions as per their own schedule. The final grade sheet will be given to the scholars along with the Degree certificate by the home Institute only.

(iii) **Selection methodology:** Both the home and host university will identify the areas of collaborative research, the number of scholars, subsistence allowance and other modalities as per the availability of funds. A scrutiny committee consisting experts from the defined area of research approved by the IIT (ISM) Authority will scrutinize the applications and forward to Curtin University for further scrutiny and selection. While finalizing the selection, priority areas of mutual interest of both Institutes will be kept in view. The selection will be made mutually by both institutions based on the priority areas.

(iv) **Assistance:** The host university will provide the required guidance, and research facilities for undertaking the Ph.D. The host university will also provide travel, insurance and free furnished accommodation for the stay of the research scholars. In case, of non-availability of accommodation, a suitable allowance will be provided by the host university to the candidate to cover the same.

(v) **Duration of the Ph.D:** This will be governed by the rules of the home university. However, the mobility under the scheme will be for a minimum period of one year and a maximum period of two years.

(vi) **Rights to Intellectual property:** Will be governed by the home university.

(vii) **Progress monitoring:** There will be joint monitoring at quarterly intervals with suitable exchange of documents.

(viii) **Thesis Examination:** The student will present his/her thesis in English and same will be examined as per the rules of the home Institute. The home Institute will submit a

copy of the thesis and all examiners report to the host Institute/University for consideration and ratification. In case of any difference of opinion in approving the thesis, needful improvements will be suggested by the host Institute/University and implemented by candidate to the satisfaction of both home and host Institute/University. Finally, a letter of concurrence from the supervisors at the home Institute and the host Institute/University stating that the thesis is suitable for submission must be obtained.

(ix) All other rules applicable to IIT (ISM) Ph.D. students will be followed for the candidates opting for this programme in addition to the rules given in Appendix A (<http://futurestudents.curtin.edu.au/research/application/entry/>).

(x) All the rules already framed for the award of Ph.D. from IIT (ISM) Dhanbad are applicable in addition to the rules/selection criteria applicable to IIT (ISM)-CUT Collaborative Doctoral Programme.

**Communication Address:** All correspondence will be done to Dean (Research and Development), Indian Institute of Technology (ISM), Dhanbad-826004.

**Important Dates: Last date of application: 28/02/2023 (Tentatively)**

### **Appendix A**

**(<http://futurestudents.curtin.edu.au/research/application/entry/>)**

#### **Higher degrees by research – Curtin University, Australia**

What is a Higher Degree by Research?

A higher degree by research differs from other postgraduate degrees in that the study program comprises mostly of research. Although Heads of Enrolling Area may require a portion of coursework-based units to be completed, the main body of work produced as a culmination of this research will be in the form of a thesis written under the guidance of a supervisor and associate supervisor/s.

Applications for admission to a doctoral research program may be submitted at any time of the year. View a full list of the research courses offered at Curtin University via the [Courses Handbook](#).

Further information for international applicants is available on the [Future International Students](#) website.

If you are an international applicant and are unsure which enrolling area to contact, or for any other inquiries related to entry requirements, contact the [International Office](#).

#### **Entry requirements for a Doctor of Philosophy and other doctoral research degrees Entry requirements for Doctoral Degrees**

Curtin offers several doctoral research degrees, including the Doctor of Philosophy (PhD). Doctoral research degree candidates throughout their research program should uncover new knowledge either by the discovery of new facts, the formulation of theories or the innovative re-interpretation of known industry data and established ideas.

The thesis research program at Curtin University is structured to allow for practical orientation, as well as being useful in developing an effective understanding – providing for the application of solutions to real-world problems.

Subject to and in accordance with Curtin University's [Rule 10: Degree of Doctor by Research](#) a Doctor of Philosophy (PhD) degree shall be awarded for a thesis as defined in the Rules or a combination of a thesis and coursework in which the coursework component does not exceed one-third of the total doctoral degree program.

In all cases, the thesis must in the opinion of the examiners be a substantial original contribution to the knowledge or understanding of any field of study and demonstrate the capacity of the candidate to conceive, design and carry to completion independent research.

For admission to a doctoral degree program an applicant normally shall have studied for a minimum of four years in a tertiary institution and satisfied the Faculty Graduate Studies Committee that at least one of the following entry requirements has been met:

- Graduated with or qualified for the award of the degree of the master within the University which requires the completion of a publicly available thesis or research project to an acceptable standard
- Graduated with or qualified for the award of the degree of bachelor with first class honors or upper second class honors within the University
- (i) Graduated with a bachelor's degree and completed a postgraduate or completed a master's degree by coursework, with, in both cases, a course-weighted average of not less than 70 percent within the University, and  
(ii) Demonstrated the capacity to undertake significant research
- in exceptional circumstances:
  - (i) graduated with or qualified for the award of the degree of Bachelor
  - (ii) has substantial:
    - i. relevant peer-reviewed publications or conference papers, exhibitions, or
    - ii. research experience,
  - (iii) and demonstrated the capacity to undertake significant research
- Obtained qualifications from another institution which are recognized by tertiary admission authorities in Australia and which are deemed to be equivalent to, or a satisfactory substitute for, any of the qualifications prescribed above
- Enrolled in a research master's degree for the equivalent of at least one semester full-time, and shown exceptional ability in the conduct of the early stages of the research project which is clearly capable of being extended and converted to doctoral level. Conversion of enrolment from a master to a doctoral program requires the approval of the Faculty Graduate Studies Committee

[For detailed guidelines of CDP please see the link: Click here](#)

NOTE: Upon final selection of the applicant for CDP, the SCHEDULE A needs to be filled and signed by the home and host institute.



**Indian Institute of Technology  
(Indian School of Mines),  
Dhanbad  
Jharkhand-826004, India**

**Application form**

**IIT (ISM) –Curtin Collaborative Doctoral Programme**

Affix here  
recent  
passport size  
photograph

1. Name : \_\_\_\_\_
2. Father's Name : \_\_\_\_\_
3. Date of Birth : \_\_\_\_\_
4. Nationality : \_\_\_\_\_
5. Gender : \_\_\_\_\_
6. Present Address : \_\_\_\_\_  
\_\_\_\_\_
7. Permanent Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. Caste : General/SC/ST/OBC
9. Marital Status : \_\_\_\_\_
10. Email : \_\_\_\_\_
11. Telephone No : \_\_\_\_\_

12. Academic Record starting with secondary education (Please attach Xerox copies of Degree Certificate)

Examination	Branch/ Specialization	College/University /Institute	Year	Percentage /Grade	Class/ Division

13. Research Publications (If any):

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14. Research Project: \_\_\_\_\_

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15. Research Statement (please attach in maximum two pages)

16. Recommendations/Acceptance Letter from the contacted Supervisor from the Host Institute.

17. I hereby declare that all entries in this form as well as attached sheets are true to the best of my knowledge and belief.

Date:

Place:

**(Signature of Applicant)**

**भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ) धनबाद**  
**INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD**  
**(OFFICE OF THE DEAN IRAA)**

10<sup>th</sup> June, 2022

**PROPOSAL FOR GIVING AN OPPORTUNITY TO THE RESEARCH SCHOLARS TO PURSUE COLLABORATIVE DOCTORAL PROGRAM (PH.D.) WHICH WILL BE AWARDED BY BOTH THE INSTITUTES/ UNIVERSITIES UNDER COLLABORATIVE DOCTORAL PROGRAM BETWEEN IIT (ISM) AND OTHER FOREIGN UNIVERSITIES/INSTITUTIONS**

It is proposed that an opportunity may be given to all registered and eligible Ph.D. scholars to pursue the **Collaborative Doctoral** Program and the Ph.D. degree to be awarded by both the Institutes/Universities under the agreement of Collaborative Doctoral Program between IIT (ISM) Dhanbad and the Foreign Universities/Institutions.

**1. OBJECTIVES**

Objectives of the proposals to be given as an opportunity to the Ph.D. Scholars to pursue Collaborative Doctoral Program are:

- 1.1 The proposed Collaborative Doctoral Program will strengthen the academic ambience and research capabilities of both the collaborative institutes in the areas of identified specializations.
- 1.2 It will give a new opportunity to the Ph.D. scholars who are interested to pursue their research work in any foreign Institutes/Universities of international repute.
- 1.3 The scholars, who will avail the opportunity, will be exposed to the learning and teaching system as well as the cultural environment of the renowned International academic Institutions. It will be helpful for them to obtain knowledge and skills that will increase their employability at both national and international levels.
- 1.4 Under this program, the students/research scholars of the host Institute/University will also get the same opportunity to pursue their academic activities and develop a cultural relationship between the two countries.

**2. ELIGIBILITY CRITERIA**

The following eligibility criteria are to be fulfilled for pursuing Collaborative Doctoral Program:

- 2.1 Only Full-Time Ph.D. scholars will be eligible for pursuing Collaborative Doctoral Program.
- 2.2 Scholars must have obtained the minimum **CGPA of 8.0** at the end of his/her course work and must have successfully completed **Comprehensive Examination** and **Research Proposal Seminar**. However, the Department will have the prerogative to decide the minimum required CGPA above the 8.0 and conducting an interview, if any, at the time of selecting the scholars who are interested to pursue the academic program under reference.
- 2.3 The scholar should have cleared all the prescribed courses in **SINGLE ATTEMPT** because no provision exists in the Ph.D. program to repeat/substitute of any backlog course(s).
- 2.4 In addition, the eligibility criteria, if any, as prescribed by the host Institute/University in the **Memorandum of Understanding (MoU)**, such as knowing of the language of the host country, then the same needs to be fulfilled by the scholars after accepting his/her application by the home Institute.

### 3. APPLICATION AND SELECTION PROCEDURE

Process to be followed for submission of application.

- 3.1 A list of host Institute/Universities entered into a Memorandum of Understanding (MoU) with IIT(ISM) Dhanbad will be available on the Institute's website by giving all information such as the number of seats available for the program in the host Institute/University, eligibility criteria, minimum and maximum duration of the academic program, available financial support as well as all other terms and conditions.
- 3.2 For submission of application, a prescribed form will be filled up (*Application Form will be available in the Institute website*) and the same to be submitted to the respective department within **thirty days from the date of commencement of classes of the Semester or as specified by the host Institute/University.**
- 3.3 The scholars will be allowed to apply for maximum three choices of Institute/University at a time where he/she is interested to pursue the Collaborative Doctoral Program.
- 3.4 Ph.D. scholars who are interested to pursue the Collaborative Doctoral Program and once selected for the same, then he/she will not be eligible to apply to other Institutes/Universities in the entire period of his/her academic program.
- 3.5 Since the supervisor is allotted by the Department, area of the research work will be decided in consultation with the supervisor as well as scholar. For interdisciplinary subjects, extra Co-supervisor may be allotted.
- 3.6 Before submission of the application form, the scholar may consult with the HOD/Convener, DPGC/supervisor of her/his respective department.
- 3.7 The scholar must either obtain a written consent from his/her supervisor at the home Institute before communicating with the identified supervisor at the host Institute/University or ask his/her supervisor at the home Institute to communicate with the identified supervisor at the host Institute/University under the Collaborative Doctoral Program.
- 3.8 Area of research will be decided based on mutual discussion amongst the supervisor of the home Institute, the supervisor of the host Institute/University and the Ph.D. scholar.
- 3.9 While applying, a proper justification will have to be given by the scholar why he/she is interested to pursue the Collaborative Doctoral Program in a particular host Institute/University.
- 3.10 HOD will send the application of the eligible scholar(s) to the Office of Dean (IRAA) along with the recommendations of DPGC and other relevant documents, including the consent letter from the identified supervisor of the host Institute/University, for accepting the candidature of the scholar.
- 3.11 In case the number of applications received from the eligible candidates exceeds the number of seats available in the host Institute/University for the specific program/discipline then
  - (a) the final selection of the candidate(s) will be done through a selection committee, approved by the competent authority, based on the criteria decided by the committee, and
  - (b) the recommendation of the selection committee will be communicated by the office of Dean (IRAA) to Dean (academic) for the necessary approval.
- 3.12 All other academic requirements for the selected candidate(s) pursuing doctoral program under the Collaborative Doctoral Programme must be fulfilled in accordance with the existing rules of the home Institute.



- 3.13 The final list of selected candidates for the Collaborative Doctoral Program will be communicated to the office of Dean (IRAA) and Dean (Academic).

#### 4. TERMS AND CONDITIONS

The following terms and conditions shall be applicable:

- 4.1 The scholars who will be selected for pursuing the Collaborative Doctoral Program, the maximum residency period in the host Institute/University should not be more than **Two Years** out of the minimum duration of **Four Years** prescribed in the Ph.D. Manual for completion of the Ph.D. program.
- 4.2 The scholars will not be allowed to change their status **from Full-Time to Part-Time** for whatsoever reason except for genuine cases subject to the approval of the competent authority at the home Institute.
- 4.3 If any scholar does not return to the home Institute after completion of maximum duration of two years, then the enrollment in the Ph.D. program of the home Institute will be cancelled and the academic program will be terminated automatically. The information of termination of the scholar from the Ph.D. program will also be communicated to the host Institute/University. No further appeal for continuing / awarding the Ph.D. or Collaborative Doctoral Program will be accepted.
- 4.4 The scholar may apply for extension to stay at the host Institute/University before expiry of the maximum residency period with the genuine reasons. However, the extension may be accorded subject to the approval of competent authority at the home Institute.
- 4.5 If due to any reason, may be academic or non-academic, the host Institute/University cancel the enrollment of the scholar and does not allow to continue the academic program under Collaborative Doctoral Program

#### OR

If any scholar wants to quit from the Collaborative Doctoral Program due to unavoidable circumstances or medical reasons, then the scholar will be allowed to quit from the Collaborative Doctoral Program subject to the following condition:

“If the scholar is paid any form of financial assistance by the host Institute/University, then fulfillment of the terms and conditions stipulated for getting the financial assistance shall be the responsibility of the scholar before leaving the host Institute/University.”

- 4.6 An affidavit, in the form of Undertaking in the specified format and **duly endorsed by the Parents/Guardians** will be submitted by the scholars at the time of submission of application form for pursuing the Collaborative Doctoral Program by giving the following declarations:
- (a) During the entire period of stay in the host Institute/University, the scholar will follow the guidelines as well as the terms and conditions of the host Institute/University.
- (b) All the Code of Conduct of the host Institute/University will be abided by the scholar at the time of pursuing the degree under reference. In case of violation of the Code of Conduct by the scholar, the host Institute/University will have the right to take any kind of disciplinary action deemed fit.
- (c) The laws of the land of the host Institute/University will be obeyed by the scholar and he/she will not indulge or involve himself/herself in any kind of illegal/unlawful/unwanted activities during the period of residing in the host Institute/University. If any scholar is indulged/involved with any unlawful activities, then the host Institute/University will have the prerogative to take legal action as per the laws of the land including expulsion from the Institute/University immediately.
- 4.7 Academic program of such scholars will be governed as per the rules and regulations prescribed in the Ph.D. Manual of the home Institute as well as the host Institute/University which will be specified in the signed MoU.

- 4.8 After returning from the host Institute/University, the scholar must spend at least one semester at the home Institute.
- 4.9 Request for Pre-submission seminar will be considered only after the completion of mandatory one semester stay at the home Institute following completion of the course at the host Institute/University and on completion of the minimum duration (i.e., 4 years).

## 5. ACADEMIC ROAD MAP

Academic Road Map for completion of the requirements of Collaborative Doctoral Program is presented below:

- 5.1 The scholars will be required to register in both the Institutes (home Institute and host Institute/University) in every semester only during the period of pursuing his/her academic program in the host Institute.
- 5.2 During the period of pursuing the research work at the host Institute/University, scholar will also register (**only 36 credits of thesis**) in every semester at the home Institute. However, registration fee will be paid either at home Institute, if the host Institute/University does not take any registration fee or in the host Institute/University, if it is specified in the MoU. The proof of payment made against the registration fee must be communicated to the office of Dean (Student Welfare) for proper record keeping.
- 5.3 If the host Institute/University suggests any course(s) of their own Institute/University that is related to research work, then all such course(s) need to be cleared by the scholar at the host Institute/University.
- 5.4 All such extra courses will not be counted at the time of calculation of the CGPA of the Ph.D. scholar. However, all such courses may be listed in the final grade sheet of the Ph.D. program subject to the receipt of official grade sheets/transcript of courses undertaken at the host Institute/University in original from the scholar.
- 5.5 During the period of pursuing the research work at the host Institute/University, evaluation of the thesis work will be done by the supervisor of the host Institute/University in consultation with the Internal Supervisor of the home Institute. However, the thesis grade will be awarded by the Internal Supervisor.
- 5.6 After completion of the specified duration, i.e., the entire period of stay at the host Institute/University and returning to home Institute, the research work will be monitored by both the supervisors (Internal Supervisor and host Institute/University Supervisor). During rest of the period of the completion of the Ph.D. program, the research work will be evaluated jointly by both the Supervisors but grades will be awarded only by the internal supervisor.
- 5.7 Submission of thesis at the home Institute will be governed by the rules and regulations of the home Institute.
- 5.8 Thesis writing in English Language is mandatory.
- 5.9 **Thesis Examination:** The student will present his/her thesis in English and same will be examined as per the rules of the home Institute. The home Institute will submit a copy of the thesis and all examiners report to the host Institute/University for consideration and ratification. In case of any difference of opinion in approving the thesis, needful improvements will be suggested by the host Institute/University and implemented by candidate to the satisfaction of both home and host Institute/University. Finally, a letter of concurrence from the supervisors at the home Institute and the host Institute/University stating that the thesis is suitable for submission must be obtained.
- 5.10 Both Pre-submission and the final defense seminars of the scholar will held in person at the home Institute, while the supervisor from the host Institute/University need to join the seminars in online mode.

## **6. FINANCIAL ASSISTANCE**

The following guidelines are to be followed for releasing of fellowship under the Collaborative Doctoral Program:

- 6.1 All such scholars selected for pursuing the Collaborative Doctoral Program will be eligible for getting the fellowship as per Ph. D. norms of the home Institute.
- 6.2 Duration of the stay in the host Institute/University will be included in the maximum duration of getting the fellowship whether the fellowship will be paid by the home Institute or by the host Institute/University and the total duration of the fellowship should not be exceed Sixty months (Five years).
- 6.3 The fellowship will be discontinued on successful submission of thesis or on completion of maximum duration whichever is earlier.
- 6.4 Financial benefit to the selected scholars will be extended only from one end i.e., either from the home Institute or host Institute/University.

## **7. AWARDING OF JOINT DOCTORAL DEGREE**

Guidelines to be followed for awarding of degree:

- 7.1 One single joint degree, bearing the logo of both the home Institute and the host Institute/University, duly signed by the competent authorities of both the institutions, to be awarded to the candidate by the home Institute for one thesis.
- 7.2 Degree will be awarded only after obtaining the approval of the competent authority/statutory committee of the home Institute and also clearance from the host Institute/University.
- 7.3 Two separate degree certificates may be awarded for one thesis by the respective partner institutions under specific Memorandum of Understanding (MoU) while maintaining the template of their own institute. However, the joint nature of the degree and the name of the partner institution must be mentioned in both the certificates.
- 7.4 In case of single joint degree, Degree will be conferred only in the Convocation by the home Institute or other alternative schedule decided by Chairman Senate. In case of two separate degrees for the same thesis, on fulfilment of all academic requirements, the degree certificate will be awarded by the host as well as home institutions as per their own schedule.
- 7.5 Final grade sheet will be given to the scholars along with the Degree certificate by the home Institute only.