



OFFICE OF THE DEAN (R&D)

IIT (ISM) DHANBAD
Dhanbad-826004, INDIA

CALL FOR APPLICATION FOR TEXMiN POST-DOCTORAL FELLOWSHIP (TPDF)

Applications are invited for 14 nos. of the TEXMiN Post-Doctoral Fellowships (TPDFs), which are available at IIT (ISM) Dhanbad for a period of one year, with a possibility for extension to 2nd year on satisfactory progress as certified by the Performance Assessment Committee (PAC). However, on unsatisfactory progress she/he may be terminated.

The proposals should be oriented towards the below key focus areas:

- 1□. Digital Twin of Mines & AI-Driven Mining Operations
- 2□. Autonomous & CPS-Based Mineral Exploration Systems
- 3□. Sustainable Processing of Rare Earths & Critical Minerals (Indigenous & Secondary Resources)
- 4□. Green Mining & Net-Zero Innovation Challenge
- 5□. Deep Mining & Extreme Conditions Robotics
- 6□. Exploration-to-Extraction of Critical Minerals
7. Implementation of data processing interpretation and integration in mining domain

The selected TPDFs will be attached to regular faculty members of the Institute; however, they will have to report to TEXMiN. They will be attached to faculty members primarily working in the TEXMiN supported/funded projects and would be working closely with various teams of TEXMiN.

Apart from the research pursued by the post-doctoral fellow, her/his services will be utilized by the TEXMiN for research assistance in the work including, Technology Development project evaluation & execution, handling laboratory classes and startup projects execution.

Eligibility

Full time regular PhD holders with at least two papers (as first or corresponding author) in Journals of repute or SCI/SCIE is eligible to apply.

Full time regular PhD holders of IIT (ISM) will not be eligible to apply for a period of two years from the date of award of PhD.

The candidate should have First class records throughout his/her academic journey. Plagiarism/AI content should be less than 10%. The proposal will be checked through Turnitin/iThenticate.

Age

35 years (to be relaxed as per Government of India guidelines).

Application Processing and Interview (Last Date of Receiving Application: 10th March, 2026):

Candidates are requested to apply through e-mail (pdf@iitism.ac.in) (on or before 10th March, 2026) as per the format given in Annexure-1, clearly mentioning the Subject line as “**Application for PDF under TEXMiN**”.

Applications (as per the format given in Annexure-1) received by the Office of Dean (R&D) will be shortlisted and the recommended candidates will be called for interview. Such candidates will be reimbursed First AC to and fro fare from their place of stay by the shortest route for attending interview.

Candidates from abroad may be interviewed through Video conferencing /Skype.

Amount of Fellowship and other benefits to TPDFs

Year	Consolidated Fellowship per month
1st year	Rs. 80,000 + HRA
2nd year	Rs. 80,000+HRA
• A contingency grant of Rs.1,00,000/= per Year	

- TPDFs may be allowed to attend Conferences subject to availability of Fund in their contingency grant.
- Medical benefits: TPDF and their legal dependents will be provided free OPD facility and medicine available in the Health Centre. Indoor hospitalization facilities will also be provided in the Health Centre, if necessary. However, reimbursement facility will not be provided to TPDFs and their legal dependents.
- 30 days accrued leave with fellowship will be provided per year. The leave can be availed on a pro rata basis of the fellowship completed.
- A TPDF may be granted maternity leave for a period as per government policy. Leave up to 6 weeks can also be granted for miscarriage including medical termination of pregnancy, if supported by a proper medical certificate. Such leave can be combined with any other leave due and will not entail any loss of financial assistantship.

Progress Report & Performance Appraisal

TPDFs shall present a progress report every three months to a Performance Appraisal Committee and TEXMiN detailing the research work carried out and reprints/preprints/manuscripts of title papers published/accepted for publication or communicated, patents filed, external funding obtained etc. for this purpose.

Termination

If the TEXMiN Post-Doctoral Fellow wishes to leave the programme before the end of the tenure, he/she can do so with the prior approval of the PAC giving one month's notice. The fellowship will be terminated by the Institute if the performance/ conduct of the fellow is unsatisfactory after giving one month's notice to the TPDF.

Disclaimer: Merely meeting eligibility criteria does not guarantee the selection of the candidate. Only selected candidate will be informed of the final outcome. The applicant who does not receive any further communication may consider that she/he is not selected. The candidature/appointment will be cancelled at any point of time if it is found that the candidate has furnished any wrong information.

APPLICATION FOR TEXMiN POST-DOCTORAL FELLOW

Curriculum Vitae

Photograph of
the Candidate
(self-attested)

Name: <<Name of the Candidate>>

Category (SC/ST/OBC/GEN): (Attach valid certificate as per GoI Norms)

Department: << Write the Name of the Department Applied for>>

PhD: << Write the Date of Award of PhD, Title of the PhD, Name of the Institute/University>>

PhD : ☐ Full Time ☐ Part Time

Educational Qualification: << Write the name of degree, Year of passing, Name of the Degree awarded Institute/university, Percentage of Marks/Grade/Class>> (including marks obtained during PhD Course Work). The details to be provided from Class X Onwards)

Teaching/Research/Industrial Experience: << Write the number of Years of Experience for each>>

Area of Expertise: << Areas of Research >>

Major Research Achievements: <<>>

List of Publications: <<Name of the Authors as appeared in the original manuscript, Title of the Paper, Vol., Year of Publication, Name of the Journal, Name of publishers, Indexed in, Impact factor if any>>

Research Proposal (Proposals submitted need to be original and plagiarism in any form will not be acceptable.)

1. Project Title:

2. Project Objective (Vision Statement):

3. Challenges Addressed by the Proposal:

4. Expected Outcomes and Deliverables:

5. Scope of AI & Cyber-Physical Systems (CPS) Technology Development:

6. Current Technology Readiness Level (TRL) Index:

7. Novelty and Relevance of Proposed Solution/Innovation: *Describe how it advances the current state of knowledge in the mining, exploration, or energy sector, and how it may bridge the gap between national and global capabilities or enhance national advantage.*

8. Import Substitution Potential: *If applicable, please explain how the solution aids in import substitution.*

9. Methodology Outline: *Provide a brief outline of the methodology to achieve each Objective/Deliverable.*

10. Timeline & Milestones: *Provide a time schedule and target milestones to achieve each objective/deliverable, including a bar chart or PERT chart (in months).*

11. Sustainability Promotion: *Explain how the proposed solution promotes sustainability.*

12. Industry Benefits: *Describe how the proposed project benefits the industry.*

13. Commercialization Plan for the Proposed Solution:

14. Summary of project proposal (1000 words):

Signature
(Name of the Candidate)

[Complete application is to be sent at pdf@iitism.ac.in on or before 10th March, 2026]

List of documents to be attached along with the application:

- 1. PhD degree certificate**
- 2. Educational qualification certificates/marksheets.**
- 3. Best two papers**
- 4. Valid Caste/EWS certificate wherever applicable.**
- 5. Copy of Research Proposal.**
- 6. Three referees details (out of which one must be PhD supervisor)**
 - **Name**
 - **Designation**
 - **Department**
 - **Institute**
 - **Official e-mail**
 - **Mobile no.**