



**Indian Institute of Technology (ISM), Dhanbad**  
Office of the Dean (Research & Development)

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|-------------------------------------------|----------------------------------------------|---------------------|
| Sanction No and Date:<br>PSF-IH-4Y-TD-077 | IIT (ISM) Project No.:<br><b>SRDP 1232 G</b> | Date:<br>01.09.2025 |
|-------------------------------------------|----------------------------------------------|---------------------|

**Project Staff (JRF) position under TEXMiN Project**

Applications are invited under the sponsored project. The details of the project are as under:

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| <b>Position</b>                                                                                                                                                                                                                                                                                                                                                                                           | <b>Junior Research Fellow (JRF)</b>                                                                                                                                                                                                                                                                                                                                                               |
| <b>Number of Position(s)</b>                                                                                                                                                                                                                                                                                                                                                                              | <b>One (01)</b>                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Title of The Project</b>                                                                                                                                                                                                                                                                                                                                                                               | Mineral Prospectivity Mapping of Critical Minerals (Li & REE) in Pegmatite of Koderma Mica Belt using Hybrid CNN Approach                                                                                                                                                                                                                                                                         |
| <b>Principal Investigator</b>                                                                                                                                                                                                                                                                                                                                                                             | Prof. Snjeev Anand Sahu<br>Department of Mathematics and Computing, IIT(ISM) Dhanbad; Jharkhand-826 004;<br>E-mail: <a href="mailto:sanjeev@iitism.ac.in">sanjeev@iitism.ac.in</a> , Mobile: 9708607865                                                                                                                                                                                           |
| <b>Tenure of Project</b>                                                                                                                                                                                                                                                                                                                                                                                  | Two Years                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Job Description (in maximum of 100 words)</b>                                                                                                                                                                                                                                                                                                                                                          | The candidate is expected to do image formation from the geochemical dataset using Origin/Surfer/Corel Draw software and to develop the hybrid and advanced CNN models using Python for the mineral prospectivity mapping. Based on performance and meeting the eligibility criteria the candidate may be subsequently allowed for Ph.D. at IIT (ISM) Dhanbad as per institute norms.             |
| <b>Essential Qualification</b>                                                                                                                                                                                                                                                                                                                                                                            | 1 <sup>st</sup> division or equivalent CGPA in M. Tech./M.Sc./M.Sc. Tech/Int. M. Tech. in Geology/Geophysics/Mathematics and Computing/Computer Science/Data Analytics/Data Science <b>or</b> 1 <sup>st</sup> Division or equivalent CGPA in B. Tech/B.E. in Computer Science/Data Science/ Mathematics and Computing. The candidate must have qualified GATE/NET.                                |
| <b>Desirable Qualification</b>                                                                                                                                                                                                                                                                                                                                                                            | Experience with deep learning frameworks such as PyTorch or Tensorflow in the domain of Computer Vision. Hands-on experience in AI/ML project is highly desirable.                                                                                                                                                                                                                                |
| <b>Age and Relaxation (if any)</b>                                                                                                                                                                                                                                                                                                                                                                        | The upper age limit is 30 years at the time of appointment (Age relaxation for SC/ST/OBC/PH candidates as per GoI norms)                                                                                                                                                                                                                                                                          |
| <b>Fellowship</b>                                                                                                                                                                                                                                                                                                                                                                                         | Rs. 37,000/- per month + HRA (as applicable, in case hostel accommodation is not provided).                                                                                                                                                                                                                                                                                                       |
| <b>Last Date &amp; Time</b>                                                                                                                                                                                                                                                                                                                                                                               | <b>10.10.2025 (6.00 PM)</b><br><b>Interested and eligible candidates should email a single PDF containing CV, GATE/NET score card, self-attested copies of all the marksheets and certificates starting from class 10<sup>th</sup> and proof of work-experience (if any) to Principal Investigator at <a href="mailto:sanjeev@iitism.ac.in">sanjeev@iitism.ac.in</a> on or before 10.10.2025.</b> |
| Shortlisted candidates will be informed about the date of interview. Mere possession of minimum qualification does not guarantee an invitation to the interview. Candidates will be short listed based on their merit and as per the requirement of the project. All candidates should make their own arrangements for their stay at Dhanbad, if required. No TA/DA will be paid to attend the interview. |                                                                                                                                                                                                                                                                                                                                                                                                   |

(Signature of PI)