Indian Institute of Technology (Indian School of Mines), Dhanbad
The Office of Dean, Research & Development
Revised Advertisement

Sanction No and Date: Letter No. HOEC / COR / CSR / 2024 / 02, Date: 28.08.2024	**IIT (ISM) Project No.:** SRDP1144I	Date: 09.08.2025

JRF Position under Sponsored Project of **M/s Hindustan Oil Exploration Company Limited.**
Applications are invited under the above-mentioned sponsored project. The details of the project are as under:

Position	**JRF**
Number of Position (s)	ONE
Title of The Project	**Hot Nanofluid for Enhanced Oil Recovery: Design and Mechanism Development**
Principal Investigator	Dr. Ajay Mandal Professor, Department of Petroleum Engineering Indian Institute of Technology (Indian School of Mines), Dhanbad-826 004, Jharkhand. Email: ajay@iitism.ac.in, Mobile: 9431711017
Fellowship Tenure	5 months or end of the project
Tenure of Project	Five months or till end of the project. It may be converted to regular JRF at any time as per IIT(ISM) rules.
Job Description (in maximum of 100 words)	1. Viscosity Reduction & Mobility Control: Hot nanofluids reduce crude oil viscosity and improve fluid mobility, leading to better sweep efficiency. 2. Interfacial Tension & Oil Displacement: Nanofluids reduce interfacial tension between oil and water, aiding in the mobilization of trapped oil. 3. Wettability Alteration: Hot nanofluids alter the reservoir rock's wettability, enhancing water-wet conditions for improved oil displacement. 4. Nanoparticle Stability & Efficiency: Nanoparticles stabilize nanofluids, ensuring uniform distribution and sustained recovery efficiency during injection.
Essential Qualification	B.Tech./B.E./M.E./M.Tech in Petroleum Engineering/Chemical Engineering or M.Sc. in Chemistry with more than 60% marks or equivalent CGPA/OGPA. GATE/NET or equivalent exam. is mandatory.
Desirable Qualification	NA
Age and Relaxation (if any)	**28 years**
Fellowship	**₹ 37,000/- per month**
Last Date & Time	25th August, 2025, 2.00 pm
Tentative Date of Interview	26st August, 2025, 10.00 am
How to Apply: Interested candidates may send their applications with self-attested copies of all degree with GATE/NET or equivalent examination scope through email and also by post at the address of Principal Investigator. **Please mention Project No.: SRDP1144I in the subject of your application.** Eligible and selected candidates will be called for an interview. **The interview will be in video conferencing mode.**	