



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

Sanction No and Date: Letter No. SYN/2024-25/01, Date: 26.04.2024	<b>IIT (ISM) Project No.:</b> SYNTRON/2024-2025/1103/PE	Date: 06.05.2024
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**Junior Research Fellow Position under Sponsored Project of M/s Syntron industries Private Limited, Ahmedabad**

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

<b>Position</b>	<b>Junior Research Fellow</b>
<b>Number of Position (s)</b>	ONE
<b>Title of The Project</b>	<b>Developments Tailor-made Surfactants for application in enhanced oil recovery</b>
<b>Principal Investigator</b>	Dr. Ajay Mandal Professor, Department of Petroleum Engineering Indian Institute of Technology (Indian School of Mines), Dhanbad-826 004, Jharkhand. Email: <a href="mailto:ajay@iitism.ac.in">ajay@iitism.ac.in</a> , Mobile: 9431711017
<b>Tenure of Project</b>	15 months or till end of the project. It may be converted to regular JRF as per IIT(ISM) rules.
<b>Job Description (in maximum of 100 words)</b>	<ol style="list-style-type: none"><li>1. Synthesis of anionic, cationic, non-ionic surfactants from different commercially available fatty-acid esters.</li><li>2. Evaluation of physicochemical properties of surfactants (ST, CMC, Thermodynamic properties, IFT, wettability, stability, phase behavior etc.)</li><li>3. Optimization of chemical slugs for application in enhanced oil recovery.</li><li>4. Core flooding experiments to measure the efficacy of the surfactants in enhanced oil recovery.</li></ol>
<b>Essential Qualification</b>	<ul style="list-style-type: none"><li>• 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.</li><li>• GATE/NET/Appropriate National Level Examination/ CFTI or IIT Graduates having a CGPA/OGPA of 8.0 or above.</li></ul>
<b>Desirable Qualification</b>	NA
<b>Age and Relaxation (if any)</b>	<b>27 years</b>
<b>Fellowship</b>	₹ 37000/- per month
<b>Last Date &amp; Time</b>	18 <sup>th</sup> May, 2024, 5.00 pm
<b>Tentative Date of Interview</b>	20 <sup>th</sup> May, 2024, 10.00 am
<b>How to Apply:</b> Interested candidates may send their applications with self-attested copies of all degree and GATE/NET through email and also by post at the address of Principal Investigator. Eligible and selected candidates will be called for an interview. <b>The interview will be in video conferencing mode.</b>	

*# Those who have applied for IIT(ISM) JRF may also apply.*