

No: Advt/ IITT/CSRC/2023-24/02

Date: 16-06-2023

**Applications are invited from eligible Indian nationals for two JRF positions in a sponsored project undertaken in the Department of Chemical Engineering.**

<b>Essential Qualifications</b>	B.Tech & M.Tech in Chemical Engineering or Mechanical Engineering or allied Engineering. (OR) B.Tech in Chemical Engineering or Mechanical with above 8/10 CGPA from CFTIs like IIT/NIT/IISC. Relaxation of CGPA as per reservation norms. As per norms NET/GATE qualified candidates will be preferred.
<b>Research Area</b>	To Develop Alternate Refrigerants to HCFCs As Low Global Warming Potential Chemicals to Protect Ozone Layer
<b>Project No.</b>	CHE2223004MEFCTHAM
<b>Sponsoring Agency</b>	Ministry of Environment, Forest and Climate Change, MOEFCC, Government of India
<b>Required Positions</b>	Two.
<b>Consolidated Monthly Salary</b>	As per the norms of the Department of Science and Technology for 5 years as applicable to JRFs & PhDs (Rs. 31,000 for 1 <sup>st</sup> & 2 <sup>nd</sup> Year; Rs. 35,000 for 3 <sup>rd</sup> , 4 <sup>th</sup> & 5 <sup>th</sup> year).
<b>Principal Investigator</b>	Dr. Thamida Sunil Kumar
<b>Department/Center</b>	Chemical Engineering
<b>Maximum Tenure of Assignment</b>	5 Years. The selected candidates have to apply and register for PhD programme in immediate semester (Jan 2024) at IIT Tirupati
<b>Brief Project Description and Nature of the Work</b>	The project is on developing alternate refrigerants which will have less impact on ozone layer depletion. As part of this study the following topics will be taken up for deep study: <ul style="list-style-type: none"> <li>• Evaluation of thermodynamic properties like vapor pressure of novel refrigerants</li> <li>• Evaluation of performance of refrigerants and their leakage tendency in compressors of air conditioners</li> <li>• Characterisation of Global Warming Potential (GWP) of the novel refrigerants</li> <li>• Diffusional tendency of refrigerant molecules in atmosphere towards ozone layer</li> <li>• Molecular simulation of mixing properties of novel refrigerants with present ones.</li> </ul>
<b>Age Limit</b>	Age limit- Not more than 30 years as on the last date of Applications.
<b>Last Date of Application</b>	01 <sup>st</sup> July, 2023 (5:00 PM By email) Email: <a href="mailto:csrc_recruitment@iittp.ac.in">csrc_recruitment@iittp.ac.in</a>

Eligible candidates must send a **detailed CV** specifying their Qualifications and Experience with scanned copies of marksheets and certificates till date. A **brief statement of purpose** (Why they are interested in this project topic?) to Dr. T. Sunil Kumar, Associate Professor, Department of Chemical Engineering, IIT Tirupati at Email: [csrc\\_recruitment@iittp.ac.in](mailto:csrc_recruitment@iittp.ac.in)

The shortlisted candidates will be informed by **Email only**. Selection will be based on the qualification, experience, and in-person interview. No TA & DA for attending the interview. The interview date will be notified to the shortlisted candidates by Email.

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