



JUNIOR RESEARCH FELLOW (JRF) OPENING UNDER GAIL (INDIA) LTD. FUNDED PROJECT

Applications are invited for a **Junior Research Fellow (JRF)** position in the Department of **Chemical Engineering** at BITS Pilani, K. K. Birla Goa Campus, Goa for a **GAIL (India) Ltd.** sponsored research project titled “**Sustainable High purity Hydrogen production using Chemical Looping Combustion in a packed bed reactor: An energy efficient and environment friendly alternative to conventional industrial Steam Methane reforming**”.

Principal Investigator: Prof. Srinivas Krishnaswamy

Co-Principal Investigator: Prof. Sutapa Roy Ramanan

Broad area of Research: Blue Hydrogen production with inherent carbon capture (via Unmixed or Chemical Looping Steam Reforming)

Project summary: The project aims to experimentally demonstrate a novel energy efficient and environment friendly Chemical Looping Steam Reforming Technology for Hydrogen production with integrated Carbon capture. The work will also include improving thermal stability and reactivity of Oxygen Storage and Release Materials (OSRM) to be utilized in this technology.

Nature of work: Experimental / Process Simulation / Material synthesis

Duration of the project: 30 months

Fellowship Amount (Rs.): Rs. 37,000/- month + HRA (as applicable)

Initial appointment will be for 1 year and will be extended subject to satisfactory progress in subsequent years.

Number of positions: 1 (Immediate joining within a month of the Interview if selected)

Accommodation: Hostel accommodation will be provided subject to availability and will be governed by the rules and regulations of the Institute prevailing at the time of joining of the candidate. In case of non-availability of hostel accommodation, HRA will be provided as per Central Govt. norms applicable in Goa.

Qualification (Essential):

- **M.E. / M.Tech. in Chemical Engineering / Mechanical or its equivalent with an undergraduate Degree in Chemical Engineering / Mechanical Engineering**
- **MSc. in Physics or Chemistry (preferably in Material Synthesis and Development)**
- **60% or equivalent in the last qualifying exam**

Candidates with exposure to Material Science & Engineering / Thermodynamics / Chemical Reaction Engineering / Process Simulation are encouraged to apply.

Age limit: 35 years

A valid GATE score is desirable. Selected candidates will have an opportunity to register for a PhD in the Department as per the PhD norms of the Institute.

How to Apply: Interested candidates may send application and curriculum vitae to the investigators (email: srinivas@goa.bits-pilani.ac.in or sutapa@goa.bits-pilani.ac.in) by **25th October 2024**. Only shortlisted candidates will be contacted via e-mail for online/personal interview to be held at BITS Pilani, Goa Campus. No TA/DA will be paid for the Interview.