

CSIR - Indian Institute of Petroleum

A National Research Laboratory under CSIR, Govt. of India



Dehradun - 248005, Uttarakhand



A constituent laboratory of the Council of Scientific & Industrial Research (CSIR), Government of India, CSIR-Indian Institute of Petroleum (CSIR-IIP) is devoted to multidisciplinary domains of research and development in the Energy sector. Areas of activity include petroleum refining, petrochemicals, biofuels, natural gas, alternative and clean energy, catalysis, adsorption, separation, CO₂ recovery and utilization, nanomaterials, biotechnology, IC engines, lubricants and combustion. CSIR-IIP offers globally competitive technologies and services for hydrocarbon, chemicals and automotive industries. It has close collaborations with other research and academic institutes/universities, both within the country and aboard, and an impressive track record of placements.

CSIR-IIP invites applications from bright and motivated candidates for the Ph.D. programme in Chemical/ Biological/ Physical Sciences and Chemical/Mechanical/Biotechnology/ Material Engineering, under the Academy of Scientific and Innovative Research (AcSIR).

Essential Qualifications

PhD in Chemical / Biological / Physical Sciences

A Master's degree in Chemical Sciences / Chemistry / Physics / Biochemistry / Biotechnology / Microbiology / Environmental Sciences/Equivalent Life Sciences AND having a valid national level fellowship (JRF/ SRF of various funding agencies, e.g. CSIR, UGC, DBT, DST etc.) or any other equivalent fellowship like INSPIRE, RGNF etc.

PhD in Engineering

- (i) A Master's degree in Engineering or Technology following a four-year engineering/technology or 4/5 year science degree; or an integrated minimum-5-year M Tech degree; or equivalent.

 AND
- (ii) At least one of the following
 - (a) Awarded a national-level fellowship (such as NET JRF) tenable at CSIR institutes
 - (b) Meeting all the conditions required for eligibility for the CSIR-SRF
 - (c) Meeting all the conditions for award of the INSPIRE fellowship (typically awarded to students ranked first in the University)
 - (d) Meeting all the conditions stipulated by AcSIR for Project Assistants to register for a PhD
 - (e) Meeting all the conditions stipulated by AcSIR for industry-sponsored students

CSIR Employees (Group III and Group IV) with above qualifications are also eligible to apply for admission to PhD in Science/Engineering, with a condition that they should have at least six years left for superannuation.

Areas of Research

- Catalysis, Catalytic Processes, Analytical Methods Development
- Advanced Functional Materials, Adsorption and Absorption, Carbon Nanomaterials
- Biomass to Chemicals, Fuels and Energy, Algal Biofuels, Lignin Valorization through chemical, bio-chemical, thermal conversions, Life cycle analysis
- Petrochemicals, Green Chemistry, Specialty Chemicals, Lubricants and Additives, Solvent Extraction
- CO₂ to Fuels , Chemicals and Energy, Waste-to-Wealth (Waste Plastics, e-waste), Hydrogen energy
- Petro-refining Processes, Hydroprocessing, Heavy Oil Processing, Reaction Engineering, Fluid Catalytic Cracking, Mass Transfer, Process Intensification,
- Material characteristics, Lubricant materials, Tribology, High entropy alloy
- Photovoltaic (PV), Batteries, Solid state hydrogen storage materials

More details can be found at www.iip.res.in

Interested candidates who fulfil the eligibility criteria may apply online for the Ph.D. programme at http://acsir.res.in. Select "CSIR-IIP" as the CSIR lab preference in the pull-down menu of application form. For any query please contact at coordinator.iip@acsir.res.in

Last date for application submission for August 2023 semester is April 10, 2023

