

REQUIRES

Hindustan Petroleum Corporation Limited (HPCL) a Maharatna Company plans to engage Fixed Term Research Associates (FTRA) & Fixed Term Project Associates (FTPA) at its HP Green R&D Centre, Bengaluru to assist in various research projects of the Corporation.

I. FIXED TERM RESEARCH ASSOCIATES.

- To prepare project proposal including work plan on the specific research topic assigned to the candidate.
- To carry out research activities on the specific topic including literature search, set up experimental facilities, if required, carry out experimental/ pilot/ simulation studies.
- Interpret results and undertake studies for further development/ improvement.
- Prepare technical reports.
- Carry out any other activities that are assigned from time to time.

Educational Qualification:

1. Ph.D. Chemistry

- Ph.D. in Polymers/Polyolefin/Petrochemicals:** • Candidate with research experience in the polymer synthesis and characterization, particularly polyolefin or specialty polymers are desirable. • Candidates with experience in polymer catalyst such as Ziegler type catalyst are desirable.
- Ph.D. in Battery Research:** • Candidate with research experience in the areas of energy storage, Metal Ion batteries, metal air batteries, flow cells, fuel cells etc., are desirable.
- Ph.D. in Membrane Separation and Adsorptive Separation:** • Candidates with research experience in the area of polymer membranes, mixed matrix membranes, membrane separation processes for gas separation, liquid separation, water desalination are desirable. • Candidates with research experience in the area of adsorbent material development and gas and liquid separation process particularly hydrocarbon mixture separation are desirable.
- Ph.D. in Catalysis:** • Candidates with research experience in the area of heterogeneous catalysis, particularly hydrocarbon transformations are preferable. Candidates with experience in the development of catalytic materials are also desirable.
- Ph.D. in Materials/Nano-materials:** • Candidates with experience in development of (i) inorganic porous materials such as MOFs, zeolites, etc., (ii) nanomaterials such as carbon nanotubes, graphene and their industrial applications, such as polymer composites (iii) thermic fluids, particularly phase change materials are preferred.
- Ph.D. in Analytical and Organic Chemistry:** • Candidates with hands on experience in advanced analytical techniques such as XRD, XPS, XRF, mass spectroscopy, electron microscopy, thermal analysis are desirable. • Candidates with experience in synthetic organic chemistry and good exposure with advanced analytical techniques are desirable.
- Ph.D. in Metallurgy with Specialization in Corrosion Studies.** Candidates with research experience in new products for corrosion mitigation, protocol for experimentation etc. are desirable

2. Ph.D., - Bio Science/Microbiology/Bio-technology

• Candidates with research experience in microbial bioprocesses with experience of working on yeast or bacterial molecular biology will be preferred. In addition, candidates with research experience of working on bio-fuels such as 2G Ethanol and Algal Biofuels are desirable.

3. Ph.D., - Engineering

- Phd. in Chemical engineering; preferably in the following areas:**
 - a. Separation Processes(Adsorption/Extraction/Absorption/Membranes)
 - b. Catalytic Processes
 - c. Modelling & Simulation
 - d. Refining Processes
- Phd. in Combustion & Emission Engineering / Automobile Engineering / Thermal Engineering / Mechanical Engineering.** Candidates with Research experience and specialization in Internal Combustion Engine (IC Engine) are desirable.
- Phd. in Metallurgy with Specialization in Corrosion Studies:** Candidates with research experience in new products for corrosion mitigation, protocol for experimentation etc. are desirable

4. M.Tech

a. Chemical Engineering /Metallurgy with specialization in corrosion studies. Candidates with experience in Corrosion Lab facilities in Industry are desirable.

b. Mechanical Engineering/

Candidates with experience in Battery Management Systems/Tribology are desirable.

c. Combustion & Emission Engineering/ Automobile Engineering

Candidates with experience in Engine Lab facilities with test benches in industry are desirable.

d. Thermal Engineering

Candidates with experience in Solar thermal, Thermal Management System are desirable, Thermic fluids, Phase change materials are desirable.

Minimum 1-year post M Tech relevant work experience (as on 01-10-2020) is required. Preferably in areas as mentioned above in Oil and Gas industries.

Candidates with Integrated courses can also apply.

AGE LIMIT: 32 Years or below as on 20-10-2020. Age relaxation for OBC (Non Creamy Layer) SC/ ST/ PWD candidates will be applicable as per the Government Directives.

(The last date for reckoning age & all other eligibility criteria will be considered as of 20-10-2020.)

STIPEND: An all-inclusive stipend of Rs. 65,000/- to Rs. 85,000/- per month

DURATION OF ASSIGNMENT: The engagement is initially for a period of one year, which may be extended by one more year at a time, based on the project requirement and performance of the candidate subject to a maximum of 4 years.

II. FIXED TERM PROJECT ASSOCIATES

- To assist Scientists carrying out research project(s).
- Prepare samples for establishing methods of analysis & carrying out routine analysis related to the assigned project(s).
- Monitoring batch reactions for optimizing reaction conditions.
- Running pilot plants in shifts.
- Carry out any other job(s) assigned by the reporting scientists / Officers.

Educational Qualification:

- MSc / BSc • Chemistry • Chemistry - Material Science • Microbiology/ Biosciences/ Biotechnology**
- Diploma / PG Diploma • Chemical Engineering/Chemical Technology / Petroleum Refining • Mechanical Engineering / Automobile Engineering /** (Candidates with experience of running Test Benches, Chassis Dyno, Transient Dyno, Eddy Current Dyno, Emission Systems, BS VI Systems, Utilities for the Transient Dyno and Chassis Dyno are desirable)

Candidates with Integrated courses can also apply.

AGE LIMIT: 28 years or below as on 20-10-2020. Age relaxation for OBC (Non Creamy Layer) SC/ ST/ PWD candidates will be applicable as per the Government Directives.

(The last date for reckoning age & all other eligibility criteria will be considered as of 20-10-2020)

STIPEND: An all-inclusive stipend of Rs. 40,000/- to Rs. 50,000/- per month

DURATION OF ASSIGNMENT: The engagement is initially for a period of one year, which may be extended by one more year at a time based on the project requirement and performance of the candidate subject to a maximum of 3 years.

NOTE:

- At the time of application, the candidate should have proof of award of Applicable degree & Marks sheet. In case of candidates with PhD degree, applicants should have been awarded PhD degree at the time of application OR candidate must have the Proof of submission of PhD thesis.
- Candidates (belonging to General, OBC-NC & EWS category) should have secured **minimum 60% marks (taking aggregate marks of all semesters / years i.e., taking average of all the semesters / years, irrespective of weightage given to any particular subject (including languages) / semester / year of the Institute/University) in all graduate and post graduate degree examinations, relaxed to 50% (taking aggregate marks of all semesters / years i.e., taking average of all the semesters / years, irrespective of weightage given to any particular subject (including languages) / semester / year of the Institute / University) for SC / ST / PWD.**

For details and to apply online, visit our Website: www.hindustanpetroleum.com under career opportunities.

Commencement of online application	: 01 October 2020
Last date of online application by candidates	: 20 October 2020