



***HPCL: Delivering Happiness...***

**ENGAGEMENT OF FIXED TERM RESEARCH ASSOCIATES  
FOR HP GREEN R&D CENTRE, BENGALURU**

**Hindustan Petroleum Corporation Limited (HPCL)** is a **Maharatna** Company and S&P Global Platts Top 250 Global Energy Company with Annual Gross Sales of Rs 2,86,250 crore and Profit after Tax of Rs 2,637 crore during FY 2019-20. HPCL has a strong presence in Refining & Marketing of petroleum products in the country.

HPCL owns and operates Refineries at Mumbai & Visakhapatnam with designed capacities of 7.5 Million Metric Tonnes Per Annum (MMTPA) & 8.3 MMTPA respectively. HPCL also owns the largest Lube Refinery in the country at Mumbai for producing Lube Oil Base Stocks with a capacity of 428 Thousand Metric Tonnes Per Annum (TMTPA). This Lube Refinery accounts for over 40% of the India's total Lube Base Oil production. HPCL holds 48.99% equity stake in JV Company, HPCL-Mittal Energy Limited (HMEL), which operates a 11.3 MMTPA Capacity refinery at Bathinda (Punjab) and also has 16.96% equity stake in Mangalore Refinery and Petrochemicals Limited (MRPL) which operates a 15 MMTPA capacity refinery at Mangalore (Karnataka)

HPCL has a vast marketing network consisting of Zonal offices in major cities and Regional Offices facilitated by a Supply & Distribution infrastructure comprising Pipeline networks, Depots, Terminals/TOPs, Aviation Service Stations, LPG Bottling Plants & Lube Blending plants.

HP Green R&D Centre located in Bengaluru. The objective of HP Green R&D Centre is to develop innovative & path breaking technologies and products in the energy sector. HPGRDC has world class laboratories in the areas of FCC/RFCC, Hydro-processing, Catalysis, Bio-processes, Crude Evaluation & Fuel Research, Analytical, Process Design, Novel Separation & Scale up and Nano Technology which are built with state-of-the-art research facilities and equipment. To acquire the intellectual Property Rights (IPR), HPGRDC has filed about 115 Indian patents and 143 International patents apart from 31 International publications. HPCL has been granted 55 patents till date and received various National Awards conferred by MoP&NG, Petrofed and The Energy & Climate Initiatives Society.

We are looking to hire dynamic and aspiring candidates with Ph.D and M.Tech (As mentioned under Sl.No 2 Educational Qualification of Advertisement) as **FIXED TERM RESEARCH ASSOCIATES** on Fixed Term basis at HP Green R&D Centre, Bengaluru. Interested candidates are advised to apply online in the prescribed format. Terms of reference and other details regarding engagement of Research Associates on fixed term basis are enumerated.

## 1. JOB DESCRIPTION FOR FIXED TERM RESEARCH ASSOCIATE:

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

## 2. EDUCATION QUALIFICATION AND WORK EXPERIENCE:

### Ph.D., - Chemistry

#### a. 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.

#### b. 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.

#### c. 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.

#### d. 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.

#### e. 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.

#### f. 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 synthetic organic chemistry and good exposure with advanced analytical techniques are desirable.

#### g. 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

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

#### Ph.D., in Bio-Sciences /Microbiology/Biotechnology.

- 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.

## Ph.D. -Engineering

- a) **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
- b) **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.
- c) **Phd. in Metallurgy with Specialization in Corrosion Studies.**  
Candidates with research experience in new products for corrosion mitigation, protocol for experimentation etc. are desirable

## M.Tech

- a. **Chemical Engineering**
- b. **Metallurgy with specialization in corrosion studies**  
Candidates with experience in Corrosion Lab facilities in Industry are desirable.
- c. **Mechanical Engineering**  
Candidates with experience in Battery Management Systems/Tribology desirable.
- d. **Combustion & Emission Engineering/ Automobile Engineering**  
Candidates with experience in Engine Lab facilities with test benches in industry are desirable.
- e. **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 20.10.2020) is required. Preferably in areas as mentioned above in Oil and Gas industries.**

## NOTE:

- At the time of application, the candidate should have proof of award of applicable degree & Marks sheets. 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
- Candidates with Integrated Courses can also apply.

- Candidates should have passed the relevant qualifying degree examinations / awarded degree in PhD in the above mentioned disciplines. All Degree/Diploma qualifications should be full time regular course/s from AICTE approved / UGC recognized University/Deemed University.
- The courses offered by Autonomous Institutions should be equivalent to the relevant courses approved / recognized by Association of Indian Universities (AIU)/UGC/AICTE. Candidates with Integrated Degrees should have done a Full Time Course.

- Wherever CGPA/DGPA or letter grade in a Degree is awarded, equivalent percentage of marks should be indicated in the application as per norms adopted by University/ Institution. Higher Qualifications, if any to be mentioned. Candidate should produce their degree conversion certificate issued by competent authority of the University/ Institute in support of the conversion at the time of interview.
- In case of Ph.D. candidates, experience (As on 20.10.2020) will be counted from the date of successful defense of Ph.D. Dissertation/Thesis. It is mandatory for candidates possessing Ph.D. qualification to mention the date of successful defense of Ph.D. in their application.
- Candidate with Integrated Ph.D. may also apply. However, such candidates must produce master's degree qualification.
- In case of candidates with Ph.D. after B Tech experience will be reckoned after Ph.D.
- Research Work carried out during course of acquiring Ph.D. will not be considered as work experience.
- Soft copy of the detailed CV including brief description of Ph.D. topic to be uploaded along with the Application Form.

### 3. ELIGIBILITY CRITERIA:

**Age: 32 Years or below as on 20<sup>th</sup> October, 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 and all other eligibility criteria will be considered as of 20.10.2020)**

### 4. CONCESSIONS/ RELAXATIONS

1. Reservation of posts for **SC, ST ,OBC-NC, EWS** and **PwBD** (Persons with Benchmark disabilities –with degree of disability 40% or above) as per Government Directives.
2. Candidates seeking reservation as SC/ST/OBC-NC, shall have to produce a certificate in the prescribed proforma (the format can be downloaded from our website <https://hindustanpetroleum.com/hpcareers/Downloads>) only, meant for appointment to posts under the Government of India from the designated authority indicating clearly the candidate's caste, the Act/Order under which the caste is recognized as SC/ST/OBCNC and the Village/Town the candidate is ordinarily a resident of. They must also ensure that the name of their caste/community and its spelling in their caste/community certificate should be exactly as mentioned in the lists notified by the central government from time to time (for OBCNC category list of castes recognized by the Govt. of India as OBC castes in the central list is available on the site <http://www.ncbc.nic.in> , for ST category the list of castes for each state is available on the site [www.ncst.nic.in](http://www.ncst.nic.in) and for SC category the list of castes for each state is available on the site <http://www.socialjustice.nic.in> ). A certificate containing any variation in the caste name will not be accepted. Further the OBC certificate should also clearly indicate that the candidate does not belong to creamy layer as defined by the Government of India for applying to posts and services under the Central Government.
3. The OBC claim of a candidate will be determined in relation to the State (or part of the State) to which his/her father originally belongs. A candidate who has migrated from one State (or part of the State) to another should, therefore, produce an OBC certificate which should have been issued to him/her based on his/her father's OBC certificate from the State to which he (father) originally belongs.
4. A person who wants to avail the benefit of PwBD reservation will have to submit a disability certificate issued by a Competent Authority as prescribed in RPwBD Act, 2016. Further to this, according to Notification No: 16-15/2010 DD.111 DT.29/07/2013 by Ministry of Social Justice & Empowerment, list of positions/disciplines in which PwBD candidates are eligible to apply for this recruitment drive are given against the vacancies. Appointment in these vacancies will be offered to PwBD candidates after considering the nature of duties & responsibilities of the job, location, hazard, strain & other factors, also considering that the condition is not likely to interfere with the performance of duties of the post with reasonable efficiency and without possible deterioration of his/her health. The final appointment would be based on candidate's medical fitness with respect to

- job profile of the identified post.
5. For availing EWS reservation the conditions and format of the certificate will be followed as per DOPT Office Memorandum No. 36039/1/2019 – Estt (Res) dated 31/01/2019.
  6. Maximum age limit is relaxed by 5 years for SC & ST, 3 years for OBC-NC, 10 years for PwBD (UR), 13 years for PwBD (OBC-NC) and 15 years for PwBD (SC/ST) candidates.
  7. The OBC candidates who belong to “Creamy Layer” are not entitled for concession admissible to OBCNC candidates and such candidates will have to indicate their category as Unreserved (UR).
  8. Further the OBC-NC candidates will have to give a self-undertaking, at the time of Personal Interviews in terms of DOPT memo No. 36012/22/93-Extt. (SCT) dt. 08.09.1993 if called for, indicating that they belong to OBC-Non Creamy Layer.
  9. Relaxed standards in assessment/selection, Computer Based Test, Group Task, Personal Interview and overall (Computer Based Test, Group Task and Personal Interview as applicable) will be applied for SC,ST, OBC-NC, PwBD candidates.
  10. If the SC/ST/OBC-NC/PwBD certificate has been issued in a language other than English/Hindi, the candidates will be required to submit a self-certified translated copy of the same either in English or Hindi.
  11. Any request for change in Category (UR/SC/ST/OBC-NC/ EWS/PwBD) once filled in the online application form, will not be considered and accordingly concession/relaxation applicable will not be extended.
  12. Further to this, according to Notification No: 16-15/2010 DD.111 DT.29/07/2013 by Ministry of Social Justice & Empowerment, category of PwBD candidates eligible to apply for this recruitment drive is OA.OL.

#### **5. 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.

#### **6. MODE OF SELECTION:**

Selection will be made on the basis of screening of applications and Testimonials as per the eligibility norms of eligible candidates followed by personal interview by the Selection Committee.

In the event of number of applications being large, corporation will adopt shortlisting criteria to restrict the number of candidates to be called for interview to a reasonable number by any one or more of the following methods:

- On the basis of higher educational qualifications than minimum prescribed in the advertisement.
- On the basis of higher experience in the relevant fields than minimum prescribed in the advertisement
- On the basis of number of patents/high impact factor publications
- On the basis of Application screening (on eligibility criteria)
- On the basis of Resume shortlisting ( Work experience, Academic 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**)).
- By holding a written test.

Candidates shortlisted after initial scrutiny will be intimated thru portal. Candidates are advised to visit the portal from time to time for completing this exercise.

Incomplete applications will be summarily rejected.

A category & discipline-wise merit list will be drawn for all the candidates who qualify in Shortlisting Criteria/Computer Based Test + Personal Interviews & offer of appointment would

be as per the vacancies available category & discipline-wise. Candidates belonging to SC /ST / OBC-NC & PwBD would be assessed under relaxed standards during group task and personal interviews.

A category wise merit list of scores (Minimum qualifying Marks (60 % for UR & EWS, 54% of OBCNC /SC/ ST/PwBD) in scores of all Interviews) will be drawn for all the candidates who qualify in all the selection parameters.

#### **7. STIPEND :**

An all-inclusive stipend of Rs. 65,000/- to Rs. 85,000/- per month depending on qualification & experience, is payable. This includes HRA, Accident Insurance, Medical Insurance, etc. The company does not provide any transport facility for commuting to office. However, there is a sharing bus facility which has to be availed by the Research Associates on pay and use basis. Breakfast and lunch facilities are provided at the office premises for which a nominal monthly lumpsum amount will be deducted. The premium towards Insurances will be deducted from the stipend. As part of the discharge of their duties they may be required to travel to other locations. Work related travel expenses will be separately reimbursed as per the entitlements.

#### **8. PHYSICAL / MEDICAL FITNESS:**

Desirous candidates seeking engagement as Fixed Term Research Associate with HP Green R&D Center, Bengaluru need to be medically fit as per Corporation's pre-employment medical standard.

**It may please be noted that Defective Colour vision is a disqualification under Pre Employment Medical norms of HPCL.**

Shortlisted candidates will be required to undergo pre-engagement medical fitness examination which will be certified by the designated medical practitioner of the corporation. Reference for a medical examination does not mean final selection. Offer of appointment would be extended subject to being declared as Medically Fit by HPCL designated Physician and fulfilment of eligibility criteria w.r.t Academic Qualification, Age, Work Experience, NOC, relieving letter from previous employer etc. as may be applicable

#### **9. HOW TO APPLY:**

1. Login to <http://hindustanpetroleum.com/hpcareers> and click on our current openings. Visit **Fixed Term Research Associates, R&D Centre, Bengaluru**. Read all the instructions given on the website carefully. Candidates should keep scanned copy of Passport size photo (in jpg/gif format less than 50 kb) and Soft copy of the detailed CV (including brief description of PhD topic in case of PhD candidates) ready before filling online application form.
2. Fill in the online application form with all the relevant details carefully (**details once submitted cannot be modified**). Upload Scan copy of your latest passport size photograph and Detailed CV.
3. Upon completion, submit the online application by clicking the Submit button at the bottom of the page You will get a system generated unique 12 Digit Application / Reference No. Please note that this Application / Reference No. is important and will be required for all future references throughout the selection process.
4. Candidates are advised to take a Printout of the Online Application Form, affix his/her recent passport size photograph, put his/her signature at the space provided and keep with him/ her safely for future reference. Candidates are **not** required to submit hard copy of the application form to HPCL.

5. Candidates with multiple applications for same discipline are liable to be rejected.
6. The details filled in the online application form will be considered final and no changes will be entertained w.r.t. personal/ any other details, later on.

#### **10. GENERAL INSTRUCTIONS:**

1. The post of RESEARCH ASSOCIATE is a fixed term post. As such the post will be named/called/designated as **Fixed Term Research Associate**. If selected, initial engagement will be for a period of one year which is extendable by one year at a time based on the project requirement and performance of the candidate, subject to a maximum of 4 years.
2. The candidates must have an active e-mail id and Cell phone/land line number, which must remain valid for at least next one year. All future communication with the candidates will take place through e-mail / cell phone /landline number only.
3. The candidates should have the relevant documents like percentage of marks obtained in the qualifying examination, caste/sub-caste certificate, date of issue, name of issuing authority, state of origin, etc. readily available with them before they commence application process. This information will be required at the time of filling in the on-line application.
4. Wherever CGPA/OGPA/DGPA or Letter Grade in a degree/ diploma is awarded, its equivalent percentage of marks must be indicated in the application form as per norms adopted by University/ Institute. Candidates should produce their degree conversion certificate issued by Competent Authority of the University/ Institute in support of the conversion.
5. Candidates not found to be meeting the prescribed eligibility criteria shall be rejected at any stage of the selection process.
6. All the details given in the online form will be treated as final and no changes will be entertained.
7. HPCL will not be responsible for any loss/ non-delivery of email/any other communication sent, due to invalid/wrong email id or due to any other reason.
8. Furnishing of wrong/false information will lead to disqualification and HPCL will not be responsible for any of the consequences of furnishing such wrong/false information. Since all the applications will be initially screened without documentary evidence, the candidates must satisfy themselves of the suitability for the position to which they are applying. If at any stage during the recruitment process or after recruitment or joining, it is found that the candidates have furnished false or wrong information, their candidature will be rejected.
9. Only short listed candidates who are found eligible based on the details given in the application form will be called for the written test and / or personal interview as the case may be. Candidates are required to bring original and copies of the certificates/Testimonials during the interviews along with the printed application form. One set of the copies of Certificates/Testimonials and the printed application form has to be attested. Such Testimonials will be verified in detail with the originals and if found not meeting the norms, the candidate will be summarily rejected. Such rejected candidates will not qualify for appearing for interview.
10. HPCL reserves the right to raise/relax the minimum eligibility standards and / or relax age, experience criteria in otherwise suitable cases. The Management reserves the right to fill or not to fill all or any of the above positions without assigning any reason whatsoever.

11. Any canvassing directly or indirectly by the applicant will disqualify his/her candidature. Any dispute with regard to recruitment against this advertisement will be settled within the jurisdiction of Bengaluru Court only.
12. The candidates should write their correct mobile number and correct e-mail address neatly.  
Please note that the intimation for interview will be given through e-mail addresses/cell phone/landline only. Candidates shortlisted for interview would be reimbursed II Class Sleeper train fare by the shortest applicable route from their normal place of residence to the interview venue. Candidates will be required to produce all relevant documents as proof of travel to and fro for claiming reimbursement.
13. Candidates are advised to visit corporation website- [www.hindustanpetroleum.com](http://www.hindustanpetroleum.com) under Career Opportunities section regularly for latest updates as no separate communication will be sent.
14. Interested candidates should only apply online on our website [http://hindustanpetroleum.com/hpcareers/current\\_openings](http://hindustanpetroleum.com/hpcareers/current_openings). Any further corrigendum / addendum would be uploaded only on our website <http://hindustanpetroleum.com/hpcareers>
15. It may please be noted that submission of online applications under fictitious/ pseudo names/ email ids /cell phone / landline numbers is strictly prohibited. Any candidate resorting to such practices will be liable for suitable action under the provisions of IT Act 2000.
16. Candidates may write to e-mail: '[fixedtermrecruitment2020.HPGRDC@mail.hpcl.co.in](mailto:fixedtermrecruitment2020.HPGRDC@mail.hpcl.co.in)' for any further queries and information.

**Furnishing of wrong/false information will lead to disqualification and HPCL will not be responsible for any of the consequences of furnishing such wrong/false information. Since all the applications will be screened without documentary evidence, the candidates must satisfy themselves of the suitability for the position to which they are applying. If at any stage during the recruitment and selection process, it is found that the candidates have furnished false or wrong information or is found ineligible with respect to any of the eligibility parameters, his/her candidature will be rejected. If any of the above discrepancies w.r.t. to eligibility parameters, furnishing of wrong intimation and or suppressing of any material fact is detected / noticed even after appointment, his/her services will be liable for termination without any further notice. Canvassing in any form during any stage of recruitment process will lead to cancellation of candidature.**

#### **11. ONLINE APPLICATION DATES:**

<b>Commencement of online application</b>	<b>01 October, 2020</b>
<b>Last date of online application by candidates</b>	<b>20 October, 2020</b>