

CSIR-INDIAN INSTITUTE OF PETROLEUM COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH P.O. I.I.P. MOHKAMPUR, HARIDWAR ROAD DEHRADUN – 248005 (UTTARAKHAND)



Advertisement No. 01/2014

Last Date for Receipt of the application: 28.04.2014

A Unique Opportunity for Research Careers in Science & Technology

CSIR-Indian Institute of Petroleum, Dehradun, a premier institute under the Council of Scientific and Industrial Research (CSIR), is involved in multidisciplinary R&D programmes of both basic and applied nature across scientific disciplines for economic, environmental and societal benefits for the people of India. CSIR-IIP has a rich legacy of being a pioneer in the area of Petroleum & Hydrocarbon industry and is presently engaged in the development of sophisticated green technologies to cater to the energy needs of modern world and for reducing carbon footprint.

CSIR-IIP has developed and transferred technologies to industries in the area of petroleum refining, natural gas, petrochemicals, chemicals and utilisation of petroleum products, provided technical services and imparted world class training to the human resource of Oil and Refining industry. CSIR-IIP has strong international collaborations with industries and academia in India & abroad and has outstanding scientist in the multidisciplinary areas of R&D in the hydrocarbon and related industry.

Applications are invited from enthusiastic, young Indian researchers having excellent academic record and proven scientific achievements along with requisite experience and a high degree of motivation and desire to take up research as a career in the field of Heavy Oil Processing, Separation Process, Biofuels, Catalytic Conversion Process, Chemical Sciences, Automotive Fuel & Lubricant Applications, Analytical Sciences and Tribology to fill up the vacancy of following posts of scientists as per the details given below:

Designation	No. of Posts	Pay Band	Grade Pay	*Total Emoluments	**Upper Age Limit not exceeding (as on last date)
Scientist	16(UR-08,OBC-4,	D- 4FC00 20400 (DD 2)	Rs.6600/-	Rs.61400/-	32 years
Senior Scientist	SC-3,ST-01)	Rs.15600-39100 (PB-3)	Rs.7600/-	Rs. 70770/-	37 years
Principal Scientist	04	D. 27400 (7000 (DD 4)	Rs.8700/-	Rs. 108290/-	45 years
Senior Principal Scientist	(UR)	Rs.37400-67000 (PB-4)	Rs.8900/-	Rs. 115070/-	50 years

^{*} Total Emoluments means approximate total emoluments on minimum of scale including House Rent Allowance in Class 'Y' City.

^{**}Please see age relaxation under Relaxation column.

Post code / No. Of Positions	Pay Band	Designation & Grade Pay(GP) /Age limit not exceeding	Essential Educational Qualifications & Experience	Desirable Experience	Job specification
HOP1 02 (UR-01, SC-01)	15600- 39100 (PB-3)	Scientist. GP 6600/- Age limit: 32yrs Senior Scientist. GP 7600/- Age limit: 37 yrs	M Tech. (Chemical Engineering) OR Ph.D. (Chemistry) submitted M. Tech. (Chemical Engineering) with 3 years relevant experience OR Ph.D. (Chemistry) with 2 years relevant experience	Candidate should have hands on experience in thermal conversion processes such as delayed coking, visbreaking, deasphalting etc. including development of advanced carbon materials like needle coke and with sound knowledge of petroleum products characterization including petroleum coke. The incumbent is expected to conceive and initiate his own research projects in the area of catalytic residue up- gradation processes and also interact with other groups in the institute to develop material for various applications	To carry out R & D in the area of thermal conversion, like 'Delayed Coking' etc and must have experience in the operation of delayed coker plant. The candidate will be expected to conceive and initiate own research projects in this area. Technology development in broad areas of refinery thermal conversion processes, lube refining and solvent extraction. The incumbent will be expected to conceive and initiate own research projects in this area. Candidates are expected to conversant with /having hands on experience in process development of advanced carbon materials like needle coke, heavy oil processing, thermal conversion processes like delayed coking/vis-breaking with sound knowledge of petroleum products characterization. OR R & D activities related to residue up gradation for application in catalytic refining processes. Strong background on catalysts/material synthesis and reaction kinetics as evidenced from publications / patents will be an added advantage.
HOP2 01(UR-01)	15600- 39100 (PB-3)	Scientist. GP 6600/- Age limit: 32yrs Senior Scientist. GP 7600/- Age limit: 37 yrs	M.E./M.Tech.(Chemical Engineering) OR Ph.D. (Organic Chemistry) submitted M.E./M.Tech.(Chemical Engineering) with 3 years relevant experience OR Ph. D. (Organic Chemistry) with 2 years relevant experience.	Candidate must have minimum two years of experience in the Bitumen Area with publications in leading international Journals	To carry out R & D in the area of 'Bitumen Modifications' and 'Development of Bitumen and Related Products'. The knowledge of bitumen testing will be an added advantage. The incumbent is expected to initiate new research projects in the area of 'Bitumen' and must have the capacity and willingness to establish networks with R & D groups working in the Institute.

HOP3 01 (OBC-01)	15600- 39100 (PB-3)	Scientist. GP 6600/- Age limit : 32yrs Senior Scientist GP 7600/- Age limit : 37 yrs	M Tech. (Chemical Engineering) OR Ph. D. (Chemistry) Submitted M Tech. (Chemical Engineering) with 3 years relevant experience OR Ph.D. (Chemistry) with 2 years relevant experience	Must have minimum two years experience in the area of Lube base oils, waxes.	To carry out R & D in the areas of 'Lube Base Oils & Waxes'. The incumbent must have knowledge in the fields of 'Solvent Deasphalting' Lube Extraction/Solvent Dewaxing-Deoiling' processes used in petroleum refineries. The incumbent will be expected to initiate new research projects in the area of 'Lube Base Oils & Waxes' and must have the capacity and willingness to establish networks that transcend the limits of organizational structures and disciplines.
AMA 01(UR-01)	15600- 39100 (PB-3)	Scientist. GP 6600/- Age limit: 32yrs Senior Scientist GP 7600/- Age limit: 37 yrs	Ph.D. Chemistry (Physical/Inorganic) submitted Ph.D. Chemistry (Physical/Inorganic) with 2 years relevant experience	Should have minimum one year experience in development and application of membrane or adsorption separation processes. Should have minimum three years of experience in membrane separation or adsorption processes.	To work in the area of multifunctional porous metal-organic frameworks (MOFs) and porous covalent organic frameworks (COFs) for their potential applications in gas storage and C capture and storage(CCS), important gas separations including hydrocarbon separation, sensing materials, heterogeneous catalysis, enantioselective separation, small achiral molecules separation and proton conducting membranes for fuel cell applications.
SPA1 02(UR- 01,OBC-01)	15600- 39100 (PB-3)	Scientist. GP 6600/- Age limit: 32yrs Senior Scientist. GP 7600/- Age limit: 37 yrs	M. Tech. (Chemical Engineering) Or Ph.D. (Chemistry) submitted. M.Tech. (Chemical Engineering) With 3 years relevant experience OR Ph.D.(Chemistry) with 2 years relevant experience.	1 to 2 years experience in Solvent Extraction Area and/or process simulation and modelling	To study application of solvent extraction for separation and recovery of chemicals from different streams more particularly from hydrocarbon industry. To apply thermodynamics principles for prediction and correlation of phase equilibrium data as well as simulation of process flow sheet OR Technology development in broad areas of refinery thermal conversion processes, lube refining and solvent extraction in oil, petrochemical, gas as well as biofuels, production & production of specialized bitumen including modified bitumen and related materials. The incumbent will be expected to conceive and initiate own research projects in this area. Candidates are expected to conversant with /having hands on experience in process development of advanced carbon materials like needle coke, heavy oil processing, thermal conversion processes like delayed coking/vis-breaking with sound knowledge of petroleum products characterization.
SPA2 01(UR-01)	15600- 39100	Scientist.	Ph.D. (Physical Chemistry) submitted	One to two years experience in development of Gas Absorption	To study application of gas absorption for recovery and removal of gases(e.g. H ₂ S, CO ₂ , SO ₂ etc) from flue as well as fuel gas

	(PB-3)	GP 6600/- Age limit : 32yrs		technologies including development of innovative solutions.	streams.
		Senior Scientist. GP 7600/-	Ph.D. (Physical Chemistry) with 2 years relevant experience		
CAT 04(UR- 01,OBC- 01,SC-01,ST- 01)	15600- 39100 (PB-3)	Age limit: 37 yrs Scientist. GP 6600/- Age limit: 32yrs Senior Scientist. GP 7600/- Age limit: 37 yrs	Ph.D. (Chemistry) submitted Ph.D. (Chemistry) with 2 years relevant experience	Should have minimum two years experience in development, characterisation and evaluation of catalysts. OR Syn gas generation and its utilization in processes, including pilot plant operation and maintenance experience	R&D activities related to development of advanced novel materials such as mesoporous/nano materials etc. for applications in catalytic petroleum refining processes, environment control and energy industry including energy storage. Strong background on catalysts/materials synthesis, characterization, catalysis and reaction kinetics as evidenced from publications/patents will be an added advantage. The incumbents will be expected to conceive and initiate their own research projects and also interact with other groups in the Institute to develop materials for various applications. OR Expected to work on GTL process development both at pilot plant and commercial level.
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		Scientist.	M.Tech.(Mechanical Engineering)		
		Scientist. GP 6600/- Age limit : 32yrs	M.Tech.(Mechanical Engineering)	Post-Graduation with Specialization in Tribology OR Minimum two years industrial experience in Tribology Lubrication and wear modelling and mechanisms, Nano-Tribology, fatigue surface characterization	Expected to undertake Testing and performance evaluation of Lubricants and greases. The incumbents will be expected to conceive and initiate their own research projects and also interact with other groups in the Institute.
TRI1 02(UR- 01,OBC-01)	15600- 39100 (PB-3)	Senior Scientist. GP 7600/- Age limit: 37 yrs	M.Tech.(Mechanical Engineering) with 3 years relevant experience	experience in Tribology Lubrication and wear modelling and	
				(gr. 1) . 16604.	

ASD1 02(UR- 01,SC-01)	15600- 39100 (PB-3)	Age limit: 32yrs Senior Scientist. GP 7600/- Age limit: 37 yrs Principal Scientist GP 8700/-	Ph.D. (Chemistry) with 2 years relevant experience Ph.D. (Chemistry) with 3 years relevant experience. OR	10 years experience in R&D On chemical/biochemical process development specifically on	The incumbent will be expected to conceive and initiate their own research projects. Knowledge in use of advanced statistical techniques desired. The incumbent will be expected to conceive and initiate their own research projects while interfacing with R&D groups working in the institute. OR Characterization of petroleum products and related materials using a combination of techniques such as GC,GC-MS,HPLC, XRD, FTIR, SEM & NMR. Managing, operating and up-keeping the above instruments and providing inputs to all in-house and sponsored projects of the Institute, besides doing research projects independently/or jointly collaborating with other scientists. The incumbent will be expected to conceive and initiate their own research projects while interfacing with R&D groups working in the institute. To lead the Biofuel Division comprising of a team of scientists and engineers working on different R&D projects with deliverables on sustainable fuels and value added chemicals.
BFD1 01(UR-01)	37400- 67000 (PB-4)	Age limit : 45yrs Senior Principal Scientist GP 8900/- Age limit : 50 yrs	Ph.D (Chemical Engineering) with 3 years relevant experience. Ph.D.(Chemistry) with 6 years relevant experience OR Ph.D. (Chemical Engineering) with 6 years relevant experience	Biofuels and value added products. Proven expertise in the area of Biofuels through patents and publications in international journals with high impact factor	Flair for innovation and motivation of scientists. Proven track record for leading a group for carrying out innovative research.

CSD 01(UR-01)	37400- 67000 (PB-4)	Principal Scientist GP 8700/- Age limit: 45 yrs Senior Principal Scientist. (UR) GP 8900/- Age limit: 50 yrs	Ph.D. (Chemistry) with 3 year relevant experience OR Ph.D (Chemical Engineering) with 3 years relevant experience. Ph.D.(Chemistry) with 6 years relevant experience OR Ph.D. (Chemical Engineering) with 6 years relevant experience	7 years research experience in chemical catalysis specifically on synthesis of fuels and lubricants from renewable resources. Proven expertise through patents and publications in the area of biofuels and renewable lubricants	To lead a team of scientist and engineers working on projects to deliver process or products. The incumbent will be expected to conceive and initiate their own research projects while interfacing with R&D groups working in the institute. Proven track record for leading a group for carrying out innovative research.
CCP1 01(UR-01)	37400- 67000 (PB-4)	Principal Scientist. GP 8700/- Age limit: 45yrs Senior Principal Scientist GP 8900/- Age limit: 50 yrs	Ph.D. (Chemistry) with 3 years relevant experience OR Ph.D. (Chemical Engineering) with 3 years relevant experience. Ph.D.(Chemistry) with 6 years relevant experience OR Ph.D. (Chemical engineering) with 6 years relevant experience	Experience in leading research groups working in the areas related to hydro processing, reforming, gas to liquid conversion and nano catalysis will be desirable. Candidate should have demonstrated proficiency at senior level R&D management in process development and commercialization.	This is a senior level position and the Candidate is expected to provide leadership to the R&D activities of the institute in the development of catalytic conversion processes related to petroleum refining, petrochemicals and natural gas

		Principal Scientist	Ph.D. (Mechanical Engineering)	Ph.D.(Mechanical Engineering)	This is a senior level position and the incumbent will be
			with 3 years of relevant	with 9 years relevant experience.	expected to provide leadership and R&D management to the
		GP 8700/-	experience.		team of scientists and engineers in Automotive Fuels and
				The candidate should be	Lubricants Applications Division. The incumbent will be expected
		Age limit : 45 yrs		conversant with the state-of-the-	to initiate new R&D projects in the areas of power propulsions in
	37400-		1114-4	art mass measurement testing and	automobiles, development of hybrid vehicle, power
AFL	67000		100	Certification in Euro IV and beyond	management systems, HCCI combustion technology and use of
01(UR-01)		Senior Principal	Ph.D.(Mechanical Engineering)	norms for transient dynamometer	future fuels. Must have demonstrated proficiency in senior level
	(PB-4)	Scientist.	with 6 years experience.	operation including measurement	R&D management in frontier areas of automotive engines
			10000 A 1000	of gaseous and particulate	development as evidenced from publications /patents and
		GP 8900/-	1000044	emissions, testing of two/three	strong networking with automotive industry.
		·	1007.414	wheelers and LCV on chassis	
		Age limit : 50 yrs	18 CO. L. C.	dynamometers including CVS and	COA
		,	ADDRESS A SECTION	emission analyzers.	

UR: Unreserved; SC: Scheduled Caste; ST: Scheduled Tribe; OBC: Other Backward Class.

Apart from qualifications indicated above, any other recognized qualification, which is equivalent to the prescribed qualification, shall be treated at par with that qualification.

General information and conditions:-

Benefits under Council service:

- a. These posts carry usual allowances i.e. Dearness Allowance (DA), House Rent Allowance (HRA), Transport Allowance (TA) etc. as admissible to the central government employees and as made applicable to CSIR. Council employees are also eligible for accommodation of their entitled type as per CSIR allotment rules depending on availability in which case HRA will not be admissible.
- b. Scientists in Pay Band-3 and Pay Band-4 are eligible for 2 additional increments (without DA) and Professional update allowance of Rs. 10000/- and Rs. 20,000/- per annum respectively.
- c. In addition to the emoluments indicated against each category of posts, benefits such as applicability of New Pension Scheme 2004, reimbursements of Medical Expenses, Leave Travel Concession, Conveyance advance and House Building Advance are available as per CSIR rules.
- d. Scientists in CSIR are also permitted to undertake consultancy and sponsored R&D project activity. These activities give them scope to earn consultancy fee and royalty as per CSIR guidelines governing these activities. Opportunities also arise for foreign deputations for training/presentation of papers/specific assignments etc.
- e. CSIR provides excellent opportunities to deserving candidates for career advancement under Assessment Promotion scheme for Scientists.
- f. Deserving candidates may be considered for advance increment as per CSIR Rules.

2. Other conditions

- a. The applicant must be a citizen of India.
- b. All applicants must fulfill the essential requirements of the post and other conditions stipulated in the advertisement as on the last date of receipt of the applications. They are advised to satisfy themselves before applying that they possess at least the essential qualifications laid down for various posts as on the last date of receipt of the applications. No enquiry asking for advice as to eligibility will be entertained.

The prescribed essential qualifications are the minimum and the mere possession of the same does not entitle candidates to be called for interview. The duly constituted Screening Committee will adopt its own criteria for short-listing the candidates. The candidate should therefore, mention in the application all the qualifications and experiences in the relevant area over and above the minimum prescribed qualification, supported with documents. Completion of Ph.D. degree will be reckoned from the date of issue of provisional certificate/notification.

- c. The application should be accompanied by self attested copies of the relevant educational qualification, experience. The prescribed qualifications should have been obtained through recognized Universities / Institutions. etc. Incomplete application/applications received or not accompanied with the required certificates / documents are liable to be rejected.
- d. In respect of equivalent clause in Essential Qualifications, if a candidate is claiming a particular qualification as equivalent qualification as per the requirement of advertisement, then the candidate is required to produce order/letter in this regard, indicating the Authority (with number and date) under which it has been so treated otherwise the Application is liable to be rejected.
- e. The period of experience rendered by a candidate on part time basis, daily wages, visiting/ guest faculty will not be counted while calculating the valid experience for short listing the candidates for interview.
- f. If any document/ certificate furnished is in a language other than Hindi or English, a transcript of the same duly attested by a Gazetted officer or notary is to be submitted.
- g. The date for determining the upper age limit, qualifications and /or experience shall be the closing date prescribed for receipt of applications.
- h. The period of experience in a discipline / area of work, wherever prescribed, shall be counted after the date of acquiring the minimum prescribed educational qualifications prescribed for that Grade.
- i. Persons with disabilities (PWD) fulfilling the eligibility conditions prescribed under GOI instructions are encouraged to apply.
- i. In case a candidate is staying abroad, his/her candidature may be considered in absentia by the Selection Committee on his/her written request.
- k. The Selection Committee may choose to place the candidate in any of the Grade Pay within the Pay Band depending upon the performance of the candidate and subject to meeting the minimum eligibility criterion specified.
- I. Only outstation candidates called and found eligible for interview will be paid to and fro single second class rail fare from the actual place of undertaking the journey or from the normal place of their residence whichever is nearer to Dehradun on production of Rail Tickets/Rail Ticket Numbers or any other proof of journey. Any discrepancy found between the information given in application and as evident in original documents will make the candidate ineligible for appearing in interview. Such candidate will not be paid any fare.
- m. The decision of the IIP/CSIR in all matters relating to eligibility, acceptance or rejection of applications, mode of selection, conduct of examination/interview will be final and binding on the candidates.
- n. Canvassing in any form and / or bringing any influence political or otherwise will be treated as a disqualification for the post.
- o. NO INTERIM ENQUIRY OR CORRESPONDANCE WILL BE ENTERTAINED.

Relaxations :

- a. The upper age limit is relaxable upto 05 years for SC/ST and 03 years for OBC as per Government orders in force only in those cases where the post are reserved for respective categories, on production of relevant certificate in the prescribed format signed by the specified authority at the time of interview.
- b. Upper age limit is also relaxable upto five years for the regular employees working in CSIR laboratories / institutes, Government Departments, autonomous bodies and public sector undertakings.
- c. As per GOI provisions, age relaxation for Widows, Divorced Women and Women Judicially separated from Husbands, the upper age limit is relaxable up to the age of 35 years (upto 40 years for members of Scheduled Castes/Scheduled Tribes and upto 38 years for members belonging to the Other Backward Classes in respect of the posts reserved for them) for Widows, divorced Women and Women Judicially separated from their Husbands who are not remarried. The persons claiming age relaxation under this sub-para would be required to produce following documentary evidence:
 - i) In case of Widow, Death Certificate of her husband together with the Affidavit that she has not remarried since.
 - ii) In case of divorced Women and Women judicially separated from their husbands, a certified copy of the judgment/decree of the appropriate Court to prove the fact of divorce or the judicial separation, as the case may be, with an Affidavit in respect of divorced Women and they have not remarried since.
- d. Age relaxation to Physically Handicapped (PH) persons: Age relaxation of 5 years is allowed (total 10 years for SCs/STs and 8 years for OBCs in respect of the posts reserved for them) to blind, deaf-mute and orthopedically handicapped persons for appointment to Group 'A' posts/services. The persons claiming age relaxation under this sub-para would be required to produce a certificate in prescribed proforma in support of their claims clearly indicating that the degree of physical disability is 40% or more. In any case, the appointment of these candidates will be subject to their being found medically fit in accordance with the standards of medical fitness as prescribed by the Government for each individual Group 'A' posts to be filled by Direct Recruitment by Selection.

- e. Relaxation in age, over and above the stipulated limit, educational qualification and / or experience may be considered in case of exceptionally meritorious candidates or if sufficient number of candidates possessing the requisite qualification and/ or experience are not available to fill up the posts.
- f. Relaxation of five years will also be permissible to those who had ordinarily been domiciled in the Kashmir division of the state of Jammu and Kashmir during the period from 1-1-1980 to 31-12-1989 subject to production of relevant certificate from concerned authority.

4. How to apply:

- a. Eligible candidates are required to apply ONLINE through our website http://www.iip.res.in
- b. If the candidate does not have a valid email id, he/she should create a new valid email id before applying online.
- Online Application will be available on our website www.iip.res.in up to 28.04.2014.
- d. Candidates are required to arrange for a crossed **Demand Draft for Rs.100/ drawn on any nationalized bank and valid for at least 3 months in favour of "Director, CSIR-Indian Institute of Petroleum" payable at Dehradun.** The last date for submitting online application and making of Demand Draft is 28.04.2014. This date will be the same for the candidates belonging to far-flung areas. The following details must be filled up on back side of Demand Draft (i) Candidate's Name, (ii) Candidate's Category, (iii) Post Code Applied For. The candidates belonging to SC/ST/PH/Women/CSIR Employees/Abroad Candidates category are exempted from submission of application fee.
- e. In case of universities/institute awarding CGPA/SGPA/OGPA grades etc., candidates are requested to convert the same into percentage based on the formula as per their university/institute.
- f. Successful online application is indicated by the page displayed after clicking **Submit Button** indicating the generated **"APPLICATION NUMBER"**. Please note down the same carefully and preserve it. If you do not preserve it, you will not be able to Re-print the Application.
- g. In case candidate wants to modify/withdraw the application there is a 'CANCEL' option to cancel the online application. Please note that application once cancelled will not be retrieved at any stage. If you have cancelled the application, please reapply before the closure of Application Date as per advertisement. Please remember to take fresh print out after modifying any details.
- h. This computer generated application (Print-out) duly accompanied by attested copies of the certificates, mark sheets, testimonials in support of age, education qualifications, experience, re-prints of publications and caste certificate, if applicable along with one recent passport size self-signed photograph affixed together with Demand Draft (if applicable) should be sent in an envelope superscribed "APPLICATION FOR THE POST OF _______ (Post Code ______)" by registered /speed post to the address:- Controller of Administration ,CSIR-Indian Institute of Petroleum, Mohkampur ,Haridwar Road,Dehradun-248005. The last date for receipt of hard copy of application is 05.05.2014. Candidates applying for more than one post must submit separate application form for each post indicating the Code No. of the post. The hard copy(s) of each application must be accompanied by separate Demand Draft(s).
- i. Application once made will not be allowed to be withdrawn and fees once paid will not be refunded on any count nor can it be held in reserve for any other recruitment or selection process.
- j. Applications from employees of Government Departments will be considered only if forwarded through proper channel, certified by the employer that the applicant, if selected will be relieved within one month of the receipt of the appointment orders. Also, vigilance clearance should also be recorded. However, advance copy of the application may be submitted before the closing date. Applications routed through proper channel should reach CSIR-IIP at the earliest.
- k. Candidates should specifically note that the applications received after the closing date for any reason whatsoever (such as envelopes wrongly addressed, delivered elsewhere, postal delay etc.) will not be entertained by CSIR-IIP.
- I. Incomplete applications (i.e. without photograph, unsigned and application fee, applicable testimonials etc.) will not be entertained and will be summarily rejected.

5. Following documents must be attached along with application form sent by post:

- a Demand Draft of Rs.100/- as application fee, where applicable.
- b Coloured photograph pasted on the form and signed across in full.
- c Self Attested photocopy of Date of Birth Certificate.
- d Self Attested photocopies of education qualifications certificates.
- e Self Attested photocopy of caste certificate, if applicable.

f Self Attested photocopies of experience certificates, if any.

