

### INDIAN OIL CORPORATION LTD. (Research & Development Centre) FARIDABAD (Advt. No. R&D/89)

# **Download application form**

Indian Oil Corporation Limited, the largest commercial undertaking in India. Completed 50 Glorious years in the service to the nation. Is the highest ranked Indian Company in the prestigious Fortune 'Global 500' listing at 125<sup>th</sup> position. IndianOil Group of companies controls 10 of India's 20 refineries with a combined refining capacity of 65.7 million metric tones per annum (MMTPA). IndianOil and its subsidiary account for 48% (approx.) of the petroleum products market in India, 34.8% national refining capacity & 71% downstream sector pipelines capacity in India.

Indian Oil has set up a world class R&D Centre at Faridabad which has won recognition for its pioneering research and development work in the areas of lubricant technology, refinery processes, pipeline transportation, bio-fuels and fuel efficient appliances.

Applications are invited from **Indian Nationals** desirous of a career in Research & Development. The Corporation offers excellent opportunities for individual growth and contribution based on performance and potential.

SI.	Aroos	oportunities for individual growth and contribution based on performance and potential.				
Si. No.	Areas	No. of vacancies	Qualification / Experience (desirable)			
1	Automotive Testing (Research Officer)	1	Ph.D / M.Tech. in Mechanical / Automobile / Thermal Engg. / IC Engines from a recognized University / Institute  Experience (desirable):      Candidates who have done the dissertation / research work in the field of IC Engines / Automotive Fuels / Emission may only apply.      Those with experience in the field of IC Engines will be preferred.  Minimum 65 % marks in graduation as well as in Post-graduation.			
			Qualification:			
2	Instrumentation (Research Officer)	4	M.E / M.Tech. in Electronics / Instrumentation / Controls / Automation etc.			
			Experience (desirable) :			
			<ul> <li>Industrial / Research lab. experience in the area of Process / Analytical / Industrial / Oil &amp; Gas Instrumentation.</li> </ul>			
			Experience in research labs. will be preferred.			
			Minimum 65 % marks in graduation as well as in Post-graduation.			
3	Refinery Technology (Research Officer)	3	Qualification:  • Ph.D / M.Tech. in Chemical Engineering.  Minimum 65 % marks in graduation as well as in Post-graduation.			
4	Solar Energy	3 ( 1 in	Grade A (Research Officer – Solar PhotoVoltaics)			
	(Research Officer / Sr. Research Officer/Dy. Manager Research)	each grade)	Ph. D in Physics / Electronics OR M.Tech. in any branch of Engineering  Experience (Essential):  For Ph.D – No experience required however must have worked in any of the areas mentioned below during doctoral studies.  For M.Tech. – 1 yr. in any of the areas of Solar Energy mentioned below.  Solar Laboratory set-up and hands-on operation of equipments such as sun simulator, various types of microscopes, texturing mechanisms, etc., OR  Solar module & cell characterization, testing & evaluation, processing & fabrication, knowledge of various relevant standards OR			

 Knowledge of electrochemistry, processing, fabrication & testing of batteries, fuel cells & electrolyzers etc

OR

• Solar PV system design, yield calculation, knowledge of inverters, batteries, remote monitoring equipments etc.

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 Proficiency in DPR and writing specifications, BoMs, statistical analysis, etc.

OR

 Experience of handling combustible gases like hydrogen, carbon monoxide and oxygen etc.,

OR

- Solar hydrogen generation & utilization through solar PV route.
- Solar PV product development

### Grade B (Sr. Research Officer - Solar Thermal Energy)

#### Qualification:

Ph. D in Physics

OR

M.Tech. in any branch of Engineering

### **Experience (Essential):**

For Ph.D - 2 years

For M.Tech. - 3 yrs. in any one or more of the following areas of Solar Energy:

 Solar thermal material research and solar thermal system installation with knowledge of optical concentrators / heat transfer / thermal power plants / steam turbines / thermal storage / CAD and Finite Element Method (FEM) / optical coating, optics, lasers, ray tracing software etc. / designing of mirrors and lenses / non-imaging optics and lasers.

OR

• Solar hydrogen generation & utilization through solar thermal route.

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Solar thermal product development.

## Grade C (Dy. Manager Research - Solar Energy)

### Qualification:

• Ph. D in Physics / Electronics

OR

M.Tech. in any branch of Engineering

# Experience (Essential):

For Ph.D - 6 years

For M. Tech. - 8 years

In any one or more of the following areas of Solar Energy:

 Solar Laboratory establishment and operation of equipments such as sun simulator, texturing mechanisms, etc.,

OR

 Solar module / cell characterization, testing & evaluation, processing & fabrication, knowledge of various relevant standards, knowledge of electrochemistry, processing, fabrication & testing of batteries, fuel cells & electrolyzers etc.

OR

 Solar PV system design, yield calculation, knowledge of inverters, batteries, remote monitoring equipments etc. Proficiency in DPR and writing specifications, BoMs, statistical analysis, etc.

OR

 Solar thermal material research and solar thermal system installation with knowledge of optical concentration, heat transfer, thermal power plants, steam turbines, thermal storage etc.,

OR

			<ul> <li>Solar hydrogen generation &amp; utilization through both solar thermal as well as solar PV route.         OR</li> <li>Solar (PV &amp; thermal) product development.</li> </ul>		
			Minimum 65 % marks in graduation as well as in Post-graduation		
			Preference will be given to candidates with :		
			Higher qualifications		
			Publications/ patents to credit at international levels		
			Notable achievements at work		
			Work experience in international laboratory		
5	Catalysis	1	Qualification :		
	(Research Officer)		<ul> <li>Ph.D – thesis in the area of Heterogeneous Catalysis or Material Synthesis for Catalytic application.</li> </ul>		
			Experience (desirable) :		
			Must have experience in various catalytic / Zeolitic materials preparation.		
			<ul> <li>Preference will be given to candidates, who have experience in the area of metal supported catalyst, mixed oxides, modification of Zeolites and related materials. Candidates should be familiar with catalysts / catalytic material characterization and data preparation of various analytical tools. Also should be capable of carrying out independent research, data handling / interpretation and report writing.</li> </ul>		
			Publication in National / International journals.		
			Minimum 65 % marks in graduation as well as in Post-graduation		

### APPLICANTS WHO HAVE SUBMITTED THEIR THESIS MAY ALSO APPLY.

Note. Qualification should have been obtained **only** through regular course (not through distance mode or part time)

<u>Upper Age Limit (as on 31/05/2011)</u> :		<u>Ph.D</u>	
	Gr. A	32 years	

Gr. B 35 years 32 years Gr. C 38 years 36 years

<u>Selection Methodology</u>: The applicants meeting the prescribed eligibility criteria / experience requirement shall be required to attend Personal Interview.

Placement:

Selected applicants will be placed in the pay scale of Rs. 24,900-50,500/- (Gr.A) / Rs. 29,100 – 54,500/- (Gr.B) / Rs. 32,900 – 58,000/- (Gr. C). Besides Basic Pay and industrial pattern of DA, the other allowances/benefits include HRA, Medical Facilities, Performance Related Pay, Gratuity, Contributory Provident Fund, Employees' Pension Scheme, Group Pension Accident Insurance, Tatkal Sahayata Yojana, Leave Travel Concession, Contributory Superannuation Benefit Fund Scheme, House Building Advance, Conveyance Advance/Maintenance Reimbursement, Professional Updation Allowance, Home Desk-Top PC, Children's Education Allowance etc. as per rules.

M.Tech. 28 years

## Concessions/Relaxations:

- Reservation of posts for SC/ST/OBC (Non-Creamy Layer) / PH (degree of disability 40% or above) as per Govt. Directives.
- Reservation of Ex-servicemen shall be applicable as per Govt. Directives.
- Age relaxation by 5 years for SC/ST, 3 years for OBC applicants and 10 years for PH applicants.
- Age relaxation by 5 years for applicants domiciled in Jammu & Kashmir between 1.1.1980 and 31.12.1989.
- Exemption from payment of application fee for SC/ST/ PH applicants.

# **General Instructions**:

- Applicants must have consistent good academic record. Applicants having published work in national/international
  journals of repute should submit details with application.
- Wherever CGPA/OGPA/DGPA or letter grade in a degree is awarded, its equivalent percentage of marks must be indicated in the application as per norm adopted by the University/Institute.
- Applicants presently employed in Govt. Deptt / PSUs / Autonomous Bodies must apply through proper channel or submit 'No Objection Certificate' at the time of interview.
- Applicants belonging to OBC category but coming in Creamy Layer will not be entitled to the benefit of reservation and should apply as general category candidate.

- Applicants must attach with the application, demand draft, documentary evidence in support of age, qualifications, experience, caste certificate (in case of SC/ST/OBC), PH certificate(if applicable), otherwise applications will not accepted.
- Minimum percentage of marks in the qualifying examination prescribed above is relaxed for SC/ST/PH category applicants.
- General and OBC applicants are required to send a NON-REFUNDABLE crossed Demand Draft for Rs. 300/(Rupees three hundred only) as application fee drawn on State Bank of India, Faridabad (Code 10449) in favour of
  INDIAN OIL CORPORATION LTD., R&D CENTRE payable at Faridabad. Write name and address on the reverse
  of Demand Draft. MO / IPO or any other mode of payment or DD drawn on banks other than SBI will not be
  accepted.
- Outstation applicants called for interview will be reimbursed 3 tier AC Rail fare or actual Bus fare by the shortest
  route, provided the distance travelled is not less than 30 km on production of actual rail/Bus ticket from mailing
  address/place of present posting.
- Write name of the post at the top left hand corner of the envelope.
- Number of posts may change as per requirement at the time of Interview.
- The decision of the management in all matters relating to eligibility, acceptance or rejection of the application, mode of selection will be final and Management will not entertain any enquiry or correspondence in this regard.
- LAST DATE OF RECEIPT OF APPLICATIONS: 10.06.2011

How to apply: Only those applicants who fulfill the eligibility criteria should submit typed/computer printed applications strictly in the prescribed format (attached) to Chief Human Resource Manager, Indian Oil Corporation Limited, Research and Development Centre, Sector 13, Faridabad-121007 (Haryana) only by ordinary post so as to reach latest by 10.06.2011. Applications with incomplete and without attachments / wrong particulars and those who do not meet the prescribed eligibility criteria as per advertisement or received after the due date will entail rejection and the DD will not be refunded.

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