

DBT-IOC CENTRE FOR ADVANCED BIO-ENERGY RESEARCH

The DBT-IOC Centre is a collaborative venture of Department of Biotechnology (DBT) and Indian Oil Corporation Limited (IOC) and located at IndianOil-R&D Centre in Faridabad. The centre shall focus on advance research in frontier areas like Lignocellulosic ethanol, Algal biofuels, Gas fermentation, Bio-hydrogen etc. Applications are invited for **purely tenure track positions for 2 to 5 years**. The Centre offers excellent research facilities and a stimulating environment.

RESEARCH ASSOCIATES (5 No.):

Qualification: Ph.D in Microbiology/Biochemistry/Biotechnology/Organic Chemistry/Analytical Chemistry. Ph.D/M.Tech in Biochemical Engineering, **Max. age:** 32 Years, **Approximate Annual Salary:** Rs 5.0 lakhs.

SCIENTIFIC(SO)/SR. SCIENTIFIC OFFICERS (SSO)(6 No.):

Qualification: As in above. **Experience:** Minimum 3 years for SO & 5 years for SSO in relevant areas such as Fermentation/Bioprocess Development/Molecular Biology/Algal Biotechnology/Analytical/Industrial Chemistry/Biochemical/Chemical Engineering, **Max. age:** 35 Years, **Approximate Annual Salary:** SO-Rs. 8.0 lakhs; SSO-Rs. 9.0 lakhs.

GROUP LEADER (2 No.):

Qualification: Ph.D in Microbiology/Biochemistry/Biotechnology/Industrial chemistry/Biochemical Engineering. **Experience:** Minimum 8 years in leadership role in research areas of interest to this centre. **Max. age:** 40 Years, **Approximate Annual Salary:** Rs 10 lakhs.

Applicants only with relevant experience/background need apply and higher salary may be considered for deserving candidates. Maximum age relaxation 5 years for SC/ST Candidates. For further details and for obtaining prescribed application format, please contact within two weeks of this advertisement at mathuras@indianoil.in, Contact **Dr. A.S. Mathur** Research Manager, DBT-IOC Centre, Sector - 13, Faridabad-121007, Ph. : 0129-2294583, 9891303425

General Instructions:

- **All positions are purely on temporary basis and on tenure of 2 years extendable up to 5 years**
- Qualification should have been obtained **only through regular course** (not through distance mode or part time) **and from recognized university/institute. Candidates with awarded/provisional degree up to date of Advertisement will only be considered.**
- Applicants must have good academic record with more than 60% marks in qualifying degree (Graduation/PG Degree). Applicants having published work in national/international journals of repute should submit details with application. **Applicant who does not describe the details of relevant research experience in Column 12 of Application will be not considered.**
- The period of experience for the above posts shall be reckoned as on **date of advertisement**
- **Mode of selection is Interview.**
- Outstation applicants called for interview will be reimbursed Second AC Rail fare or actual Bus fare by the shortest route, provided the distance travelled is not less than 200 km & on production of actual rail/Bus ticket from mailing address/place of present posting.
- **DBT-IOC centre is not liable to invite all eligible candidates for interview. Decision of DBT-IOC centre shall be final in this regard.**
- **Only Short listed Candidates working overseas may considered for online interview like video conferencing/Skype etc.**
- Incomplete applications not supported by Self attested copies of relevant documents in support of age, qualifications (Mark sheet/degrees), experience, not fulfilling the eligibility criteria or those received after the last date of receipt of applications shall not be considered and treated as **“Rejected”**.
- The decision of the DBT-IOC Centre 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.
- DBT- IOC centre reserves the right to cancel any/all vacancies without assigning any reason thereof. The no. of vacancies is likely to increase or decrease keeping in view with the requirements.
- Candidate who wishes to apply for more than one post need to **apply separately**.
- Canvassing of any kind shall disqualify the candidate.
- Candidates from SC/ST/OBC, who meet the criteria ,shall be given preference.
- Application in prescribe format should reach **by post** to Dr. A.S. Mathur, Research Manager, DBT-IOC Centre, Indian Oil Corporation, R & D Sector-13, Faridabad-121007, Haryana, India

before 31st October 2012. Overseas candidates may send their application by e-mail at mathuras@indianoil.in

About DBT-IOC Advanced Bioenergy Research Centre:

The DBT-IOC centre for Advanced Bioenergy Research is centre funded by Department of Biotechnology, Government of India and Indian Oil Corporation Limited. The Centre is committed to advanced Bioenergy research addressing second and third generation biofuel. The major thrust of the centre will be to develop and deploy viable 2nd generation biofuel technologies. All projects will culminate into pilot plant demonstration units and result in a transferable technology package for bio energy industry. The centre is initially funded for 5 years and extendable thereafter depending upon performance and availability of funds. The centre will also conduct Ph.D. and very recently a MOU signed with Deakin University, Australia to develop effective Industry-Academia Research Partnerships.

The major objective of centre is to conduct multi-disciplinary bio-energy research involving biology, chemical and material sciences etc., to provide a platform for integrating dis-jointed research activities pursued in several areas related to biofuels by various institutes, development of “institutional capability” to address the bio-energy need of nation based on “science -enterprise model” and to provide national capability of pilot level scale-up of developed technologies.

The centre has recently commissioned a first integrated pilot plant in India for “conversion of Lignocellulosic biomass to ethanol” with technological support from **National Renewable Energy Laboratory (NREL), USA**. The pilot plant is designed for processing 5 kg/hr variety of dry feedstock. The centre will be equipped with all modern analytical and biotechnology facility e.g., Biomass characterization lab, State of art Fermentation and enzymatic hydrolysis laboratory, MALDI-TOF, LC-MS, HPLC, GC, Gene Sequencing facility, advance molecular biology facility, Microbial Culture laboratory etc.

The management of DBT-IOC Centre is committed to make the Centre as a premier centre for advanced Bioenergy research to provide cutting edge technology to reduce dependency on fossil fuel. The major research focuses of centre are as follow.

- **Lignocellulosic based bio-fuels**
 - Development of new and economical pre-treatment process
 - Cellulolytic enzyme research / evaluation
 - Mixed sugar fermentation
 - Bio-assisted / Chemical lignin de-polymerization and Lignin value addition
 - Novel techniques for enhanced bio-butanol recovery
- **Algal research & Gas Fermentation**
- **Synthetic biology**
 - Development of novel pathways for production of energy molecules
 - Modification of ABE fermentation pathway for bio-butanol
- **Novel biotechnological method for CO₂ mitigation**
 - Syn gas fermentation for biofuels
- **Life cycle analysis**