



राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर
NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR
Department of Chemical Engineering

MAHATMA GANDHI AVENUE, DURGAPUR – 713209, WEST BENGAL, INDIA

Advt. No.: NITD/ChE/JRF/DBT-In-Bz/01/2014

Date: 24/04/2014

Applications in plain paper are invited from **Indian nationals** for the following temporary positions to work in a project entitled “**Synthesis of Bioethanol from Sugarcane Bagasse in a Membrane – Integrated Hybrid System - A Green Technology Approach**”, funded by Department of Biotechnology, Government of India. The candidates will be recruited with tenure of three years and with no possibility of tenure extension beyond the specified term of office.

The selected candidate has to register for Ph.D. at NIT Durgapur after clearing the Institutional admission procedure. He/she will work at the collaborating Institute (University of Sao Paulo, Brazil) for a maximum duration of eight months in one visit within last two years of the project as approved by DBT. During this visit to Sao Paulo, Brazil, the candidate will be entitled to fellowship as mentioned below and to monetary allowance covering expenses incurred during travel to Brazil. For the remaining period in the three years tenure when the candidate will work at NIT Durgapur, he/she will receive a scholarship as enumerated below.

Last date of receipt of applications: **20th May, 2014**

Sl. No.	Position and fellowship	Qualifications required
1.	Junior Research Fellow Fellowship: @Rs. 18000/- +10% HRA - for 1 st and 2 year @Rs. 20000/- +10% HRA - for 3 rd year 6-8 months stay in Brazil: during that time stipend will be Rs. 50,000/- consolidated and the candidate will not receive any fellowship during these visits.	Essential: BTech and MTech in Chemical Engineering (minimum 6.5 CGPA or 60% marks) with a valid GATE score. Final year MTech students are also eligible to apply but joining will only be after publication of results. Desirable: Strong knowledge in programming using Fortran/Matlab. Good writing skills/ Fluency in English.
2.	Junior Research Fellow Fellowship: @Rs. 18000/- +10% HRA-for 1 st and 2 year @Rs. 20000/- +10% HRA-for 3 rd year 6-8 months stay in Brazil: during that time stipend will be Rs. 50,000/- consolidated and candidate will not receive any fellowship during these visits.	Essential: BTech in Biotechnology and MTech in Biotechnology/Biochemical Engineering (minimum 6.5 CGPA or 60% marks) with a valid GATE score. Final year MTech students are also eligible to apply but joining will only be after publication of results. Desirable: Knowledge in handling bacteria, fungi etc., fermentation. Good writing skills /Fluency in English

Project Description:

This project aims at the production of bioethanol from sugarcane bagasse through green technology. The selected candidates will be responsible for pretreatment of sugarcane bagasse and optimizing the pretreatment process. He/She will characterize the pretreated bagasse using various analytical instruments. Furthermore, he/she should be able to perform the fermentation process (which calls for strong biotechnological expertise) as well as downstream purification process using different separation techniques. The chemical engineering aspects of the project mostly include simulation of mathematical models that can provide an adequate mechanistic understanding of the various techniques involved in the study. A thorough examination of process kinetics is also required.

How to apply:

Interested candidates are advised to send their curriculum vitae giving full particulars of their Educational Qualifications along with attested copies of mark sheets and certificates, experience, publications, research interests etc. to the undersigned by post only. A copy of the curriculum vitae (excluding the other relevant particulars) may also be sent via email. Candidates should also mention the names and contact addresses (including email ID) of two referees who have known the candidates academically and professionally out of which at least one of the referees must be from candidate's latest affiliating institute.

Terms and Conditions:

1. The applications will be screened and only short-listed candidates will be called for interview via email. No regular mail will be sent.
2. The above position is purely temporary, and performance will be evaluated every six months. Selected candidates will not be entitled to claim for regular appointments in this Institution.
3. Candidates called for interview should bring all the original mark-sheets, certificates etc.
4. No TA/DA will be paid for attending the interview.
4. Canvassing in any form will disqualify the candidature.

Dr. J. Sikder

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Assistant Professor

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