

**Center of Innovative and Applied Bioprocessing (CIAB)**

**&**

**National Agri-Food Biotechnology Institute (NABI)**

(An autonomous institutes of Dept. of Biotechnology,  
Ministry of Science & Technology, Govt. of India)

Sector-81, Knowledge City, Manauli P.O, S.A.S. Nagar-140306, Punjab, India.

Website: [www.ciab.res.in](http://www.ciab.res.in) & [www.nabi.res.in](http://www.nabi.res.in)

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**Walk-in interview for the temporary positions of Project scientist (PS) and Project Fellow(PF),under a GOI R&D project**

**Advertisement No. NABI/8(51)/2019-GAP-26**

Center of Innovative and Applied Bioprocessing (CIAB) and National Agri-Food Biotechnology Institute (NABI) are the Institutes of Department of Biotechnology, Government of India and sharing a single campus. CIAB works mainly on secondary agriculture and development of value-added products from different types of bioresources. NABI aims at catalyzing the transformation of Agri-food sector in India by being a nodal organization for knowledge generation and translational science leading to value-added products based on Agri-Food biotech innovations for improved household nutritional security. CIAB-NABI requires following research personnel purely on temporary basis. Candidates of Indian nationality are invited to appear for the Walk-in interview for project appointments under the following project. The duration of the project is maximum of two years (till December 31, 2020), and the positions will renewed on yearly basis depending on the performance or fund flow, whichever is earlier.

**R& D Project** Development and validation of technology for production of high energy density biocoal from rice straw and other agri-biomasses.

**Funding agency** Government of India (GOI)

**Name of the project** Dr. T. R. Sharma, CEO, CIAB and Executive Director, NABI

**investigators** Dr. Joy K Roy, Scientist-E, NABI

**Deptt./Centre** CIAB-NABI

**Project duration** 2 years till 31/12/2020

**Date of Interview** 5<sup>th</sup> March, 2019 starting at 10:00 AM

**Project Summary:**

The vast generation of rice straw residues creates a problem for the farmers, and a significant portion is burnt in the field, alleviating environmental pollution and health problem. In this context, the project aims in utilizing the rice straw or other agri-wastes residues to produce final torrefied solids (biocoal) for the purpose to be co-fired along with fossil coal in thermal power boiler. The R&D project is an Indo-Sweden collaborative work to demonstrate the processing technology of rice straw using a pilot plant (raw biomass to final product package and storage), with a capacity of 150 kg/hr is being installed in CIAB and NABI premises. The project comprises of the following work components: initial process verification preferably using rice straw (grinding, leaching, pelletization, torrefaction, cooling, briquetting, packaging and storing), optimization of process conditions through simulation trials, biochemical testing

of the technology on rice agri-wastes residues (mainly rice straws); effect of different rice varieties and types on process, and its process optimization. It is a purely R & D project on technology demonstration and optimization under Indian conditions.

**(A) Project Scientist (Electrical Engineering) – one position**

**Work responsibility:**

1. Assisting in commissioning and erection of the R & D pilot plant facility (150 kg/h capacity).
2. Overall plant operations and maintenance with respect to electrical components.
3. Running simulation trials using virtual manufacturing systems.
4. Assisting optimization of the R & D technology.
5. Data analysis and Report writing.

**Essential qualifications:**

1. The applicant should be an Indian citizen
2. PhD in Electrical Engineering or First class in M.E/M.Tech Electrical Engineering with first class B.E/B.Tech in Electrical Engineering from a Govt. recognised University/ Institute and at least three years post-ME/M. Tech experience in the relevant area.

**Desirable qualification**

At least three years industrial experience specifically work experience in plant operations (electrical maintenance); knowledge in handling high & low tension control panels and instrument control panels; sound knowledge in virtual manufacturing system applications (distributed control system). Preference will be given to candidates having specialization in power systems engineering or power engineering management.

**Age limit:** The upper age limit for the fellowship is 35 years at the time of the submission of application, Age relaxation of 5 (five) years will be given to candidates belonging to SC/ST/OBC/Physically Challenged & Women candidates.

**Emoluments:** Rs. 55000/-per month plus HRA.

**(B) Project Scientist- (Mechanical Engineering)– one position**

**Work responsibility:**

1. Assisting in commissioning and erection of the R & D pilot plant facility (150 kg/h capacity).
2. Overall plant operations and maintenance with respect to machinery components.
3. Running simulation trials using virtual manufacturing systems.
4. Assisting optimization of the R & D technology.
5. Routine data collection and analysis.
6. Report writing and data summarizing.

**Essential qualifications:**

1. The applicant should be an Indian citizen

2. PhD in Mechanical Engineering or First class in M.E/M.Tech Mechanical Engineering with first class B.E/B.Tech in Mechanical Engineering from a Govt. recognised University/Institute and at least three years post-ME/M.Tech experience in the relevant area .

**Desirable qualifications:**

At least three years industrial experience specifically work experience in plant operations; sound knowledge in virtual manufacturing system applications (distributed control system) and simulation softwares like ANSYS/Autodesk simulator. Preference will be given to candidates having specialization in energy engineering or thermal engineering.

**Age limit:**The upper age limit for the fellowship is 35 years at the time of the submission of application, Age relaxation of 5 (five) years will be given to candidates belonging to SC/ST/OBC/Physically Challenged & Women candidates.

**Emoluments:** Rs. 55000/-per month plus HRA.

**C) Project Fellow (level 2)Mechanical or Electrical Engineering: – Two positions**

**Work responsibility:**

1. Assisting in commissioning and erection of the pilot plant (150 kg/h capacity).
2. Sample collection and chemical analysis.
3. Routine data collection and performing kinetic modeling.
4. Report writing and data summarizing.

**Essential qualifications:**

B.E/B.Tech in Mechanical or Electrical Engineering with minimum of 60% marks and at least two year of experience in the relevant field.

**Desirable qualifications:**

At least of two year of industrial experience specifically work experience in plant operations/quality control; sound knowledge in kinetic data modelling; knowledge in MATLAB and CAD softwares.

**Age limit:**The upper age limit for the fellowship is 28 years at the time of the submission of application, Age relaxation of 5 (five) years will be given to candidates belonging to SC/ST/OBC/Physically Challenged & Women candidates.

**Emoluments:** Rs. 14000/-per month Plus HRA.

**Application and Selection Process:-**

All interested candidates may appear for Walk-In Interview at National Agri-Food Biotechnology Institute (NABI) located at Knowledge City Sector-81, Mohali 140306 on **5<sup>th</sup> March, 2019 at 10:00 hrs** (Tuesday) along-with duly filled Application form (Mandatory) available on the website [www.nabi.res.in](http://www.nabi.res.in). **The duly filled application form must be submitted at the time of registration at NABI from 09:00 hrs to 10:00 hrs on 5<sup>th</sup> March, 2019.** The candidates must ascertain their eligibility before applying; as ineligible candidates will not be interviewed. All the candidates are requested to appear for the interview with full CV, thesis/project report, publications and original degree certificates and transcripts. No TA/DA will be paid for appearing in the interview. Canvassing in any form or bringing influence, political or otherwise, will lead to disqualification of the candidate(s).