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

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# **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: <a href="https://www.ciab.res.in">www.ciab.res.in</a> & www.nabi.res.in

# 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-26-2

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 Dr. Joy K Roy, Scientist-E,

<u>investigators</u> NABI

**Deptt./Centre** CIAB-NABI

**Project duration** Till 31/12/2020

#### **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- (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.

<u>Age limit:</u> 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 Engineering: – One position

## 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 Engineering with minimum of 55% marks and at least two year of experience.

#### **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.

<u>Age limit:</u> 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 <u>01</u><sup>st</sup> <u>August, 2019 (01:00 PM)</u> along-with duly filled Application form (Mandatory) available on the website www.nabi.res.in. <u>The duly filled application form must be submitted at the time of registration at NABI from 01:00 PM to 02:00 PM on above mentioned date and time.</u> 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).