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

**(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.nabi.res.in.**

**Advertisement no. NABI/Admin/5(11)/2022-23/ACAD-10**

**Walk-In-Interview for temporary positions of Junior Research Fellow, Senior Research Fellow, Project Scientist, Project Associate -II & Research Associate-I**

National Agri-Food Biotechnology Institute (NABI) is an autonomous Institute under the Department of Biotechnology, Government of India. NABI aims at catalysing the transformation of the 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. Since its inception in 2010, NABI is involved in research activities for Biofortification, the development of designer crops for improved nutrition, providing sustainable and novel solutions for quality food and nutrition, and the development of evidence-based functional foods to counter malnutrition. The food and nutritional Biotechnology division at **NABI requires the following research personnel purely on a temporary basis.**

1. **Project Title: Targeting Vacuolar Phosphate Transporter (SPX-MFS) genes for improving Phosphate Use Efficiency (PUE) in rice**” **(MK Bhan Fellowship)**

**Principle Investigator:** Dr. Ajit Pal Singh, MK Bhan Fellow

**Positions:** Senior Research Fellow (01)

**Duration:** The research position is a purely temporary assignment and is tenable for a period of 1 (one) years.The total duration will be one years from date of joining or completion of the project whichever is earlier.

**Essential Qualification: -** Post Graduate Degree in Basic Science OR Graduate /Post Graduate Degree in professional course selected through a process described through any one of the following: - Scholars who are selected through National Eligibility Tests-CSIR-UGC-NET including Lectureship (Assistant Professorship) and GATE Additionally, candidate will be eligible for interview if they have qualified National Level examinations conducted by central government departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, etc.

The qualification prescribed above with two years of research experience. (DST OM No. SR/S9/Z-08/2018 dated 30.01.2019).

**Desirable: -** Enthusiastic for research and with a proven track record of research in the area of agricultural biotechnology and molecular biology.

**Emoluments:** Rs. 35000/- per month Plus HRA as per project.

**Desirable Experience: -** Enthusiastic for research and with a proven track record of research in the area of agricultural biotechnology and molecular biology.

**Age:** 32 years (Relaxation is admissible in the case of SC/ST/OBC/PD and women candidates as per GOI instructions)

**Contact details:** Dr. Ajit Pal Singh, MK Bhan Fellow, NABI, India
**Email:** ajitpal.s@nabi.res.in

1. **Project title: Research Associate for Development of nano-cellulose based smart, biodegradable, antimicrobial food packaging materials. (GAP -64)**

**Position:** Research Associate-I (RA-I).

**Summary:** This is a Department of Biotechnology (DBT) sponsored project.

**Duration for RA position:**

The research associate-ship is a purely temporary assignment and is tenable for a period of 3 (three) years or till the termination of the project whichever is earlier. The performance of the selected candidate will be evaluated after initial 1 year; further extension of another 2 year will be subject to submission of progress report submitted by selected candidate and satisfactory assessment remarks given by the reporting officer on annual basis.

**Job profile:**

1. RA-I will be responsible for the lab scale and up-scaling production of bio-polymers (Nano-cellulose and derivatives of arabinoxylan).
2. RA-I will be responsible for the characterization of biopolymers.
3. RA-I will be responsible for physico-chemical characterization of the functional properties of antimicrobial composite films and packaging materials.
4. RA-I will be responsible for the efficacy evaluation of the smart, biodegradable, antimicrobial food packaging materials for post-harvest quality improvement perishable commodities (fruits/vegetables) under storage.

**Essential qualifications:**

PhD/MD/MS/MDS or equivalent degree or having three years of research, teaching and design and development experience after MVSc/M.Pharma/ME/M.Tech with at least one research paper in Science Citation Indexed (SCI) journal. Candidate with thesis submission will also be eligible (along with proof of submission) but will be hired at SRF level till they receive their degree (Eligibility criteria as per As per DST OM No. DST/PCPM/Z-06/2022 dated 26.06.2023).

**Desirable qualifications:**

1. Prior research experience by high impact peer reviewed publications.
2. Research experience in extraction of biopolymers.
3. Research experience in characterization of biopolymers and composite films/packaging materials.
4. Research experience in post-harvest quality improvement studies of perishable commodities (fruits/vegetables) during storage.

**Emoluments:**

The RA-I will be hired with the emoluments of Rs. 58,000/month + 8% HRA for Year 1 & 2; Rs. 61,000 month + 8% HRA for Year 3.

**Age Limit:**

The age limit of applicants for RA will be 40 years as on date of interview. (Relaxation is admissible in case of SC/ST/OBC/women as per government of India instructions).

**Contact Details: Dr. Koushik Mazumder, Scientist-E email: koushik@nabi.res.in contact no. 0172-5221244.**

1. **Project Title:** “Genome editing the key saponin biosynthesis genes to enhance the taste and nutritional qualities in soybean (*Glycine max*). (Own fellowship)

**Principle Investigator:** Dr. Panneerselvam Krishna Murthy, Scientist-D

**Positions:** Junior Research Fellow (01) having own funding fellowship

**Duration:** 5 years

**Essential Qualification:**

1. MSc/ MTech in any area of life sciences or an equivalent degree.
2. 55% total marks or equivalent score in the qualifying degree (5% relaxation in marks will be given to SC/ST/OBC(non-creamy layer)/PWD as per GOI norms)
3. In addition to the above, candidates applying for admission must qualify a national-level test for pursuing the Doctor of Philosophy program. Such tests include doctoral fellowship or admission eligibility tests conducted at the national level by recognized government agencies, such as the University Grants Commission (UGC), Council for Scientific and Industrial Research (CSIR), Indian Council for Medical Research (ICMR), Department of Science and Technology (DST), Department of Biotechnology (DBT), or any other government-recognized agency.

**Desirable Experience:**

General plant molecular biology related techniques such as cloning and qPCR and Plant tissue culture

**Responsibilities:**

1. Development of somatic embryos and transgenic hairy root stocks for selected soybean cultivars

2. Editing key saponin pathway genes in soybean

3. Gene function characterization

**Age:** 28 years (Relaxation is admissible in the case of SC/ST/OBC/PD and women candidates as per GOI instructions)

**Emoluments:** The selected student should have his/ her own fellowship from any of the recognized granting agencies

1. **Project Title:** “Molecular and biochemical characterization of nutritional enriched transgenic plants” (NABI Core)

**Principle Investigator:** Dr. Siddharth Tiwari, Scientist E

**Position:** Senior Research Fellow (SRF)-One

**Funding Agency:** NABI CORE Grant

**Duration:** 3 years

**Essential Qualification:**

1. Post Graduate Degree in Basic Science OR Graduate/Post Graduate Degree in professional course selected through a process described through any one of the following: -

a. Scholars who are selected through National Eligibility Tests-CSIR-UGC-NET including Lectureship (Assistant Professorship) and GATE

b. The selection process through National Level examinations conducted by central government departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc.

2. Two years of research experience.

3. Essential eligibility criteria, Salary and other benefits as per the Office Memorandum DST/PCPM/Z-06/2022 (E-file-41804) dated June 26, 2023, Department of Science and Technology, Ministry of Science and Technology. Other rules and benefits as per NABI rule.

**Desirable Experience:**

1. Experience in Plant Tissue Culture, Plant Genetic Engineering, Genome editing and Molecular analyses of transgenic plants.
2. Practical knowledge of gene cloning and expression.
3. Relevant research publications in peer-reviewed journals.

**Age:** 32 years (Relaxation is admissible in the case of SC/ST/OBC/PD and women candidates as per GOI instructions)

**Remuneration** and other conditions**:** Rs. 42000/- per month Plus HRA as per OM: DST/PCPM/Z-06/2022 (E-file-41804) dated June 26, 2023, Department of Science and Technology, Ministry of Science and Technology Government of India.

**Contact Details: -** Project Investigator: Dr. Siddharth Tiwari, Scientist E, Email: - siddharth@nabi.res.in; Contact no. 0172-5221138

4. **Project:** “BIRAC sponsored Banana Bio fortification project entitled “Development and Transfer of Technology from Queensland University of Technology, Australia to India for Bio fortification and Disease Resistance in Banana” (GAP-02)

**Principle Investigator:** Dr. Siddharth Tiwari, Scientist E

**Position:** Project Scientist-One

**Duration:** Till March 2024 or termination of the project

**Funding Agency:** Biotechnology Industry Research Assistance Council (BIRAC)

**Essential Qualifications: -** Doctoral Degree (submitted/awarded) in Science or Master’s Degree in Engineering or Technology from a recognized University or equivalent.

**Desirable:**

1. Experience in biochemical analysis (HPLC, ICPMS, protein purification, Western blotting), molecular analysis (Southern blotting, site of integration & flanking regions) and compositional/proximate analysis for food characteristics of genetically modified plants.
2. Excellent academic record with research experience in area relevant to plant metabolic engineering, molecular biology and bioinformatics supported with high-quality publications.
3. Capable to collect and analyze data related to agronomic, yield and phenotypic performance of transgenic banana lines from multi-location event selection trial sites.
4. Knowledge and experience of in-silico analysis such as transcriptomics, proteomics and genomics.
5. Relevant research publications in reputed international journals with 5 or more cumulative impact factor.

**Emoluments: -** Rs. 56000/- per month plus HRA (As per DST OM No.SR/S9/Z08/2018 dated 30.01.2019)

**Age limit: -** 35 Years (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI Instructions)

**Contact Details: -** Project Investigator: Dr. Siddharth Tiwari, Scientist E, Email: - siddharth@nabi.res.in; Contact no. 0172-5221138

5. **Project title: Molecular analysis of metabolic pathways to improve seed vigor and stress tolerance response in rice. (NABI Core)**

**Principal Investigator:** Dr. Prafull Salvi, Scientist-C

1. **Junior Research Fellow (JRF) (One position) (NABI Core grant)**

**Essential Qualification:** -

1. Post Graduate Degree in Basic Science OR Graduate/Post Graduate Degree in professional course selected through a process described through any one of the following: -
2. Scholars who are selected through National Eligibility Tests-CSIR-UGC-NET including Lectureship (Assistant Professorship) and GATE
3. The selection process through National Level examinations conducted by central government departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc.

**Duration**: The appointment will be initially for one year. Further up-gradation will be on the basis of the submission of a progress report and further assessment.

**Job Profile:** The selected candidate will be involved in a project aimed at comprehending the significance of molecular determinants and associated pathways focusing on enhancing seed vigour and stress tolerance response for crop improvement.

**Desirable Experience:**

1. Strong molecular and cell biology expertise relevant to the current project.
2. Prior experience in molecular biology and plant tissue culture.
3. Experience in protein expression in yeast and the bacterial system.
4. Experience in protein-protein interaction (Y2H, Co-IP, etc) will be preferred.

**Emoluments: -** Rs. 31000/- per month plus HRA (As per DST OM No.SR/S9/Z08/2018 dated 30.01.2019)

**Age limit: -** 28 Years (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI Instructions)

1. **Junior Research Fellow (JRF) (One position) (Own Fellowship)**

**Essential Qualification:** -

1. Post Graduate Degree in Basic Science OR Graduate/Post Graduate Degree in professional course selected through National Eligibility Tests-CSIR-JRF, UGC-NET-JRF, DBT-BET-Category-I, etc. with their own fellowship.

**Duration**: The appointment will be initially for one year. Further up-gradation will be on the basis of the submission of a progress report and further assessment.

**Job Profile:** The selected candidate will be involved in a project aimed at comprehending the significance of molecular determinants and associated pathways focusing on enhancing seed vigour and stress tolerance response for crop improvement.

**Desirable Experience:**

1. Strong molecular and cell biology expertise relevant to the current project.
2. Prior experience in Molecular Biology and Genetic Engineering.
3. Experience in protein expression and purification.
4. Experience in protein-protein interaction (Y2H, Co-IP, etc) will be preferred.

**Emoluments: -** Rs. 31000/- per month plus HRA (As per DST OM No.SR/S9/Z08/2018 dated 30.01.2019)

**Age limit: -** 28 Years (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI Instructions)

6. **Project Title:** Prions as stress sensors in plants: Role of DNA/RNA binding proteins in regulating stress memory (HGK-IYBA project)

**Principle Investigator:** Dr Charanpreet Kaur, Scientist-D

**Positions:** Project Associate II

**Duration:**  Two years. Note that appointment is a co-terminus with the tenure of the project.

**Essential Qualification:**

Postgraduate degree in Basic Science or Graduate/Postgraduate in Botany/Microbiology/Agriculture/Bioinformatics/Biotechnology/Biochemistry and other fields in Life Sciences

Selected via a process described through any one of the following:

a) Scholars selected through National Eligibility Tests-CSIR UGC NET including Lectureship (Assistant Professorship) and GATE.

b) The selection process through National level examinations conducted by Central Government Departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER, etc.

*Minimum of two years of research experience is essential*.

**Desirable qualifications**: Candidate with experience in techniques such as cloning, protein purification, yeast-two hybrid, and using CRISPR/Cas system-mediated rice transformation will be preferred.

**Age limit**: 35 years

**Emoluments:** Rs. 35000/- per month Plus HRA as per project

**Desirable qualification:** Research experience in molecular biology, microbiology and plant physiology.

7. **Project Title: “**Oral nanomedicine as a novel treatment for type 2 diabetes: a pre-clinical study” (Own Fellowship)

**Principal Investigator:** Dr Nitin Kumar Singhal, Scientist-E

**Positions:** Junior Research Fellow (01) (Own Fellowship)

**PhD registration:** IISER-Mohali/DBT-RCB, Faridabad/Punjab University, Chandigarh

**Duration:** 5 years (Two years of JRF and will be converted to SRF after evaluation as per the funding agency guidelines)

**Project Summary:** The project activities are given below:

1. To create and evaluate oral capsules that contain siRNA-PLGA nanoparticles

2. To use 2-D and 3-D in-vitro models to examine the synthesised formulation's therapeutic efficacy and cell target selectivity.

3. To investigate the oral capsules' biodistribution, toxicity, and therapeutic profile using type 2 diabetic rodent models.

4. To look into the transcriptome profiling of rodent models' liver and kidney tissues.

**Essential Qualifications:**

i) Post graduate degree in basic Science OR Graduate /Post Graduate Degree in professional course and

ii) Having own fellowship for 5 years from different funding agencies such as UGC, CSIR, DST, DBT, etc.

**Area of research:** Diabetes, Biochemistry, Metabolic disorder

**Age limit:** 28 Years (Relaxation is admissible in case of SC/ST/OBC/PD/EWS/ women and/or as per GOI Instructions)

**Application Procedure & Other Conditions**

1. All interested candidates may appear for Walk-In-Interview at **National Agri-Food Biotechnology Institute located at Knowledge city, Sector-81, Mohali - 140306, Punjab** on **05-12-2023 at 09:00 A.M.** along with the duly filled application form available on the website [www.nabi.res.in](http://www.nabi.res.in).

2. Incomplete application forms and applications that are not in proper format may be summarily rejected.

3. The applications should be submitted strictly as per the prescribed format that can be downloaded from the NABI website.

4. Candidates applying for more than one option can give their preference in the same application by ticking multiple options. No need to submit a separate application form for each option.

5. Candidates should ensure that information mentioned in the application form is accurate. Once the application form is submitted no further request regarding any changes/ information in the application form will be considered.

6. The duly filled application form must be submitted at the time of registration at NABI from **09:00 AM to 10:00 AM on 05-12-2023.**

7. The candidates must ascertain their eligibility before applying, as ineligible candidates will not be interviewed.

 8. All the candidates are requested to appear for a Walk-In interview with an application form, experience certificates, publications, and original degree certificates and transcripts.

 9. Original mark sheets, certificates, award/fellowship, etc must be accomplished for verification at the time of the interview, and attach one set of attested copies of the documents with the application form.

10. No TA/DA will be paid for appearing in the interview.

11. Canvassing in any form or bringing influence, political or otherwise, will lead to disqualification of the candidate(s).

12. Candidates should strictly adhere to guidelines issued by World Health Organization and Centre Govt/State Govt on Covid-19.

 **Manager Administration**