

<u>National Agri-Food Biotechnology Institute (NABI)</u> (Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India) Sector-81, Knowledge City, Manauli P.O, S.A.S. Nagar-140306, Punjab, India. <u>Website: www.nabi.res.in.</u>

Advertisement no. NABI/5(01)/2011-22-04-Res

<u>Walk-In-Interview for temporary Positions of Research Associate-I, Project Associate-I,</u> <u>Senior Research Fellows, Junior Research Fellows, Project Fellow-I</u>

National Agri-Food Biotechnology Institute (NABI) is an autonomous Institute under the Department of Biotechnology, Government of India. NABI aims at catalyzing 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 <u>NABI requires the following research personnel purely on a temporary basis.</u>

<u>1.</u> <u>**Project Title:**</u> "Efficient genome editing of seed-specific bZIP transcription factors in tomato for small-seeded/seedless phenotype using CRISPR/CAS system." (GAP-50)

Principle Investigator: Dr. Vikas Rishi, Scientist-F

Positions: Junior Research Fellow (01)

Duration: The appointment will be initially for two years as JRF or till the termination of the project whichever is earlier. Further up-gradation from JRF to SRF will be on the basis of the submission of a progress report and further assessment. However, tenure will not extend beyond the project. i.e. 13.01.2026.

Essential Qualification: -

Postgraduate degree in Basic Science or Graduate/Post Graduate in the professional course selected through a process described through any one of the following

a) Scholars 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.

Emoluments and eligibility: - As per DST OM No. SR/S9/Z-08/2018 dated 30.01.2019

Desirable Experience: - Plant Tissue Culture, Plant Transformation, Protein Purification.

<u>Responsibilities:</u> To carry out research in tomato seed physiology and gene editing using CRISPR/Cas

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

Emoluments: Rs. 31000/- per month Plus HRA as per project.

<u>2.</u> <u>**Project Title:**</u> "Aptamer modified gold nanocluster-based diagnostic platform for rapid sensing of bacteria."</u>

Principle Investigator: Dr. Nitin Kumar Singhal, Scientist-E

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

Duration: The appointment will be initially for two years as JRF. Further up-gradation from JRF to SRF will be on the basis of the submission of a progress report and further assessment.

Essential Qualification: -

Postgraduate degree in Basic Science or Graduate/Post Graduate in the professional course selected through a process described through any one of the following

a) Scholars 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.

Emoluments and eligibility: - As per DST OM No. SR/S9/Z-08/2018 dated 30.01.2019

Desirable Experience: - 1. Experience in the development of aptamer and gold nanoparticles or clusters.

- 2. Practical Knowledge of nanomaterial fabrication.
- 3. Practical Knowledge of culturing the bacteria.

<u>Responsibilities:</u> - Recruited JRF will work on the development of aptamer and gold nanocluster, development of a new diagnostic platform for detection, fabrication of various sizes clusters.

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

Emoluments: Rs. 31000/- per month Plus HRA as per project.

3. <u>Project Title:</u> "Development of engineered nanomaterials based diagnostic platforms for bacterial detection." (NABI Core)

Principle Investigator: Dr. Nitin Kumar Singhal, Scientist-E

Positions: Research Associate-I (01)

Duration: The RA fellowship is a purely temporary assignment and is tenable for a period of 2 years only, and in exceptional cases, depending upon the progress of the research, the performance, the committee may recommend the up-gradation of RA Levels.

<u>Essential Qualification:</u> Ph.D/MD/MS/MDS or equivalent degree or having 3 years of research, teaching, and design and development experience after MVSc/M.Pharm/ME/M.Tech with at least one research paper in Science Citation indexed (SCI) journal.

Emoluments and eligibility: - As per DST OM No. SR/S9/Z-08/2018 dated 30.01.2019

Desirable Experience: 1. Experience in the development of nanomaterials and biosensor platforms.

2. Practical knowledge of nanomaterial fabrication.

3. Relevant research publications in peer-reviewed journals.

<u>Responsibilities:</u> - Recruited RA will work on the interface of chemistry and biology, and synthesis of nanomaterials, development of a new platform of biosensors.

<u>Age:</u> 40 years (Relaxation is admissible in the case of SC/ST/OBC/PD and women candidates as per GOI instructions)

Emoluments: Rs. 47000/- per month Plus HRA.

<u>4.</u> <u>**Project Title:**</u> "Development of advanced computational tools for multi-omics big data mining." (NABI Core)

Principle Investigator: Dr. Shrikant Mantri, Scientist-E

Positions: Junior Research Fellow (01)

Duration: The appointment will be initially for two years as JRF. Further up-gradation from JRF to SRF will be on the basis of the submission of a progress report and further assessment.

Essential Qualification: -

Postgraduate degree in Basic Science or Graduate/Post Graduate in the professional course selected through a process described through any one of the following

a) Scholars 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.

Emoluments and eligibility: - As per DST OM No. SR/S9/Z-08/2018 dated 30.01.2019

Desirable Experience: - We seek an enthusiastic scholar with a master in Bioinformatics, Computational Biology, Systems Biology, or closely related disciplines with experience and interests in bioinformatics analyses. The project is focusing on improving and developing tools for multi-omics big-data mining. Candidates are expected to have a solid foundation with the Linux/Unix command line and basic programming skills.

<u>**Responsibilities:**</u> 1. Development of bioinformatics tools for nucleic acid and protein sequence and structure analysis.

- 2. Development and use of biological database.
- 3. Multi-omics big-data mining using a high-performance computing cluster.

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

Emoluments: Rs. 31000/- per month Plus HRA as per project.

5. <u>Project Title:</u> "Understanding the molecular basis of selective transport of silicon and arsenic by modulating Nodulin 26-like Intrinsic protein 2-1 (NIP2-1) in rice (Oryza sativa)" (GAP-36)

Principle Investigator: Dr. Rupesh Deshmukh, Ramalingaswami Fellow

Positions: Senior Research Fellow (01)

Duration: Appointment is a co-terminus with the project along with the availability of funds. It will not exceed the project.

Essential Qualification: -

Postgraduate degree in Basic Science or Graduate/Post Graduate in the professional course selected through a process described through any one of the following

a) Scholars 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.

Qualification prescribed above with two years of research experience.

Emoluments and eligibility: - As per DST OM No. SR/S9/Z-08/2018 dated 30.01.2019

Desirable Experience: - Research training in bioinformatics, expertise with molecular dynamic simulations, Generating proper parameters of the force field, molecular biology techniques.

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

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

6. <u>Project Title:</u> "Developing Food-grade soybean using CRISPR/Cas9 mediated multiplex genome editing" (GAP-52)

Principle Investigator: Dr. Humira Sonah, Ramalingaswami Fellow

Positions: Junior Research Fellow (01)

Duration: Appointment is a co-terminus with the project along with the availability of funds. It will not exceed the project.

Essential Qualification: -

Postgraduate degree in Basic Science or Graduate/Post Graduate in the professional course selected through a process described through any one of the following

a) Scholars 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.

Emoluments and eligibility: - As per DST OM No. SR/S9/Z-08/2018 dated 30.01.2019

Desirable Experience: - Experience in Plant Biotechnology, plant tissue culture, soybean or any other plant transformation, genome editing/bioinformatics.

<u>Responsibilities: -</u> Soybean genome editing.

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

Emoluments: JRF (1st & 2nd year): Rs. 31000/- per month + 8 % HRA and from 3^{rd} year Rs. 35000/- per month +8 % HRA.

7. <u>Project Title:</u> "Improvement of seed oil, protein content and nutritional quality in soybean (Glycine max (I.) Merr) (Ramalingaswami Project)

Principle Investigator: Dr. Humira Sonah, Ramalingaswami Fellow

Positions: Project Fellow (01)

Duration: Appointment is a co-terminus with the project along with the availability of funds. It will not exceed the project.

Essential Qualification: - M.Tech/M.Sc. in Biotechnology or equivalent degree in life sciences or B.Tech in Biotechnology or B.Sc. in Agricultural Biotechnology with minimum of 55% marks.

Desirable Experience: - Experience in Plant Biotechnology, Plant Tissue Culture, Plant Transformation, Statistics, Bioinformatics.

<u>Responsibilities:</u> - Maintaining cultures, preparation of media, plant tissue culture, data analysis.

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

Emoluments: Rs. 12000/- per month Plus HRA as per project.

<u>8.</u> <u>**Project Title:**</u> "Gene editing for addressing rancidity in rice bran for enhanced shelf-life"

Principle Investigator: Dr. Rupam Kumar Bhunia, Inspire Fellow

Positions: Project Fellow-I (01)

Duration: The appointment is a co-terminus with the project along with the availability of funds. It will not exceed the project.

Essential Qualification: - M.Sc. in Biochemistry/Biotechnology/Life Sciences or B.Tech in Biochemistry/Biotechnology with a minimum of 55%.

Desirable Experience: - Candidates with experience in working with plant tissue culture and molecular biology techniques (such as RNA isolation, cDNA isolation, PCR) will be given preference.

<u>Responsibilities:</u> - Selected candidate will work in close association with the PI on the project. The candidate will also be responsible to manage the day-to-day activities for the successful execution of the project, designing of the experiments, data analysis.

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

Emoluments: Rs. 12000/- per month Plus HRA as per project.

<u>9.</u> <u>**Project Title:**</u> "Unraveling epigenetic mechanisms triggering cognitive dysfunction in hepatic encephalopathy-role of nutraceuticals"

Principle Investigator: Dr. Aanchal Aggarwal, M K Bhan Fellow

Positions: Project Associate-I (01)

Duration: Appointment is a co-terminus with the project along with the availability of funds. It will not exceed the project.

Essential Qualification: -

Master's Degree in Natural or Agricultural Sciences/MVSc or Bachelor's Degree in Engineering or Technology or Medicine from a recognized University or equivalent.

Emoluments and eligibility as per DST OM No. SR/S9/Z-05/2019 dated 21.08.2019

Desirable Experience: - Experience in working with rodents, especially rats, rodent behavior analysis, surgeries, cell culture techniques, real-time RT-PCR, western blotting, immunohistochemistry, a basic understanding of bioinformatics tools with strong knowledge in basic concepts of neuroscience and biochemistry.

<u>**Responsibilities:**</u> - Selected candidate will work in close association with the PI on the project entitled "Unravelling epigenetic mechanisms triggering cognitive dysfunction in neurodegenerative disorders". The candidate will also be responsible to manage day-to-day activities for the successful execution of the project, designing of the experiments, data analysis, manuscript writing, and progress report preparation.

Age: 35 years (Relaxation is admissible in the case of SC/ST/OBC/PD and women candidates as per GOI instructions)

Emoluments: Rs. 31000/- per month Plus HRA as per project. -

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 25-04-2022 at 09:00 A.M. along with the duly filled application form available on the website 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 25-04-2022.

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