

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

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Positions of Senior Research Fellow & Project Fellow-I

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

1. Name of project: High resolution QTL mapping for iron (Fe), zinc (Zn), grain protein, and phytate content and their introgression in high yielding wheat cultivars

Name of Principal Investigator:-

Dr. Joy K. Roy, Scientist-F National Agri-Food Biotechnology Institute (Mohali)

Duration:-

Till March, 2022)

Project summary:-

This is a NABI's flagship program, which is funded by Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India. The network project "Development of Bio-fortified and Protein-rich Wheat" will be executed in collaboration among seven networkpartners. The project will include i) evaluation of wheat germplasms for Fe, Zn, folate, and grain protein content, starch quality and antinutritional factors, ii) Validation and characterization of available genes/QTLs/markers for micronutrients, iii) Development of mapping populations (F2, RILs, NILs, BCs) for genetic analysis, iv) Development of high density linkage maps and QTL maps using high thoughput SNPs, v) Epistatics interactions

(QTLxQTL, QTL x environment) analysis, and vi) development of wheat varieties with enhanced micronutrient content and enhanced bioavailability and bio-accessibility.

Manpower: - Senior Research Fellow (SRF) 01 Position

<u>Qualification:</u> Post graduate degree in Basic Science Or Graduate/Post Graduate in 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 is as per DST OM SR/S9/Z-08/2018 dated 30th January, 2019

Essential qualification:- Qualification prescribed for JRF with two years of research experience.

<u>Desired Qualification:-</u> Research training in molecular breeding, DNA based_molecular marker development, linkage mapping, QTL mapping, mapping population development (RIL, F2, backcross); experience in microarrays and SNP chips, next gen sequencing and data analysis

Emoluments:- 35,000/-PM+ HRA

<u>Responsibilities:-</u> Crossing for development of pre-breeding and biparental mapping populations for high iron, zinc, low phytate and grain protein content in wheat; development of association mapping panel in wheat for high iron, zinc, low phyate; DNA and RNA extraction; PCR reaction, SSR and SNP genotyping; phenotyping of micronutrients in wheat; qRT-PCR and sequencing; Off-season growing of plants in green house and plant growth chambers and at off-season stations in HP; multi-location field experiments; biochemical analysis; molecular biology works, large scale population analysis, etc.

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

2. **Project Fellow** (One Position)

<u>Project Title:-</u> Development of nanomaterials based biosensors for the detection of pesticides and food contaminants.

Principal Investigator:- Dr. Vanish Kumar, Inspire Faculty, DST

Essential Qualification:-

M.Tech/M.E/M.Sc. or equivalent with minimum 55% marks.

Emoluments :- Rs. 12,000/- per month plus HRA as applicable in Mohali.

<u>Age limit:</u> 28 Years as on date of interview.(Relaxation is admissible in case of SC/ST/OBC/PD as per GOI Instructions)

Application Procedure

All interested eligible candidates should send completely filled application form (Single adobe pdf file) available on institute website through email till $\underline{06.09.2021}$ on email id. recttscholarnabi@gmail.com

Kindly note the following important points:- (Application and Selection process)

- 1. Kindly do not send the hard copy of the application form.
- 2. Incomplete application form and applications that are not in proper format may be summarily rejected.
- 3. The applications should be submitted strictly as per prescribed format that can be downloaded from the NABI website.
- 4. Candidates are also required to send filled synopsis sheet in excel format as available on website to email id mentioned above. recttscholarnabi@gmail.com. Kindly note that synopsis sheet in excel format is mandatory as per prescribed format.
- 5. Candidates applying for more than one position can give their preference in the same application by $\sqrt{}$ multiple positions. No need to submit separate application form for each position.
- 6. Kindly send complete filled application form (Single adobe pdf file) through email only.
- 7. Kindly do not send any documents with application form. Candidates will be provisionally shortlisted on the basis of information given in the application form. All the documents related to eligibility i.e. Age, educational qualification, Net/Gate, Experience etc(in-original) will be verified at later stage before issuing offer/award letter.
- 8. No application form will be accepted after due date i.e. <u>06.09.2021</u>
- 9. Eligible candidates will be informed via email for interview schedule.
- 10. Candidates should ensure that information mentioned in application form is accurate. Once the application form is submitted no further request regarding any changes/ information in the application form will be considered.
- 11. Eligible candidates will be interviewed through video conferencing mode by duly constituted selection committee.
- 12. Qualifications, Age and experience will be reckoned as on the last date for the submission of application form through email i.e. <u>06.09.2021</u>
- 13. Any changes in last date for submission of application forms, procedure for selection, important points etc shall be available only in NABI website. Interested candidates may kindly see the NABI website before applying for the same.

Manager Administration