गणित विभाग



मोतीलालनेहरुराष्ट्रीयप्रौदयोगिकीसंस्थानइलाहाबाद

प्रयागराज - 211004 (भारत)

Mathematics Department Motilal Nehru National Institute of Technology, Allahabad Prayagraj-211004 (India)

Website: http://www.mnnit.ac.in

Advertisement No.: 628/R&C/2023-24 **Date:28/11/2023**

Advertisement for the Post of Junior Research Assistant (JRA) (On Contract)

Applications are invited from Indian nationals and **residents of Uttar Pradesh only** for the post of **Junior Research Assistant (JRA) (on contract)** in research project entitled "Role of small solid particles to control the damage due to strong explosion" (Project ID: 2600), funded by Council of Science & Technology (CST), U.P., sanctioned letter no.: CST/D-1522, dated 26/10/2023.

The duly completed application on prescribed format along with copies of supporting documents and a photo must reach to: The Dean (Research & Consultancy), Motilal Nehru National Institute of Technology, Allahabad, Prayagraj-211004 (U.P.) India on or before 18 December, 2023 (i.e. 21 days from the date of advertisement). The envelope should be superscribed as "Application for the post of Junior Research Assistant (JRA) (on contract) in the research Project entitled "Role of small solid particles to control the damage due to strong explosion". A soft copy of the application should also be sent to gnath@mnnit.ac.in and vivek@mnnit.ac.in email addresses of Dr. Gorakh Nath (PI) and Dr. Vivek Kumar Patel (Co-PI).

Description and Objectives of the Project: Shock waves have immense impact on environment. Shocks regularly arise in nature because of a balance between non-linear wave breaking and wave damping dissipative forces. Many naturally occurring processes like supernova explosion, lightning stroke, solar flares, volcanic and cosmic explosions, Earthquake etc., all involve shock waves. The animals coming in the vicinity of region of impact shock waves would be severely affected and could suffer from haemorrhaging and oedema.

The study of shock waves can be helpful in analyzing risks involved in processes like manmade explosions, blasts in mines, in nuclear power plants, in pencil and petroleum industry, in drag reduction of supersonic flights etc. Thus using the knowledge of shock waves and by monitoring the shock wave strength occasionally the adverse impact on environment can be reduced and shock wave may be used effectively in industry and medical science for mankind. Results of this study would be applicable in drag reduction of supersonic flights, in the field of nuclear power, in pencil, soap and petroleum industry and space research, in the analysis of experimental data e.g.: shocks in supernova explosions; star formation processes description; particles accelerations in shocks, man-made explosion in the Earth's environment, rotational effect of the planets and stars on the process happening in their outer layers, etc.

The position is purely temporary and will be governed by the funding agency rules & service conditions of Office of the Dean (Research & Consultancy), Motilal Nehru National Institute of Technology, Allahabad, Prayagraj-211004 (U.P.) India

Number of Position: 1 (One)

EssentialQualifications: 1. M.Sc. in Mathematics or M.Tech in Mathematics or M.Tech. with specialization in

Fluid Dynamics or equivalent with first class in graduate and post graduate examination.

GATE/NET qualification is preferred.

2. The applicant must be resident of Uttar Pardesh.

Desirable Experience: Research experience in Fluid Dynamics and in any other related disciplines.

Assistantship: Rs. 25,000.00 per month (Consolidated) for first two years [as Junior Research Assistant

JRA)] and Rs 28,000.00 per month (consoliadated) for the last third year [as Senior

Research Assistant (SRA)]

Other Benefits: Candidate selected for the JRA may register for Ph.D. if he/she meets the eligibility

ccritoria of the Institute for Ph.D. admission. The candidates may refer MNNIT website for detailed eligibility criteria. Facility of yearly leave, carryover leave, medical benefits

etc. may be available as per applicable rules of the project staff.

Accommodation may be available as per the availability and the Institute norms.

Upper Age Limit 28 years as on the date 01/04/2023.

Tenure of Appointment: Appointment will be made on contract basis for a period of one year initially, which may

be extended depending on the performance evaluation on yearly basis till the end of project. The tenure of the project is three years which starts from the day of joining of the

JRA. The project may be terminated by the agency at any time.

Note:

- 1. The applicant will be responsible for the authenticity of information, other documents and photographs submitted.
- 2. The Institute reserves the right to accept application at any time, and consider candidates of exceptional credentials without online/offline/ applications or applications. The selection committee has the discretion to restrict the number of candidates to be called for interview to a reasonable limit on the basis of qualification and experience higher than the minimum prescribed in the advertisement or qualification and experience may also be relaxed at any point of time for exceptional candidates.
- 3. Mere, possessing the prescribed qualification does not ensure that the candidate would be called for Interview. The Candidates will be shortlisted on the basis of merit and need of the project.
- 4. Only shortlisted candidates will be informed by e-mail about the interview date. So, the candidate must provide valid e- mail IDs in their applications.
- 5. The mode of interview will be online and informed to the shortlisted candidates only via the email id provided in the application form.
- 6. Applicants in employment (private, government or any other organization) are required to submit a "**No Objection Certificate**" from the employer at the time of interview.
- 7. No TA/DA will be paid for appearing in the interview.
- 8. The candidate is excepted to join immediately, if selected.

Name of Project Investigator (PI) : Dr. Gorakh Nath

Designation :Associate Professor and Head
Department :Mathematics Department



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Mathematics Department

Motilal Nehru National Institute of Technology, Allahabad Prayagraj-211004 (India), Website: http://www.mnnit.ac.in

For office use only						Self Attested	
Application No						nt	
ADDITION FORM					passp	ort	
	<u>A</u>	PPLICATION FOR	<u>V1</u>		size		
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Research Project Entitled:Role of small solid particles to control the damage due to strong							
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	e of P.I.:- Dr. Gorakh Nat						
	e of position: Junior Research		contract)				
	rtment/Section-Mathematics	S					
1.	Name of the Candidate						
	(In Capital letter)						
2	Sex (Male/Female)						
3	Marital Status						
	(Married/Unmarried)						
4	Date of Birth						
5	Age as on last date of	Years _	Months	Days			
	application						
6	Father's/Husband's Name						
7	Present Contact Address						
0	D						
8	Permanent Address						
9	Mobile No						
10	E-mail						
11	Nationality						
12	Category	Gen/SC/ST/OBC/PH	I (enclosed atte	ested conv	y of certificate	a)	
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13	NET/GATE	Validup o	Score/R	ank			
14	Educational Qualification						
10.1	Qualification	Subject/Discipline	Board/Institute/Univ.	Year	% of marks	Div.	
10th							
12th Craduation (P. Tank/PSa/Other)							
Graduation (B.Tech/BSc/Other)							
Post Graduation (M.Sc./							
M.Tech./other)							
Other							

15	Details of Exsignature if n	-	chronological order. E	Enclose a sep	parate sheet duly	y authention	cated und	ler your
Org	anization	Position	Salary/Emoluments	Nature of Duties	Nature of appointment		of Experi Month	
16 Research Publications (Attach list):- if any i) SCI Journal Publications					Numbers			
	on-SCI Journ		nns					
			Seminar/ Symposium Pr	coceeding				
			nar/Symposium Proceed					
17	Any other in	formation						
18	Indicated whether you propose to register for higher degree* at MNNIT, Allahabad. Yes/No (Name of higher degree is Ph.D.)							
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DECLARATION

I hereby declare that all the statements made in this application are true and complete and nothing has been concealed/distorted. I am aware that, if at any time I am found to have concealed/distorted any material information, my engagement is liable to be summarily terminated without notice.

Place:	Signature of the Applicant
Date:	

Enclosure-Self attested copy of documents

- 1. Proof of Date of Birth
- 2. Mark sheets & certificates of all the examination passed
- 3. Category Certificate, if applicable
- 4. Resident Proof of Uttar Pradesh
- 5. NET/GATE score card, if passed
- 6. Experience support, if any
- 7. CV
- 8. Proof of 1st division in UG and PG.

^{*}Those candidate who wish to be admitted as student for higher degree (Ph.D.) must fulfill at least the minimum eligibility for the respective admission as available on the Institute website