### विद्युत अभियंत्रण विभाग मोतीलाल नेहरु राष्ट्रीय प्रौद्योगिकी संस्थान इलाहाबाद प्रयागराज — 211004 (भारत)

## Department of Electrical Engineering MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABAD Prayagraj – 211004 (India)

Advertisement No-09/2021/Project Staff

Dated- 21/10/2021

#### Advertisement for the Post of Junior Research Fellow (On Contract)

Applications are invited from Indian nationals for the post of Junior Research Fellow (on contract) in Indo-Norway Joint research project entitled "Integrated Renewable Resources and Storage: Operation and Management [IReSOpM]", This is a collaborative research project, jointly funded by the Department of Science and Technology (DST) for Indian side and the Research Council of Norway (RCN) for Norwegian side. This project is a consortium of academic institution: UiA along with research company: NORCE in Norway, and academic institutions: MNNIT Allahabad, IIT Kanpur/MMMUT Gorakhpur and NIT Raipur in India.

The duly filled-in application (Soft copy in any form) in prescribed format along with copies of supporting documents (scanned copy) must reach to email ID: <a href="mailto:richa@mnnit.ac.in">richa@mnnit.ac.in</a> [Prof. (Dr.) Richa Negi] with subject of email as: "Application for JRF position in Indo-Norway Project" on or before 11:59 PM, 11 November, 2021. The position is purely temporary and will be governed by the funding agency rules & service conditions of Office of the Dean (Research & Consultancy), MNNIT Allahabad.

#### Project Description:

There is a need for research on flexible interconnection and use of multiple energy forms (wind and solar PV), resiliency of the energy supply and semantic interoperability between different energy subsystems and demand. An increased amount of roof top PVs, and even energy storages (both electrical and thermal), demand side management, heat pumps will pose technical challenge in the distribution network due to change in load flow patterns, the power quality issue, protection, and the voltage, frequency and reactive power control.

Additionally, these multi-interconnected energy resources will inevitably rely on the internet or other network communication of large-scale for part of their operation. The collective research effort on cyber security and physical security have been striding fast and fostering a new area of cyber-physical security for the smart grid. The project objectives are defined under work packages, each lead by these institutions.

The research studies will be in the lines of monitoring and assessment of micro grid and emerging cyber-physical aspects, optimizing the distribution network utilization with energy management, and design of intelligent distribution grids.

#### Objectives of the Project:

The main focus of this work package is on research in the area of networked, distributed and cooperative control. The work package lead by MNNIT Allahabad will focus in the direction of design at control levels and communication between the energy resources in the form of networked control systems.

Number of Position

: 1 (One)

**Essential Qualifications** 

M.Tech. with specialization in Power System/Control &

Instrumentation/Power Electronics having qualified GATE examination in

Electrical Engineering.

Desirable Experience

One year research experience in related area along with relevant

publication if any.

Additional Requirements : The following additional requirements will be advantageous:

Programming skills (Matlab, DigSilient).

• Strong academic skills in publication of research papers in International Journals and/or previous experience in company dedicated to smart grid products development.

• Experience in working on real-time simulators, particularly Opel-RT

Fellowship

₹ 25,000.00 per month (Consolidated)

Other Benefits

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

The candidate may be enrolled in the PhD programme in the Department of Electrical Engineering, MNNIT Allahabad as per existing rules. Facility of yearly leave, carryover leave, medical benefits etc. may be available as per applicable rules of the project staff.

Age Limit : 28 years on the last date of application (The upper age limit is

relaxable up to 5 years in the case of candidates belonging to

SC/ST/OBC/PH and women candidates)

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.

#### 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 applications. Qualification and experience may be relaxed by the Institute at any point of time for otherwise 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. 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. Shortlisted candidates have to present themselves for the interview on the interview date with updated CV and original and attested photocopies of mark sheets/ certificates in support of their academic qualifications. Due to COVID-19, mode of interview for selection process will be informed to candidates on 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 at MNNIT Allahabad.

Name of Principal Investigator : Dr. RichaNegi
Designation : Professor

Department : Electrical Engineering



### अधिष्ठाता(शोध एवं परामर्श) कार्यालय मोतीलालनेहरु राष्ट्रीय प्रौद्योगिकीसंस्थान इलाहाबाद— 211004 (भारत)

# OFFICE OF THE DEAN (RESEARCH AND CONSULTANCY) MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY Allahabad – 211 004 (India)

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

Application No		For	r office use	only		****	
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Sanction letter & Date-Sanction order no INT/NOR/RON/R 00/2010 dated 07 11 2010							nt passpo. Photograp
Fundir	ng Agency: DST,	New Delhi				5120	notograp
Name of P.I. – Prof. Richa Negi							
Name of position- Junior Research Fellow (on contract)							
	ment/Section- Electrica	al Engineering					
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 application	Years _	M	onthsDays			
6	Father's/Husband's Name						
7	Present/Contact Address						
8	Permanent Address			***************************************			
9	Mobile No						
10	E-mail						
11	Nationality						
12	Category	Gen/SC/ST/OBC/PH women	1	(enclosed attested	d copy	of certifica	ate) and
13	NET/GATE	Valid to		Score/Rank			up _
14	Educational Qualification				***************************************		
	Qualification	Subject/Disci	pline	Board/Institute/Univ.	Year	% of marks	Div.
10th or equivalent							
12th or equivalent							
Diploma, if any							
BA/B.Sc./B.E./B.Tech							
M.A./M.Sc.							
M.Phil./M.E./M.Tech*							
Ph.D*							
*Title o	of M.Tech./M.Sc.						

15	Details of Experience in chronological order. Enclose a separate sheet duly authenticated under your signature if necessary						
Organization		Position Salary/Emoluments	Nature of	Nature of appointment	Period Experience	of	
				Duties		Year Days	Month
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16	Research Publication	s (Attach list	):-		Numbers		
SCI	Journals	,					
	SCI Journals						
	national Conference/So						
	National Conference/Seminar ./Symposium Proceeding						
17	Any other information						
18	Indicated whether you propose to register for higher degree* at MNNIT, Allahabad. Yes/No (Name of degree)						

Note:- \*Those candidates who wish to be admitted as student for higher degree must fulfill at least the minimum eligibility for the respective admission as available on the Institute website.

#### **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:		
Date:		

Signature of the Applicant

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. NET/GATE score card, if passed
- 5. Experience certificate, if any

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