Office of the Dean Academic Affairs National Institute of Technology, Srinagar

ADVERTISEMENTNOTICE DATED: 20-05-2019

ONLY FOR ASSISTANT PROFESSORS (TEMPORARY) ENGAGED THROUGH TEQIP

Online applications are invited from Indian citizens for enrolment in Ph.D. Programmes under TEQIP-III (Sponsored Part Time) in the following departments for the Academic session Spring 2019. The advertisement is meant for candidates working in different organizations under TEQIP.

1. PH.D PROGRAMME: SPECIALIZATIONS:

Specializations in Ph.D Programme are listed below:

S.No	Department	Research Specialization
1.	Civil Engineering	1. Reinforced Concrete, Bridge Engineering,
		2. Transportation Engineering
		3. Geotechnical Engineering
		4. Geology and Rock Mechanics / Geosciences
2	Electrical Engineering	A) Power & Energy Systems:-
		This covers the following areas of research:-
		Power System Dynamics & Control, Stand Alone power System, Power system operation
		& Optimization, Renewable energy systems (solar, wind and Hybrid),
		Probabilistic Power System, Uncertainty quantifications, Deregulation, Distributed
		Generation, Applications of Energy Storage Devices to Power System. Flexible AC
		Transmission System, Energy System Planning & Auditing, Loss Allocation, Power
		Systems Stability & Control.
		B) Power Electronics & Electric Drives:-
		This covers the following arrears of research:
		Power Electronics, Power Quality, Improved Power Quality Convertors, Custom Power
		Devices (DSTATCOM,DVR & UPQC), Active Power Filters, Multi-level converters,
		Matrix converters, Electric Drives, Flexible AC Transmission System, Isolated
		Bidirectional DC-DC converters, AC – DC Micro grids, Smart Grids, Special Machines
		& Control, Modulation Techniques, Electric Vehicles, Control of Renewable Energy
		Systems, Variable frequency transformer.
		C) Control & Automation,
		Control Theory, Model Order Reduction of Linear, Non Linear and Parametric systems,
		Finite Element modelling of Distributed Parameter systems, efficient Algorithms for fast
		simulation of power electronics circuits & power systems, vector control of electric
2		drives,
3	Electronics &	Nano Electronics,
	Communication	Machine Learning, Information Theory,
	Engineering	Wireless Communication,
		Biomedical Signal Processing,
		VLSI, Semiconductor Devices,
4	Computer Science	Security and Block Chain Technology, Computer Networks, Machine Learning / Big Data
	Engineering	/ Internet of Things, Algorithms, Computer Networks, IoT, Deep Learning, Biological
		Network and Computational Biology,

5	Information	IoT, Big Data, Machine Learning, AI and Information Security.
	Technology	
6	Mechanical Engineering	Materials Tribology, Bearing Tribology and Synthesis and Analysis of Mechanism, Wear modelling.
		Tribology of advanced ceramics & Nano Ceramics, Life Cycle Engineering. Bio material, Friction Material, Condition monitoring. Machining, Optimization and Modelling.
		Computational Mechanics, FEM, Thermo elasticity and Second Sound Fracture Mechanics and Material Fatigue.
		Aircraft wing vibration, Smart Structures, Finite elements, Material Characterisation. Experimental Fluid Mechanics, Heat Transfer Augmentation, Design of Thermal Systems.
		Engine Design To Meet Future Emission Norms, Turbo-charging And Downsizing Of Spark Ignition Engines. Alternative Fuels For I C Engines. Computational Fluid Dynamic Applications In Engine Design.
		Haptics and Control Systems, MEMS Modeling and Simulation, Fuel Cells (DMFCs) and Membrane synthesis.
		Industrial Engineering and Operations Management, Value Engineering, Project management, Quality control, Decision Sciences, Ergonomics, Innovations and Entrepreneurship, Data mining and Manufacturing Strategies Nano lubrication, Materials, Tribology.
		Smart Structures, Mathematical modelling, Material Characterisation. Haptics, Robotics, Multibody Dynamics, Mechatronics.
		Utilization of Biofuel in I C Engine. Engine Performance, Emission and Combustion Thermal Energy Systems
		Welding, Materials Processing, Machining, Optimization, Production. Composite Materials, Computational Methods, Experimental Fluid Mechanics, Material Characterisation.
		Machinability of Metal Matrix Composites; Conventional and non-traditional machining of composite materials; Materials Characterizations
		Water Generation from Atmospheric air, Desiccant Materials, Low and Medium Temperature Applications of Solar Energy, Biofuel in IC Engine.
7	Chemical Engineering	Membrane, Science & Technology, Pollution Abatement, Energy, Unit Operations, CFD, Modelling and Simulation.

2. ELIGIBILITY FOR ADMISSION TO PH.D PROGRAMME:

I. **Eligibility Requirements:** Admission to a Ph.D Programme shall be open to Indian National who passed the qualifying degree in relevant field with a Cumulative Grade Point Average (CGPA) of at least 6.5 in the 0-10 scale grading system, or not less than 60% marks in the aggregate (taking into account the marks scored in all the subjects of all the recognized university/Institutes examinations conducted during the entire prescribed period for the qualifying degree. However, this prescribed minimum shall be a CGPA of

6.0 or 55% marks in the aggregate for SC/ST candidates. The prescribed qualifying examination is as follows:

- a) For Ph.D in Engineering/Technology Master's degree in relevant field.
- b) For Ph.D in Chemical Engineering Master's degree in relevant field shown as under:

Relevant Degrees for Chemical Engineering

Degree	Description
M.Sc.	Chemistry (Organic/Physical/Inorganic/Analytical/Industrial etc.)
	Pharmaceutical Science or Pharmaceutical Engineering or Pharmacy
	Food Science or Food Engineering
	Biotechnology or Biochemistry
	Environmental Science or Environmental Engineering
M.Tech.	Civil Engineering
	Metallurgy or Metallurgical and Materials Engineering
	Mechanical Engineering
	Agriculture Engineering
	Chemical Engineering
	Biochemical Engineering
	Petroleum Engineering
	Petrochemical Engineering

If the evaluation system in qualifying degree is in both CGPA and Marks. CGPA value will be considered.

In addition to above, candidates should fulfil eligibility criteria as laid down by NPIU vide letter No: NPIU/TEQIP-III/Acad/442 Dated: 5th June, 2018 and as per Institute Rules.

- Admission Procedure: As per Institute Rules.
- Fee structure will be applicable as per Institute policy.
- Important Dates:

Activation of Link for filling online applications = 23^{rd} May, 2019

Last date to submit application forms = 10^{th} June, 2019

Hostel accommodation will be provided subject to availability.

Documents to be uploaded along with application:

- 1. Matriculation Certificate for verification of Date of Birth
- 2. B. Tech/B. E Degree and Marks Sheet
- 3. M. Tech./M.E. Degree and Marks Sheet.
- 4. Migration Certificate (in case a student coming from other University/Institute).
- 6. No Objection cum Service Certificate from the employer (in case of in-service candidates) (The format may be downloaded from Institute website)
- 7. Schedule Caste/Schedule Tribe/Physically Handicapped Certificate/OBC (NCL) certificate.

- 8. Nature of employment, Research experience, publication and other related details.
- 9. GATE/NET /JEST score card (if applicable)

Candidates must produce the following documents at the time of Enrolment.

a) No Objection Certificate & Sponsorship Certificate from the employer.

The candidates have to apply online using the link **nitsriadmission.mastersofterp.in** Candidates are required to pay application processing fee in the form of Demand Draft for Rs: 1500/= (in case of SC/ST candidates Rs: 1000/ only) drawn in favor of Director, NIT Srinagar, payable at Srinagar by or before 10-06-2019. The D.D. details should be uploaded along with the application form and the original D.D. have to be submitted at the time of written test (to be held at NIT Srinagar).

Note: If a candidate desires to apply for Ph. D Programme in one or more Departments, he / she should submit separate APPLICATION alongwith Demand Draft of application fee for each programme.

Applications will be screened by concerned Departments and list of eligible candidates will be put on Institute website www.nitsri.ac.in. All announcements related to admissions will be made through our website. All candidates are advised to keep in touch with the website till the process of enrolment is complete.

Sd/-(Prof. (Dr.) Kowsar Majid) Dean Academic Affairs

No.NIT/DAA/M. Phil / Ph. D/249

Dated: 23-05-2019

Copy for information and n/a to:

- 1. All Deans, National Institute of Technology Srinagar.
- 2. All Heads of the Department, National Institute of Technology Srinagar.
- 3. Coordinator, NIT Camp Classes, Old University Campus, Canal Road, Jammu
- 4. Registrar, National Institute of Technology Srinagar with a request to arrange the publishing of the advertisement in the National and Local Dailies for wide circulation and publicity.
- 5. Dy. Registrar (Accounts), National Institute of Technology Srinagar.
- 6. Associate Dean Examinations, National Institute of Technology Srinagar
- 7. Officer Incharge Institute website with a request to please upload the said Ph. D advertisement notice on Institute website.
- 8. PA to Director, NIT Srinagar for kind information of the Director please.
- 9. Advertisement Notice File for record and reference.
- 10. Dean Academic Affairs, Central University of Kashmir, Nowgam, Srinagar,
- 11. Dean Academic Affairs, IUST, Awantipora, Pulwama,
- 12. Dean Academic Affairs, University of Kashmir, Hazratbal Srinagar,
- 13. Dean Academic Affairs, BGSB, University, Rajouri.