



राष्ट्रीय उन्नत विनिर्माण प्रौद्योगिकी संस्थान
(पूर्व नेशनल इंस्टीट्यूट ऑफ फाउंड्री एंड फोर्ज टेक्नोलॉजी)
हतिया, राँची - 834 003 (झारखण्ड)

National Institute of Advanced Manufacturing Technology
(Formerly National Institute of Foundry and Forge Technology)
Hatia, Ranchi – 834 003 (Jharkhand)

सं No. – NIAMT/GA-70/2022/ 621

दिनांक Date - 10 / 01 / 20 23

**REVISED RELEVANT BRANCH/ SPECIALISATION AND GENERAL INFORMATION
FOR FACULTY RECRUITMENT**

Advertisement No. R/01/2022 [POST – PROFESSOR]

In partial modification of the Advertisement No. R/01/2022, published vide No. NIAMT/GA-70/2022/589, dated 07/01/2023, the Appropriate Branch and Specialization contained in Para – 6 has been revised and points S and T are added in general information contained in para-7 as given below.

6. REVISED APPROPRIATE BRANCH AND SPECIALIZATIONS:

A. Engineering Disciplines:

Discipline	Appropriate Branch (BE / B. Tech. / BS)	Specialization in Ph. D
Foundry Technology	Foundry and Forge Technology/ Foundry Technology/ Materials and Metallurgical Engineering/ Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Methoding of casting, Foundry Tooling and Methoding, Technology of ferrous casting, Technology of non-ferrous casting, Thermodynamics and kinetics of molten metal process, Electrodynamics of molten metal, Liquid metal treatment, Nano metal matrix composites by casting route, Rapid solidification, Advanced mold and core making, Physics of solidification, Micromechanical behavior in cast materials
Forge Technology	Foundry and Forge Technology/ Foundry Technology/ Materials and Metallurgical Engineering/ Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Forging technology/ Forging die design/ Modern forging process/ Modeling and simulation of free forging and closed die forging/ Production/ Advanced Manufacturing Process/ Industrial

	Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Automation & Robotics/ Smart Manufacturing/ Industry 4.0/ Product and Process optimization/ Industrial Engineering
Materials and Metallurgical Engineering	Materials and Metallurgical Engineering/ Metallurgical Engineering	Process Metallurgy (Powder Metallurgy and Deformation, Solidification) Extractive Metallurgy (Ferrous and Nonferrous) Thermodynamics and Kinetics Computational Metallurgy (Modelling & Simulation) Corrosion Engineering, Non-destructive Evaluation Material integrity and Failure analysis Surface Engineering Ceramics (Structural/Functional)
Mechanical and Manufacturing Engineering	Mechanical Engineering/ Production Engineering/ Manufacturing Engineering/ Industrial Engineering/ Applied Mechanics/ Thermal Engineering/ Mechanical Design/ Computer Engineering	Mechanical, Manufacturing, Production, Industrial Engineering, Design, Thermal, Mechatronics

B. Science & Humanities Disciplines:

Discipline	Appropriate Branch (MA / M. Sc. / M. Tech.)	Specialization in Ph. D
Applied Science	Environmental Science/ Environmental Engineering	Air Pollution Control/ Water & Wastewater Treatment Process/ Industrial Waste Management/ Environmental Modelling & Simulation/ Water Resources Planning & System Engineering/ Geo-informatics
	Physics	Experimental condensed matter physics/ Theoretical physics

7. GENERAL INFORMATION:

- S. Fresh appointment beyond the age of 60 years is discouraged expect in the case of candidates with exceptional research, industrial and / or academic career.

- T. Candidates applying from the abroad can be permitted to attend the interview on the request through video conferencing depending on merit. It is mandatory to have personal presence in the interview for the applicants who are residing in India.

Advertisement No. R/02/2022 [POST – ASSOCIATE PROFESSOR]

In partial modification of the Advertisement No. R/02/2022, published vide No. NIAMT/GA-70/2022/590, dated 07/01/2023, the Appropriate Branch and Specialization contained in Para – 6 has been revised and points S and T are added in general information contained in para-7 as given below.

6. APPROPRIATE BRANCH AND SPECIALIZATIONS:

A. Engineering Disciplines:

Discipline	Appropriate Branch (BE / B. Tech. / BS)	Specialization in Ph. D
Foundry Technology	Foundry and Forge Technology/ Foundry Technology/ Materials and Metallurgical Engineering/ Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Methoding of casting, Foundry tooling and methoding, Technology of ferrous casting, Technology of nonferrous casting, Casting design and simulation of casting, Phase field modeling, Modeling microstructural evolution, Multi-scale modeling of the segregation and microstructure to enhance material properties, Micromechanical behavior in cast materials
Forge Technology	Foundry and Forge Technology/ Foundry Technology/ Materials and Metallurgical Engineering/ Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Forging technology/ Forging die design/ Modern forging process/ Modeling and simulation of free forging and closed die forging/ Production/ Advanced Manufacturing Process/ Industrial Automation & Robotics/ Smart Manufacturing/ Industry 4.0/ Product and Process optimization/ Industrial Engineering
Materials and Metallurgical Engineering	Materials and Metallurgical Engineering/ Metallurgical Engineering	Process Metallurgy (Powder Metallurgy and Deformation, Solidification) Extractive Metallurgy (Ferrous and Nonferrous)

		Thermodynamics and Kinetics Computational Metallurgy (Modelling & Simulation) Corrosion Engineering, Non-destructive Evaluation Material integrity and Failure analysis Surface Engineering Ceramics (Structural/Functional)
Mechanical and Manufacturing Engineering	Mechanical Engineering/ Production Engineering/ Manufacturing Engineering/ Industrial Engineering/ Applied Mechanics/ Thermal Engineering/ Mechanical Design/ Computer Engineering	Mechanical, Manufacturing, Production, Industrial Engineering, Design, Thermal, Mechatronics
Electronics and Computer Engineering*	Computer Science and Engineering/ Electronics & Communication Engineering	Artificial Intelligence/ Computer Graphics/ Internet of Things
Electrical Engineering	Electrical Engineering	Power system, Control System/ Electrical machine/ High Voltage Engineering

* For Electronics and Computer Engineering, in addition to BE/B.Tech./BS in relevant branch as above, the applicant must have **ME/M.Tech./MS** in Computer Science & Engineering/ Information Technology/ Software Engineering.

B. Science & Humanities Disciplines:

Discipline	Appropriate Branch (MA / M. Sc. / M. Tech.)	Specialization in Ph. D
Applied Science	Mathematics	Probability/ Statistics/ Pure Mathematics/ Applied Mathematics
	Chemistry/ Applied Chemistry	Inorganic Chemistry/ Physical Chemistry/ Polymer Chemistry/ Material Chemistry
	Physics/ Applied Physics	Experimental condensed matter physics/ Theoretical physics

	Environmental Science/ Environmental Engineering	Air Pollution Control/ Water & Wastewater Treatment Process/ Industrial Waste Management/ Environmental Modelling & Simulation/ Water Resources Planning & System Engineering/ Geo-informatics
--	---	--

7. GENERAL INFORMATION:

- S. Fresh appointment beyond the age of 60 years is discouraged except in the case of candidates with exceptional research, industrial and / or academic career.
- T. Candidates applying from the abroad can be permitted to attend the interview on the request through video conferencing depending on merit. It is mandatory to have personal presence in the interview for the applicants who are residing in India.

Advertisement No. R/03/2022 [POST – ASSISTANT PROFESSOR]

In partial modification of the Advertisement No. R/03/2022, published vide No. NIAMT/GA-70/2022/591, dated 07/01/2023, the Appropriate Branch and Specialization contained in Para – 6 has been revised and points S and T are added in general information contained in para-7 as given below.

6. APPROPRIATE BRANCH AND SPECIALIZATIONS:

A. Engineering Disciplines:

Discipline	Appropriate Branch (BE / B. Tech. / BS)	Specialization (ME / M. Tech. / MS and/or Ph. D)
Foundry Technology	Foundry and Forge Technology/ Foundry Technology/ Materials and Metallurgical Engineering/ Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Foundry Tooling and Methoding, Pattern Development and design, CAD-CAM,3D solid modeling, Advanced casting processes, Ferrous castings, none- ferrous castings, Numerical Modeling of Foundry Processes, IoT applications in Foundries, Rapid solidification, Bulk Metallic Glass, Nanocrystalline materials, levitation melting, additive manufacturing, Design/ production/ Thermal, Advanced Manufacturing Process/ industrial Automation & Robotics, Smart Manufacturing/ Industrial 4.0/ A.I/ ML/ Data Analytics, Advanced Material Processing, Computational Mechanics, CAD/ CAM/ CAE,

		Product and Process optimization, CFD, Instrumentation & Sensors, Fuel Furnace Refractoriness, Thermal Engineering/ Heat transfer/ Fluid mechanics/ CFD, AI, M/c Learning, Big Data in Manufacturing
Forge Technology	Foundry and Forge Technology/ Foundry Technology/ Materials and Metallurgical Engineering/ Mechanical Engineering / Production Engineering/ Manufacturing Engineering/ Industrial Engineering	Design/ Production/ Thermal/ Advanced Manufacturing Process/ Industrial Automation & Robotics/ Smart Manufacturing/ Industrial 4.0/ Advanced Material Processing/ Computational Mechanics/ CAD/ CAM/ Product and Process optimization/ Industrial Engineering/ CFD/ Instrumentation & Sensors/ Industrial Tribology/ Metal Forming Technology/ Fuel Furnace Refractoriness/ AI/ ML/ Data Analytic
Materials and Metallurgical Engineering	Materials and Metallurgical Engineering/ Metallurgical Engineering	Process Metallurgy (Powder Metallurgy and Deformation, Solidification) Extractive Metallurgy (Ferrous and Nonferrous) Thermodynamics and Kinetics Computational Metallurgy (Modelling & Simulation) Corrosion Engineering, Non-destructive Evaluation Material integrity and Failure analysis Surface Engineering Ceramics (Structural/Functional)
Mechanical and Manufacturing Engineering	Mechanical Engineering/ Production Engineering/ Manufacturing Engineering/ Industrial Engineering/ Applied Mechanics/ Thermal Engineering/ Mechanical Design/ Computer Engineering	Mechanical, Manufacturing, Production, Industrial Engineering, Design, Thermal, Mechatronics
Electronics and Computer Engineering*	Computer Science and Engineering/	Artificial Intelligence/ Compiler Design/ Computational Geometry/ Computer Architecture/ Computer Graphics/ Data Analytics/ Data Structures and Algorithms/



	Electronics & Communication Engineering	Discrete Mathematics/ Internet of Things/ Machine Learning/ Operating Systems/
CAD/CAM/CAE^	Mechanical Engineering/ Manufacturing Engineering/ Production Engineering	Computer Aided Design/ Computer Aided Manufacturing/ Intelligent Control and Automation/ Machine Design and Analysis/ Multi-scale and Multi-physics Simulation

* For Electronics and Computer Engineering, in addition to BE/B.Tech./BS in relevant branch as above, the applicant must have **ME/M.Tech./MS** in Computer Science & Engineering/ Information Technology/ Software Engineering.

^ For CAD/CAM/CAE, in addition to BE/B.Tech./BS in relevant branch as above, the applicant must have **ME/M.Tech./MS** in Engineering Design/ Mechanical Design/ CAD/ CAM.

B. Science & Humanities Disciplines:

Discipline	Appropriate Branch (MA / M. Sc. / M. Tech.)	Specialization in MA / M. Sc. / M. Tech.
Applied Science	Mathematics	Probability and Statistics/ Pure Mathematics/ Applied Mathematics
	Chemistry/ Applied Chemistry	Physical Chemistry
	Environmental Science/ Environmental Engineering	Air Pollution Control/ Water & Wastewater Treatment Process/ Industrial Waste Management/ Environmental Modelling & Simulation/ Water Resources Planning & System Engineering/ Geo-informatics
	Materials Science/ Materials Engineering	Fabrication Science and Engineering/ Surface Science and Surface Engineering
Humanities	English	Communicative English/ ELT/ Linguistics

7. GENERAL INFORMATION:

- S. Fresh appointment beyond the age of 60 years is discouraged expect in the case of candidates with exceptional research, industrial and / or academic career.
- T Candidates applying from the abroad can be permitted to attend the interview on the request through video conferencing depending on merit. It is mandatory to have personal presence in the interview for the applicants who are residing in India.


REGISTRAR