

ಮಾನವಸಂಪನ್ಮೂಲವಿಭಾಗ/मानव संसाधन अनुभाग/HUMAN RESOURCES SECTION ಭಾರತೀಯವಿಜ್ಞಾನಸಂಸ್ಥೆ/भारतीय विज्ञान संस्थान/INDIAN INSTITUTE OF SCIENCE

ಬೆಂಗಳೂರು/बेंगलूर/BANGALORE – 560012 ದೂರವಾಣಿ/दूरभाष/TELEPHONE : 2293 2232 ಇ-ಮೇಲ್/ईमेल/E-mail : office.estb@iisc.ac.in

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Engagement of Facility Manager for Additive Manufacturing/ 3D Printing (Metal & Polymer AM)

1. The Indian Institute of Science (IISc), Bangalore, invites applications for the following positions <u>in</u> <u>Department of Design and Manufacturing</u>. The details are as follows:

SI. No.	Post	No. of Vacancies	Qualifications	Monthly Emoluments*
01	Facility Manager for Additive Manufacturing/ 3D Printing (Metal & Polymer AM)	1	A Doctoral degree in Engineering/Technology OR Master of Engineering/Technology in any discipline or Master of Design with at least 2 years of relevant experience OR Bachelor of Engineering/Technology in any discipline with at least 3 years of relevant experience	Up to a maximum of Rs.1,00,000/- per month (consolidated)
Total Post		01		

^{*}Note: Salary will be decided depending on qualification and experience, as well as performance during the Interview

2. Job Prerequisites:

A candidate with good understanding and knowledge in Additive Manufacturing/3D Printing and shall meet the following criteria:

- 1. Should have hands-on experience of working on 3D printers and has familiarity with metal additive manufacturing technologies.
- 2. Should have knowledge of different 3D slicing software
- 3. Should have knowledge about the repair and service 3D Printers.
- 4. Should be able to support development and delivery of concepts based on requirements of end users from various segments like Aerospace, Automotive, Tooling & Medical
- 5. Should have knowledge of how to Convert 2D drawings or conceptual sketches into 3D CAD model
- 6. Should have knowledge of how to convert CAD → CAE and/or CAD → CAM as per requirements
- 7. Should be able to Prepare STL models for 3D printing and estimate the cost for printing using the cost estimation tools.
- 8. Should have knowledge of all process technologies currently being used in 3D printing These include knowledge of the one or more points below:
 - a) Expertise in engineering design of components & BOM study
 - b) Geometric Dimensioning and Tolerancing (GD & T)
 - c) Materials for AM, material study & selection
 - d) Manufacturing process planning
 - e) Various types of AM techniques, and respective pros & cons
 - f) Concept design & topology optimization
 - g) Design for AM (DfAM) methods
 - h) Assembly process and planning
 - i) Methods to simplify assembly or parts

- j) Equipment and methods for post process AM fabricated parts
- k) Multiple concept generation with DfAM approach & part integration
- I) Effect of part orientation in AM & support structure optimization for AM
- m) Software skills related to Additive Manufacturing
- n) Technical Knowledge of equipment hardware in vacuum and inter-gas environment
- 9. Should be able to design and print innovative functional products/prototypes
- 10. Should be able to manage the CAD/CAM/3D print workflow
- 11. Should be able to maintain and track the schedule and work performed in the additive manufacturing
- 12. Should be able to keep a clean, organized, and thoroughly maintained machine and workspace
- 13. Should be able to performs periodic maintenance of the allocated machines
- 13. Must have good computer skills, minimum Microsoft office.

3. Job Profile/Responsibilities:

The Facility Manager-AM will have overall responsibility for the operation of the Metal and Polymer AM facilities spread across the department and whose duties will include:

- Ensuring that items of equipment and support infrastructure are maintained in good operating condition with high up-time through routine maintenance and liaison with suppliers and service providers
- 2. Prepare STL models for 3D printing and estimate the cost for printing using the cost estimation tools
- 3. Support development and delivery of Concepts based on requirements of end users.
- 4. Manage and operate complete 3D Printing workflows on multiple AM machines at same time.
- 5. Participating in collaborative research activities with faculty members and students.
- 6. Managing support staff involved in running facilities
- 7. Maintain a clean and orderly work area.
- 8. Strong interpersonal skills and effective communicator
- 9. Follows standard work methods on assignments and requests guidance for any part making / modification conflicts or gaps
- 10. Maintain and promote a positive and safe work environment
- 11. Support execution to metrics and goals surrounding utilization, scrap reduction, and preventative maintenance and calibration
- 12. Any other duties as assigned from time to time

4. Duration

Engagement is purely temporary on a contract basis, initially for a period of **one year** and renewable annually up to a maximum duration of **five years**, based on the satisfactory performance and requirements of the Institute. Contract tenure will commence from the date of joining. An increment up to a maximum of **10%** annually may be admissible in case of an extension of the contract, based on the performance of the candidate and the recommendation of the Chairperson of the department.

5. Selection Procedure:

The academic performance of the candidate (i.e., marks obtained), will be considered for shortlisting. Shortlisted candidates will be called for an online/in-person Interview.

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INS	INSTRUCTIONS FOR APPLICANTS					
(i)	Subi	ubmission of Online Application				
	(a)	Candidates who are desirous to be considered strictly on the aforesaid terms and conditions may fill out the application form on the link given below duly attaching the required certificates in support of age, category, qualification, marks, disability, and experience on or before 21.03.2024				
	(b)	Link for Applying Online: https://recruitment.iisc.ac.in/Temporary Positions/				
	(c)	No hardcopy submission of the online submitted application is accepted. However, candidates are advised to keep a printout of the online application form for future reference.				
	(d)	The shortlisted candidates will be informed through e-mail about the date & time of the selection process. Candidates are also advised to provide the correct information in their online application.				
	(e)	If required, the electronic mode of interview (Zoom Call/ Microsoft Team) will be conducted and the same will be intimated to the candidates in advance. It is advised that the candidates should be prepared to give interviews in all the medium, if so required.				

(f)	In case the interview is held in person, no TA/DA shall be paid for attending the interview.	
(g)	Candidates may please ensure that they are fulfilling all the requisite criteria prior to registering, failing which, their candidature is liable to be rejected/cancelled.	

(ii)	Gene	neral Instructions		
	(a)	The Candidate must possess the essential prescribed qualifications on or before the last date of		
		submitting the application.		
	(b)	Candidate, if selected, must join immediately and no later than four weeks after the offer of		
		appointment is received.		
	(c)	Qualifications other than one prescribed in this advertisement will not be accepted.		
	(d)	Engagement on a contract basis would be subject to medical fitness.		
	(e)	Except the consolidated and fixed emoluments, no other benefits will be extended.		
	(f)	The contract can be terminated at any time by giving one month's notice, by either side.		
	(g)	Candidature/contract of candidate(s) submitting false certificates or suppression/submission of		
		incorrect information shall be liable for termination/disqualification/rejection at any stage.		
	(h)	Prescribed educational qualifications and experience are the minimum eligibilities required and		
		the mere fact that a candidate possesses the same shall not entitle him/her for being called for		
		a written test/interview. The Institute reserves the right to restrict the no. of candidates admitted		
		for the interview to a reasonable number, based on qualifications and/or experience.		
	(j)	Applications should be sent well in advance, without waiting till the last date.		
	(k)	Call letters to attend written test or interview or both will be sent only to the shortlisted		
		candidates by e-mail. Candidates are required to check their registered e-mail ID frequently. No		
		correspondence will be made with applicants who are not short-listed/not called for the		
		interview.		
	(1)	The Institute reserves the right to reject any application without assigning any reason. The		
		Institute also reserves the right to cancel the advertisement/ recruitment at any stage without		
		assigning any reasons. No correspondence will be entertained in this regard.		
	(m)	The Institute reserves the right to verify the antecedents or documents submitted by the		
		candidate at any time during the service. In case it is found that the documents submitted by the		
		candidate are not genuine, then his/her services shall be terminated, and disciplinary/criminal		
	1.1	proceedings will be initiated.		
<u> </u>	(n)	No accommodation will be provided on the Institute campus during the course of their stay.		
	(o)	The candidates have to appear for the interview during the selection process at their own cost.		
	(p)	Only Indian nationals need to apply.		
	(q)	The decision of the Institute on the result of the recruitment would be final and binding on all		
		candidates.		

Date: 01.03.2024 Registrar