INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING, KANCHEEPURAM



भारतीयसूचनाप्रौद्योगिकीए अभिकल्पनाएवंविनिर्मानसंस्थानए कांचीपुरम

# (An Institution of National Importance under MHRD, Government of India) Melakkotaiyur, Off Vandalur-Kelambakkam Road, Chennai-600127

Ph: +91 44 2747 6393 Fax: +91 44 2747 6301

Email: sricce@iiitdm.ac.in

Advt. No: IIITDMK/PR/JRF/A13/2023

Date: 05.06.2023

## **Advertisement for Junior Research Fellow**

Indian Institute of Information Technology Design and Manufacturing (IIITDM), Kancheepuram is an Institution of National Importance established in 2007 by the Ministry of Human Resource Development, Government of India and is located at outskirts of Chennai (Off Vandalur-Kelambakkam Road). It is a Centre of Excellence for pursuing Design and Manufacturing Oriented Engineering Education and Research and for promoting competitive advantage of Indian products in global markets.

IIITDM Kancheepuram is presently offering undergraduate, postgraduate, dual-degree programmes in the areas of Computer Science, Electronics, Mechanical Engineering and Inter-Disciplinary Ph.D. programmes in core and applied areas of basic sciences (Physics and Mathematics) and engineering. It functions with the vision to groom engineers with design and manufacturing skills. The institute gives significant amount of emphasis for practice courses and theory concepts are also explored along with the relevant laboratory course.

Name of the Research Project	A Framework for Steiner tree, Domination, and its variants in Convex graphs - Computing and Complexity Study
Duration of the project	36 months(Aug 2023 – July 2026)
Duration of Appointment	Initially One year. May be extended
Name of the principal Investigator	Dr N. Sadagopan, Associate Professor, Department of CSE
Funding Agency	NATIONAL BOARD FOR HIGHER MATHEMATICS Department of Atomic Energy, Government of India
Name of the Project Position	Junior Research Fellow
	B.E/B.Tech in CSE/IT or M.E/M.Tech in CSE/IT and related areas.
Qualification	A good knowledge in Discrete Mathematics, Algorithms and Programming are essential.
Age	Below 30 years
Stipend (Consolidated)	Rs. 31,000 p.m (first 2 years) and Rs. 35,000 (third year); Payment of stipend is subject to the release of fund by NBHM

IIITDM Kancheepuram invites **online application** for the following research project position:

- 1. Online application only accepted. No need to send a hard copy of the application.
- 2. Candidates need to apply through institute website.
- 3. Indian Nationals need to apply.
- 4. The candidates are required to work mainly for the success of the project.
- 5. The position is temporary.
- 6. Candidates should bring self-attested copies of the relevant certificates/testimonials along with the original certificates/documents at the time of interview.
- 7. No travelling or any other allowances is admissible for attending the interview.
- 8. The Institute reserves the right not to fill up the position, if it so decides.
- 9. The Institute reserves the right to terminate the appointment at any time before completion of the period, if it so decides.
- 10. No interim correspondence will be entertained.
- 11. Canvassing in any form will lead to disqualification.
- 12. Shortlisted candidates will be intimated through email.
- 13. Shortlisted candidates will have to appear for a written test and interview.
- 14. Last date for submission of online application is June 27, 2023

#### Date of Written Test and Interview: July 5, 2023, 10.00 AM.

#### Place of Written Test and Interview\*:

### Indian Institute of Information Technology Design and Manufacturing, Kancheepuram

Melakkottaiyur, Off Vandalur-Kelambakkam Road, Chennai-600127 Contact No: 044-27476393/\_\_\_\_ Email: sricce@iiitdm.ac.in/sadagopan@iiitdm.ac.in

Sd/x

Dean (SR)

**IIITDM Kancheepuram** 

\*Syllabus for the written test

Discrete Mathematics: Sets, Relations, Functions, Graphs, Basic Proof Techniques.

Data Structures and Algorithms: Elementary Data structures: Trees, Heaps, (Balanced) Binary

Search Trees, Sorting, Searching, Graph Algorithms (Minimum Spanning tree, shortest

path) and Time Complexity Analysis.