Department of Mechanical Engineering

National Institute of Technology Karnataka, Surathkal

02 ANSYS-ENTUPLE Postdoctoral Fellowship Positions

National Institute of Technology Karnataka (NITK) invites applications for the **Postdoctoral fellowship (PDF)** positions in the department of mechanical engineering. These positions are sponsored by **ANSYS-ENTUPLE**.

Number of Positions: 02

Remuneration: Rs 50,000/month (with contingency Rs 30,000/year. HRA is not provided under this scheme)

Application Last Date: 30th Nov 2022

Fellowship Duration: 01 Year (extendable subjected to availability of funds)

Note: An individual candidate can apply for both the positions, **separately**.

A detailed description for **each** PDF position is given below:

Postdoctoral Fellowship – 1 (PDF-1)

Project Title /Theme	Design optimization and thermal management of electric motors applied to electric vehicles Theme: EV Motors
Faculty (with email)	Dr Poornesh Kumar Koorata, (kpkoorata@nitk.edu.in)
Essential Qualifications	PhD in Mechanical Engineering or Electrical Engineering or Control Engineering or related field.
Required Skills	• Experience of working in ANSYS maxwell/MotorCAD/Fluent or Matlab EMDtool • Fundamental understanding of electromagnetics or electromechanics or Electrical machine vibrations • Extensive understanding of BLDC and Reluctance motor design • Knowledge of working in thermal management solutions • Knowledge of NVH (Noise and Vibration) analysis is highly desirable
How to Apply	The candidates opting for **PDF-1** should email their detailed CV to **kpkoorata@nitk.edu.in** with subject line **'Postdoctoral Application for PDF-1'**

Postdoctoral Fellowship – 2 (PDF-2)

Project Title /Theme	Design and optimisation of efficient Battery Thermal Management System (BTMS) based on Flow Boiling
Faculty (with email)	Dr. A. Sathyabhama, Associate Professor, Department of Mechanical Engineering, NITK Surathkal Email: sathyabhama@nitk.edu.in
Essential Qualifications	PhD in Mechanical Engineering/Chemical Engineering or any other related field
Required Skills	Essential Skills: (i) Prior knowledge and hands-on experience on transient heat transfer analysis using ANSYS-Fluent. (ii) Prior knowledge of geometry modelling (Spaceclaim/Workbench) and meshing Fluent-Mesher, ICEM-CFD, Workbench. (iii) Prior experience of using/editing UDF, UDS. Desirable Skills: (i) Experience of designing battery thermal management systems. (ii) Understanding of Electro-Chemistry of electric batteries. (iii) Experience of adjoint solver will be surplus
How to Apply	The candidates opting for **PDF-2** should email their detailed CV to **sathyabhama@nitk.edu.in** with subject line **Postdoctoral Application for PDF-2**