

Department of Mechanical Engineering

National Institute of Technology Karnataka, Surathkal

One JRF Position in PEM Fuel Cell Research

National Institute of Technology Karnataka (NITK) invites applications for two Junior Research Fellowship positions in the area of Computational Fluid Dynamics with expertise in two-phase or multiphase flow simulation; **'OR'** In the area of Computational Solid Mechanics.

Description:

Applications are invited for one Junior Research Fellow (JRF) positions for SERB sponsored project on polymer electrolyte fuel cells (PEFCs). The candidate will work on building advanced computational models where writing user-defined code may be necessary (ANSYS Fluent - UDF); **'OR'** The candidate with solid mechanics specialization shall be able to use user subroutines in ABAQUS.

Essential Qualifications: B.E/B.Tech in Mechanical Engineering with a minimum of 60% aggregate score (6.5/10 CGPA) and M.Tech/M.E in Mechanical Engineering or Materials Engineering with a minimum of 60% aggregate score (6.5/10 CGPA). Those who are appearing for M.Tech/M.E last semester may also apply. Proof of M.Tech/ M.E certificate has to be provided during the time of interview. A good GATE score is highly desirable.

Required Skills:

Strong fundamentals of theoretical fluid mechanics and computational CFD especially on multiphase flow is highly desirable. An advanced degree and prior research experience in the area of computational modeling with background of conducting experiments would also be a big plus (related to PEFC). Experience in fuel cell research including MEA fabrication is highly desirable.

'OR'

Strong fundamentals of continuum mechanics and computational solid mechanics especially on polymer mechanics. An advanced degree and prior research experience in the area of computational modeling with some background of conducting experiments would also be a big plus (related to PEFC). Experience in fuel cell research including MEA fabrication is highly desirable.

Remuneration: Rs 30,000/month (as per DST-SERB norm)

Application Last Date: 20^h Oct 2020

How To Apply: Email your profile along with scanned copy of your certificates and previous work experiences to Dr Poornesh K Koorata (Assistant Professor, Dept of Mechanical Engineering, NITK) to the following e-mail address: kpkoorata@nitk.edu.in. **Do not forget to mention your previous publications and experience in coding (Ansys fluent OR abaqus).** Only shortlisted candidates will be intimated by email and called for interview.

Note: The selected candidate is entitled to register for Ph.D. at NITK, Surathkal.