

Dr. Jacob Koshy Mulamootil

Assistant Professor
Mechanical Engineering Department, NIT Calicut

Broad area of Research: Applied Fluid Dynamics and Heat Transfer

Research topics/projects:

1. Non-Boussinesq effects in non-Newtonian convective heat transfer
 - Preferred skillset: Basic knowledge in CFD (e.g. UG level course)
2. CFD based optimization studies in the development of flow batteries
 - Preferred skillset: Basic knowledge in CFD (e.g. UG level course)
3. Bio-inspired Heating and Ventilation systems
 - Pre-requisite: completed UG degree in Mechanical Engineering
 - Preferred: PG degree in Thermal / Fluid sciences



Dr. Jacob Koshy Mulamootil joined as Assistant Professor in the Mechanical Engineering Department of NIT Calicut in August 2022. Prior to joining, he was an Institute of Eminence post-doctoral research fellow at IISc Bangalore in the Combustion & Spray Laboratory (CSL). He completed his B.E. degree in Mechanical Engineering from R.V. College of Engineering (VTU), Karnataka. Following a two-year stint working in the industry for ABB Limited, Dr. Jacob pursued his masters and doctoral degrees from the Indian Institute of Technology Kharagpur. His doctoral thesis focused on the significance of non-Boussinesq effects in natural convection of non-Newtonian fluids. His current research interests include the numerical and experimental studies of multiphase flows, heat transfer, and single phase flows of rheologically complex fluids.