



Mr. Nikhil Babu P

Assistant Professor, Mechanical Engineering

Education Summary

- PhD Mechanical Engineering (Thermal Science), NIT Calicut & DRDO NPOL Kochi, 2021– Present (Pursuing)
- Master of Technology (Thermal Power Engineering) from Mar Athanasius College of Engineering, Kothamangalam, 2015-2017
- Bachelor of Technology (Mechanical Engineering) from Sree Narayana Guru College of Engineering and Technology, Kannur University, Kannur, 2010-2014

Employment History

- Project Engineer at NPOL Kochi (DRDO) through Lama Enterprises, Kochi from 26/02/2026 to 24/07/2026 (5 months)
- Research Fellow through MHRD (now MoE) - sponsored research at NPOL Kochi (DRDO) from 03/05/2022 to 25/02/2026 (3 years and 9 months)
- Assistant Professor at KPR Institute of Engineering and Technology, Coimbatore, India from 20/05/2019 to 12/01/2021 (1 year and 7 months)
- Assistant Professor at Vimal Jyothi Engineering College, Kannur, Kerala, India from 02/05/2017 to 05/12/2018 (1 year and 7 months)

Journal/Papers Published

- “Design Fabrication and Calibration of a Five Hole Pressure Probe for Measurement of Three-Dimensional Flows”, Global Journal and Development Journal for Engineering, 2(5),102-114, 2017
- “Design and fabrication of NACA 0018 straight-bladed vertical-axis wind turbine”, 2020, IOP Conference Series: Earth and Environmental Science <https://iopscience.iop.org/article/10.1088/1755-1315/573/1/012047>
- “Energy efficient refrigeration system with simultaneous heating and cooling and Design and Fabrication of efficient VAW Turbine”, Materials Today: Proceedings, 2021 <https://doi.org/10.1016/j.matpr.2021.03.072>
- “Flow characteristics and Effect of Orifice Diameter on Hydrodynamic Cavitation,” Lecture Notes in Mechanical Engineering. Springer Nature Singapore, pp. 475–480, 2023 https://doi.org/10.1007/978-981-19-6270-7_79

- “Analyzing Cavitation in Marine Propeller: A Computational Approach with Consideration for Polymer Applications”. Journal of Polymer and Composites; 12(08):29-44, 2024 <https://doi.org/10.37591/JOPC.v12i08.181252>
- “Cavitation Bubble Collapse over a Solid Surface: A Numerical Approach Incorporating Surface and Flow Variations” Fluid Dyn 60, 121, 2025. <https://doi.org/10.1134/S001546282560213X>

Areas of Interest

- Thermal Engineering
- Heat and Mass Transfer
- Computational Fluid Dynamics
- Numerical simulations using ANSYS Fluent software
- Cavitation modeling and prediction

Achievements

- GATE Qualified (2015)
- College topper in B. Tech mechanical engineering with 79.2% (2010-2014 batch) and University rank – 5th
- Certified with ANSYS MECHANICAL (APDL) from PRO CAD Academy (ISO Certified) with an A grade
- Associate Member in Institution of Engineers (IE) (India)
- Conducted National Conference on “Technological Advancements in Materials and Manufacturing for Industrial Environment – TAMMIE 2020 on Recent advancements in materials and manufacturing at KPRIET, Coimbatore