Dr. NITHESH K. G

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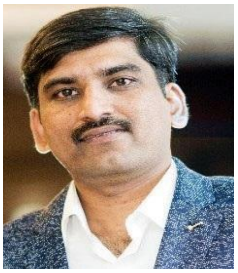

Education

Sl.No.	Degree	Year	Institute	Specialization
1	Ph.D.	2017	Indian Institute of Technology IIT- Madras	Turbines for Ocean Thermal Renewable Energy
2	M.Tech	2008	Siddaganga Institute of Technology SIT-Tumkur	Thermal Power Engineering
3	B.E	2004	The National Institute of Engineering N.I.E- Mysore	Mechanical Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	27-7-2017 Till date	Assistant Professor	SIT Tumkur
2	18-12-2009 to 5-1-2011 & 2-1-2013 to 26-7-2017	Ph.D Scholar Teaching- Research MHRD Scholarship, Govt.of India	IIT Madras
3	6-1-2011 to 1-1-2013	Project Scientist-II	National Institute of Ocean Technology- Chennai, Ministry of Earth Sciences Govt of India
4	18-02-2009 to 16-12-2009	Lecturer	M.V.Jayaraman College of Engineering, Bangalore
5	25-08-2008 to 17-02-2009	Lecturer	Alpha College of Engineering, Bangalore
6	22-12-2005 to 2-09-2006	Contract Production Engineer	ALH, Final assembly, Helicopter division, HAL, Bangalore

7	6-9-2004 to 28-10-2005	CAD Engineer	Softpro software Professionals Pvt ltd, Bangalore

(Please fill in reverse order. Current designation should be at the top)

Positions held

- Mini-project Coordinator, Dept. of Mechanical Engineering, Siddaganga Institute of Technology, SIT-Tumkur.
- Faculty Coordinator, MOMENTUM 2024, Department of Mechanical Engineering, SIT Tumkur.
- Team lead for 75kWe OTEC project, EFW Group, NIOT Chennai.
- Test Coordinator Dept. of Mechanical Engineering, M.V.Jayaraman College of Engineering, Bangalore.

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

Affiliations of Professional organizations

- International Association of Engineers, IAENG Member
- Life member of AMIE
- Life member of ISTE
- Life member of FMFP
- Life member of InDA Bombay

Awards and Honors

- ADARSH VIDHYA SARASWATHI RASHTRIYA PURASKAR
  Global Management Council National Award of Excellence 2020
- INTERNATIONAL PLATFORM ON OCEAN ENERGY FOR YOUNG RESEARCHER- 2017
  Institute of Ocean Energy, Saga University, Japan
- INVITED RESEARCH SCHOLAR TO KMOU S.KOREA
  Korea Maritime & Ocean University
- Ph.D Scholar, HTRA-MHRD Scholarship, Govt.of India.

Courses Taught

Undergraduate Courses

- Basic Thermodynamics
- Applied Thermodynamics
- Heat & Mass Transfer
- Turbo machinery
- Energy Conservation and Auditing
- Introduction to CFD

- Gas dynamics and Propulsion
- Refrigeration and Air conditioning
- Hydraulics & Pneumatics
- Elements of Mechanical Engineering
- Introduction to Mechanical Engineering
- Mechanical Vibration
- Strength of Materials
- CAED
- Energy/BTD lab
- Heat transfer Lab

Postgraduate Courses

- CFD
- Theory of steam turbines
- CFD lab

Research Areas

- Ph.D. thesis is about the design and optimization of OTEC turbines.
- CFD applications in thermal turbo machinery.
- ORC cycles and waste heat recovery.
- Renewable energy (OTEC, geothermal).
- Design of power plant components such as turbines and heat exchangers.
- Turbines for Brayton cycles.
- Turbines for rocket turbo-pump applications.
- Two-phase flow heat transfer.
- Optimization

Completed Projects:

1. Title: CFD Approach to Predict the Performance Characteristics of Radial Turbine Designed for Low Thermal Energy Conversion Power Plant Applications
   Funding Agency: VGST RGS/F Project Scheme, VGST Govt of Karnataka
   Amount: 5 lakhs
   Duration: 2020 - 2021
   Role: Principal Investigator

Publications

Journals

- Thiyagarajan, Prem Kumar, **Nithesh Kumble Gokuldas**, Srinivasa G, Avinash Kumar Rajendran, Kavin Selvan Saravanakumar, Mohanaharish Vasudevan, Mohith Kannan, C.Durga Prasad, and Adem Abdirkadir Aden. “Investigating the combinations of operating parameters of PEMFC

computational results using the Taguchi method." International Journal of Thermofluids, March 1, **2025**, 101162. https://doi.org/10.1016/j.ijft.2025.101162.

- **Nithesh, K. G.,** D. C. Savitha, R. Avinash Kumar, S. Deepankumar, and Sridhara N. Marathe. "Comparison of mathematical modeling to determine the fanning friction (f) and colburn (j) factors for an offset strip compact heat exchanger." International Journal on Interactive Design and Manufacturing (IJIDeM) 18, no. 6 (July 9, **2024**): 4255–62. https://doi.org/10.1007/s12008-024-01959-z.
- Prakash Kumar,C. Manjunatha,K R Varun,Nagaraja K.C,Piyush Kumar Soni ,R. Suresh Kumar,Chandan Prasad, **K. G Nithesh** "Optimization of processing parameters and wear performance of B4C reinforced AA6061 composites through TaGUCHI methodology," *Journal of the Institution of Engineers (India) Series D*, Jul. **2024**, doi: 10.1007/s40033-024-00792-8
- Naman A, Kamle A, Sahu K**, Nithesh KG**. CFD Approach to Evaluate Pin-Fin Performance for Forced Convection Heat Transfer. *Journal of Mines, Metals and Fuels*. **2023** Dec 30:27-37.
- **K. G. Nithesh**, D. Chatterjee, C. Oh, and Y.-H. Lee, "Design and performance analysis of radial-inflow turboexpander for OTEC application," *Renewable Energy*, vol. 85, pp. 834–843, Jul. **2015**, doi: 10.1016/j.renene.2015.07.018.
- **K. G. Nithesh**, D. Chatterjee, C. Oh, and Y.-H. Lee, "Design and performance analysis of radial-inflow turboexpander for OTEC application," *Renewable Energy*, vol. 85, pp. 834–843, Jul. **2015**, doi: 10.1016/j.renene.2015.07.018.

Conference Proceedings

- **N. K. Gokuldas *et al.***, "Fluid flow analysis of a mine ventilation axial fan using CFD techniques," in *Lecture notes in mechanical engineering*, **2025**, pp. 469–481. doi: 10.1007/978-981-97-7388-6_39.
- Aman Raj and **Dr. Nithesh K G**, "CFD Technique to Analyze Flow through Venturimeter" conference ICRDME **2022**.
- **K.G. Nithesh**, Abdus Samad , Integrated CFD-Surrogate Optimization to Enhance Efficiency of Turbine Designed for OTEC.European Seminar on Computation, Pilsen, Czech Republic, **2016**.
- **K.G. Nithesh**, Dhiman Chatterjee, Numerical prediction of performance of 75-kWe radial turbine for OTEC application, ASME ORC **2013**, 2nd international seminar on ORC Power system, Rotterdam, The Netherlands.
- **K.G. Nithesh,** Dhiman Chatterjee, Purnima Jalihal Design and numerical prediction of performance of a radial inflow turbine for OTEC application 5 th International Symposium on Fluid Machinery and Fluids Engineering (ISFMFE 2012), Year **2012**.

Book Chapters

- Light Weight Materials for Electric Vehicles: Sustainable Materials, Production Process, and Modeling Techniques (accepted), **2025**, CRC Press, Taylor & Francis Group.

Books

- Title: Basics of Thermal Engineering
  Authors: Dr Krishnakumar Gupta, Dr Sudarshan TA, **Dr K G Nithesh** & Mr Sumit Subhash Kalmegh
  Publisher: REST Publisher
  ISBN: 9788197564031
  Year: 2024
- Title: Heat and Mass Transfer (HMT)
  Authors: **Nithesh K G**, Savitha D C, Akshay G M
  Publisher: LAMBERT Academic Publishing, International.
  ISBN: 9786208222871
  Year: 2024
- Title: IC Engines
  Authors: Dr. Praveen Kumar MV, Dr. Suresha P, **Dr. K G Nithesh** & Dr Vijayavardhan C
  Publisher: Scientific International Publishing House
  ISBN: 9789366749167
  Year: 2025

Editor/ Reviewer of Journal

- Reviewer of FMFP 2023, the 10th International and 50th (Golden Jubilee) National Conference on Fluid Mechanics and Fluid Power.
- Reviewer for Results in Surfaces and Interfaces, Elsevier journal.
- Reviewer for IJIDeM, Springer Journals.
- Reviewer for ICRDME-2022
- Reviewer for Journal of Thermal Engineering.

Patents

- Compact Heat Exchanger With Enhanced Thermal Efficiency,
  Patent No. 423775-001, Indian Patent Granted, 2024
- Pipe and Hose Multi Port Connector, Patent No. 428650-001, Indian Patent Granted 2025

Invited Lectures, talks and workshops

- In-house workshop on report writing & documentation using Latex to the MED student fraternity.