



## **Dr. Sijo M. T.**

Professor & Head, Department of Mechanical Engineering, CCE, IJK.

### **Administrative Responsibilities**

---

- Head of the department
- Academic Coordinator (First Year)

### **Education Summary**

---

- PhD. in “Composite Materials”, Calicut University, GEC Thrissur
- M. Tech. in “Production Engineering”, CUSAT (First class with Distinction)
- B. Tech. in “Mechanical Engineering”, Calicut University, GEC Thrissur (First class with honours)

### **Employment History**

---

- Christ College of Engineering, Irinjalakuda, Kerala, from July 24, 2017 to date, has been promoted as a professor in the department of Mechanical Engineering (December 28, 2020).
- SCMS School of Engineering & Technology, Karukutty, Kerala, from 1/08/2006 to 21/07/2017, as Assistant Professor in the department of Mechanical Engineering.
- GEC Thrissur, Kerala, From 20/1/2004 to 31/7/2006, as Guest Lecturer in the department of Mechanical Engineering

### **Journal/Papers Published**

---

- “Simulation of mushy state solidification in stir casting”, World Journal of Engineering, February 2018.
- “Numerical simulation of centrifugal casting for functionally graded metal matrix composites”, IJMET, April 2017.
- “A Numerical Study on Stir Casting Process in A Metal Matrix Composite Using CFD Approach” Advanced Materials Research, April 2015.

- “Effect of silicon carbide percentage on fracture toughness of aluminium silicon carbide metal matrix composites”, IJRET: International Journal of Research in Engineering and Technology, Nov- 2014.
- “Effect of Carbon Nanotubes Addition on Fracture Toughness in Aluminium Silicon Carbide Composite”, International Journal of Engineering Research and General Science October- November, 2014.
- “Analysis of Inventory Control Techniques A Comparative Study”, International Journal of Scientific and Research Publications, March 2013.
- “Electricity Generation from Footsteps A Regenerative Energy Resource”, International Journal of Scientific and Research Publications, March 2013.
- “Controlling Measures to Reduce Rejection Rate due to Forging Defects”, International Journal of Scientific and Research Publications, March 2013.
- “Industrial Safety and Accident Prevention A Managerial Approach”, International Journal of Science, Engineering and Technology Research (IJSETR), February 2013.
- “Implementation of JIT in industries A Case Study”, International Journal of Science, Engineering and Technology Research (IJSETR) February 2013.
- “Cargo Loading Using Dynamic Programming and Comparative Software Study”, International Journal of Science, Engineering and Technology Research (IJSETR) February 2013.
- “Investigation of Mechanical Properties and Grain Structure of 5xxx Aluminium Alloys under Precisely Controlled Annealed Conditions”, International Journal of Scientific and Research Publications, January 2013.
- “Taguchi Method for Optimization of Cutting Parameters in Turning Operations”, AMAE Int. J. on Manufacturing and Material Science, May 2011.
- “Characterization of Stir Cast Aluminium Silicon Carbide Metal Matrix Composite” Materials Today: Proceedings, IConAMMA, Jan 2018.
- “Analysis of stir cast aluminium silicon carbide metal matrix composite: A comprehensive review”, Procedia Technology, PDME, Jan 2016.
- “Optimisation of machining parameters using particle swarm optimisation and comparison with genetic algorithm”, Second International conference on materials for the future Feb 2011.
- “Characterization of Centrifugally Cast Aluminium Silicon Carbide Metal Matrix Composite”, IC@MACE-2020, March 2020

## **Specialized Trainings**

---

- Completed MOOC on CFD and Robotics.

## **Areas of Interest**

---

- Machine Design, CFD, Composite Materials, Theory of Machines.

## **Achievements**

---

- Faculty Coordinator, International Conference on Emerging Trends in Mechanical and Materials Engineering - 2021, (ICEMME-'21), held at Christ College of Engineering.
- Recognised reviewer in peer reviewed international journals of ASME. Reviewer of conference papers of ICCCE 2017.
- Successfully guided and completed 7 PG students Thesis in “Production and Industrial Engineering”
- stream Conference chair of KETCON 2018 Fluid and Thermal stream held at Sahrdaya College of Engineering and Technology, Kodakara. Feb 2018 , Talk Delivered
- Metal Matrix Composites- An Overview’ at First National Symposia on Advanced Materials and Processing organised by Department of Mechanical Engineering, Government Engineering College Palakkad, on 21st January, 2017 Talk Delivered
- Optimisation Techniques – Taguchi method” at New paradigms in Mechanical Engineering organised by department of mechanical Engineering, SSET, Karukutty on 18th September 2010.
- Kerala Technological University Guideship (2022-2023)