

# **FACULTY PROFILE**



**Mr. Vinothraj.U.T, M.E., (Ph.D)**  
Assistant Professor- Mechanical

## **HIGHLIGHTS:**

- Number of Research Publications: 08
- H-Index: 04

## **PROFESSIONAL LINKS:**

- Scopus ID: 59129266000
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=59129266000>
- Google Scholar ID: <https://scholar.google.com/citations?user=FHekeKcAAAAJ&hl=en>
- Anna University Faculty ID: 323966
- AICTE Faculty ID: 7824250809
- LinkedIn: <https://in.linkedin.com/in/vinothraj-u-t> .
- ORCID : <https://orcid.org/0000-0002-7224-0658>

## **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 05 Years
- Industrial Experience: 02 Years

## **AREA OF SPECIALIZATION:**

- Additive Manufacturing
- Computer-Aided Design
- Metal Matrix Composites
- Material Characterization.
- Tribology

## CERTIFICATIONS:

- Auto cad
- Pro-E
- Computer hardware and maintenance

## INTERNATIONAL EXPOSURE:

- Received “**Best Paper Award**” at the Global Congress on Manufacturing and Management (**GCMM-2023**) conference, University Technology Malaysia.
- Presented a paper at the Global Congress on Manufacturing and Management (**GCMM-2022**) conference, Auckland University of Technology, New Zealand.

## PUBLICATIONS:

- Vinothraj, U. T., and M. Anthony Xavier. "Effect of heat treatment on tribological properties of AISI 316L manufactured through selective laser melting." *Journal of Materials Research and Technology* 35 (2025): 7180-7192. Grain boundary behaviour and impact fractography of cryogenic treated AISI 316l manufactured by laser powder bed fusion, Materials Letters, <https://doi.org/10.1016/j.jmrt.2025.03.024>
- Vinothraj, U. T., and M. Anthony Xavier. "Wear and frictional behaviour of additive manufactured SS 316L through powder bed fusion." *J. Appl. Sci. Eng* 27.12 (2024): 3601-3612. Investigation on post-processing techniques oriented towards strength improvement of 3D printed SS316L, Materials Today: Proceedings. [https://doi.org/10.6180/jase.202412\\_27\(12\).0001](https://doi.org/10.6180/jase.202412_27(12).0001)
- Vinothraj, U. T., et al. "Finite element analysis and experimental study of ss316l manufactured by powder bed fusion." *International Conference Innovation in Engineering*. Cham: Springer Nature Switzerland, 2024. [https://doi.org/10.1007/978-3-031-62684-5\\_23](https://doi.org/10.1007/978-3-031-62684-5_23)
- Vinothraj, U. T., et al. "Investigation on post-processing techniques oriented towards strength improvement of 3D printed SS316L”, Materials Today: Proceedings. <https://doi.org/10.1016/j.matpr.2023.05.049>
- Silambarasan.M. , Vinothraj.U.T. “Modal Analysis for the Design of Glass/Epoxy Hollow Shaft for Misalignments in IJLTET publications.” *International Journal of Latest Trends in Engineering and Technology*. Vol.(10)Issue(1), pp.166-171. DOI: <http://dx.doi.org/10.21172/1.101.29>
- Vinothraj, U. T., et al. (2025, June). Experimental Investigation and Finite Element Analysis of AISI 316L Manufactured by Laser Powder Bed Fusion. In *International Conference Innovation in Engineering* (pp. 283-295). Cham: Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-93554-1\\_25](https://doi.org/10.1007/978-3-031-93554-1_25)
- Vinothraj, U. T., et al. (2025, June). Effect of Heat Treatment on the Microstructure and Grain Boundary Characteristics of AISI 316L Produced Using the Powder Bed Fusion Technique. In *International Conference on Intelligent Systems in Production Engineering and Maintenance* (pp. 77-88). Cham: Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-99159-2\\_6](https://doi.org/10.1007/978-3-031-99159-2_6)

## CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Presented a paper presentation in Adithya institute of technology, Coimbatore.
- Attended a workshop on “**Diesel Engine**” conducted by Kubota.

- Attended a workshop on “**Recent Development in IC Engine and Alternative Fuels**” at Ramakrishna College of engineering, Coimbatore.
- Attended a workshop on “**Digital Twin Technology**” conducted by Thagarajar college of engineering, Madurai.
- Attended a Faculty Development Program on “**Design of Transmission System**” conducted by Velammal college of Engineering and Technology.
- Attended a workshop on “**5 S & KAIZEN**” conducted by CII.
- Attended in plant training in ‘**SALEM STEEL PLANT**’.
- Attended in plant training in ‘**METTUR THERMAL POWER STATION**’.
- Participated a Training programme on “Instructional Design and Delivery System” conducted by NITTTR Chennai.

#### **OTHER DETAILS:**

- Coordinated the “International Conference on Materials, Manufacturing and Modelling (**ICMMM 2023**)”.
- Coordinated International workshop on “Pioneering Advances: AI and ML Leading the Change in Hydrogen-Materials Interactions and Laser Innovations”.
- Coordinated workshop on “Additive Manufacturing for Future: AM2030”.
- Coordinated International workshop on “Hydrogen-Material Interactions: Advancing Storage Solutions and AI Technologies.”