## SRI SHRIDEVI CHARITABLE TRUST (R.)



# SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sira Road, NH-4, Tumakuru - 572 106. Karnataka



NAME: THARA R

**Designation: ASSISTANT PROFESSOR** 

**Department: MECHANICAL ENGINEERING** 

DateofJoining	26/06/2023		
Professional Experience	Teaching	Industry	Research
Experience	12.6 Years		

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## **Academic Background**

- Pursuing Ph.D in Visvesvaraya Technological University-Belgavi.
- Master of Technology (Thermal power Engg) from Siddaganga Institute of Technology-Tumkur of Visvesvaraya Technological University.
- Bachelor of Engineering (Mechanical Engineering) from Shridevi Institute of Engineering & Technology-Tumkur.

### **Areas of Interest**

- PLATE FIN HEAT EXCHANGERS
- METAL MATRIX COMPOSITES

# **Significant Publications**

# No. of Papers =12

1. Effect of Graphene and Coconut Shell Ash on Mechanical Properties of Al6061 Metal Matrix Composites, Journal of The Institution of Engineers (India): Series D, April 2024

- 2. Optimizing Wear Performance: Comprehensive Analysis of Aluminium 6061 Metal Matrix Composites Reinforced with Coconut Shell Ash and Graphene, Journal of The Institution of Engineers (India): Series D Jan 2024
- 3. Investigation of mechanical properties of Al6061 with reinforcement of coconut shell ash and graphene metal matrix composites, Materials Today: Proceedings, 2023.
- 4. Mechanical and Micro Structural Properties of Aluminum Metal Matrix Composites (MMC) Reinforced with Coconut Shell Ash Particulates and Graphene. Journal of Mines, Metals & Fuels, 2023.
- 5. Multi-Objective Optimization of Plate-Fin Heat Exchanger Using Taguchi-based Grey Relational Analysis. Journal of Mines, Metals & Fuels, 2022
- 6. **Design & Analysis of Steering and Uprights of FSAE Car**, International Journal of Recent Trends in Engineering & Research (IJRTER), 2017.
- 7. **Prediction of Crack and Stress Analysis of a Cut out In A Airframe Structure**, International Journal of Recent Trends in Engineering & Research (IJRTER), 2017.
- 8. Design & Analysis of Natural Convection Heat Transfer in a Rectangular Finned Heat Sink, International Journal for Scientific Research & Development, 2017.
- 9. Enhancement of Thermal and Design Properties of Aluminum Alloy LM6 with MgO Nanoparticles, International Journal of Recent Trends in Engineering & Research (IJRTER), 2016.
- 10. Experimental & finite element analysis of sisal fibre reinforced composites, International International Journal of Recent Trends in Engineering & Research (IJRTER), 2016. Total citations: 8
- 11. "Effect Of Zinc Oxide Nanoparticles On Mechanical Properties Of Aluminium Alloy LM6"

  Emerging Trends in Nano Applications (NCETN-2015)
- 12. "Effect Of MgO Nanoparticles On Mechanical Properties Of Aluminium Alloy LM6" Emerging
  Trends in Nano Applications (NCETN-2015)

#### No. of Papers Presented in International Conferences= 03

- Presented a paper on "Experimental Analysis And Optimization Of Mechanical, Machinability and Tribiological Properties On Aluminum Metal Matrix Composites Reinforced With Coconut Shell Ash Particulates and Graphene: A Review" in the International Conference on Advances in Materials Research(ICAMR-2019) organized by Departments of Chemistry and Mechanical and Manufacturing, RUAS on 25<sup>th</sup> -27<sup>th</sup> July 2019 at Ramaiah University of Applied Sciences.
- 2. Presented a paper on "Multi-objective Optimization of Plate Fin Heat Exchanger using Taguchi based grey relation analysis" in the International Conference on Recent Development in Mechanical Engineering organized by Siddaganga Institute of Technology, Tumkur
- 3. Presented a paper on "A Review On Mechanical Characteristics Of Al6061 Reinforced With Coconut Shell Ash Particulates And Graphene- Hybrid Metal Matrix Composites" in the "International Conference on Recent Developments in Mechanical Engineering (ICRDME- 2022)" organized by Siddaganga Institute of Technology, Tumkur, Karnataka, India.

#### No. of Papers Presented in National Conferences= 05

- 1. "Design and Fabrication of a Thermoelectric Air Conditioner Cum Refrigerator Using E-Waste" R Thara, NCRAETS-2019.
- "Effect Of MgO Nanoparticles On Mechanical Properties Of Aluminum Alloy LM6" R Thara, Lohitesh Jaga Kumar, G Nagaraju, G S Shivashankar, NCETN-2015, ISBN No.978-81-928203-8-5, Page No.73-76
- 3. "Effect Of Zinc Oxide Nanoparticles On Mechanical Properties Of Aluminum Alloy LM6" Lohitesh Jaga Kumar, R Thara, G Nagaraju, Abhilash V J, NCETN-2015, ISBN No.978-81-928203-8-5, Page No.62-65
- 4. "Experimental and Finite Element Analysis of Sisal Fibre Reinforced Composites", NCESM-2016.
- 5. "Experimental Analysis of Jute, Sisal and Glass Fibre Reinforced Composites", NCESM-2016.
- List of FDP's/Workshops

#### Numbers = 30

- 1. Participated & completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on HYDROGEN HYBRID TECHNOLOGY FOR CLEANER MOBILITY REVOLUTION at BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT from 06/11/2023 to 11/11/2023.
- 1. Attended a webinar on "Additive Manufacturing for Bioimplant Manufacturing and its Challenges" conducted by Department of Mechanical Engineering, Arasu Engineering College, Kombakonam on 13TH June 2020.
- 2. Attended One week FDP on "Multi objective optimization for Mechanical Engineering Applications" conducted by Department of Mechanical Engineering, QIS College of Engineering and Technology, Andhra Pradesh 8TH June to 12TH June 2020.

  OTHER ACTIVITIES
- 3. Attended One week FDP on "Refrigerants Progression-Environmental Concerns" conducted by Department of Mechanical Engineering, QIS College of Engineering and Technology, Andhra Pradesh 1<sup>st</sup> June to 5TH June 2020.
- 4. Attended a webinar on "An overview of turbine and its Auxiliaries of 500MW unit of KTTP" conducted by Department of Mechanical Engineering, Jayamukhi Institute of Technological sciences on 8TH June 2020.
- 5. Attended a webinar on "Tailor Made Nano-materials for Applications in Sensors, LEDs and Water Remediation" conducted by Department of Mechanical Engineering, RajaRajeshwari College of Engineering, Bangalore on 5TH June 2020.
- 6. Attended a webinar on "An Insight into Fluid Machines in Mechanical and Civil Engineering" conducted by Department of Mechanical Engineering, SEA College of Engineering and Technology,

Bangalore on 5TH June 2020.

- 7. Successfully completed online Quiz on "Intellectual Property Rights- IPR" on 4-6-2020 organised by school of Mechanical engineering, REVA University, Bengaluru.
- 8. Attended a webinar on "Manufacturing in current Scenario: INDUSTRY 4.0" conducted by Department of Mechanical Engineering, GM Institute of Technology, Davangere on 4TH June 2020.
- 9. Attended a webinar on "Interrogation in MEMS,NEMS and Nanotechnology" conducted by Department of Mechanical Engineering, Cambridge Institute of Technology, Bangalore on 5TH June 2020.
- 10. Attended One week FDP on "LaTeX" conducted by CSE, Gopalan College of Engineering and Management, Bangalore in association with IIT Bombay-Spoken Tutorial 17th April to 30TH April 2020.
- 11. Successfully participated online quiz on "Internal Combustion Engine" organized by the Department of Mechanical Engineering, BCE, Shravanabelagola on 6/2/2020.
- 12. Presented a paper on "Experimental Analysis & Optimization of Mechanical properties on AL-MMC with coconut shell ash particulates: A Review" held on 25<sup>th</sup> 27th July-2019 at International Conference on Advances in Materials Research(ICAMR-2019), Ramaiah University-Bangalore.
- 13. Attended One week FDP on "Recent Trends in Mechanical Engineering, NBA Process and Use of Mendeley Software for Researchers" conducted by Department of Mechanical Engineering, CIT, GUBBI, 15 TH July to 20TH July 2019.
- 14. Attended One day FDP on "Beyond Teaching" on 29th Jan 2019, CIT, GUBBI.
- 15. Attended One day Workshop on "PC based Automation" conducted by BECKHOFF Automation Pvt. Ltd. In Association with CIT, GUBBI, ON 10TH NOV 2017.
- 16. Attended Two days Workshop on "Nano Materials & Nano Composites" Organized by the Department of Mechanical Engineering held on 24th & 25th March 2017 at Kuppam Engineering College.
- 17. Attended One day Workshop on "Advancement in Mechanical Sciences" Organized by the Department of Mechanical Engineering held on 24th December 2016 at MSEC Bangalore.
- 18. Presented a paper on "Plate Fin Heat Exchanger" held on 5th April 2016 at Akshaya Institute Of Technology in National Level Technical Paper Presentation at TECHNIKA 2016, Tumkur.
- 19. Presented a paper on "Experimental and Finite Element Analysis of Sisal Fibre Reinforced Composites" held on 23rd & 24th March-2016 at Shridevi Institute of Engineering and Technology in National Conference on "Emerging Trends in Engineering and Management".
- 19. Presented a paper on "Experimental Analysis of Jute, Sisal and Glass Fibre Reinforced Composites" held on 23<sup>rd</sup> & 24th March-2016 at Shridevi Institute of Engineering and Technology in National Conference on "Emerging Trends in Engineering and Management".
- 20. Attended two days FDP on "Design of Experiments and Optimization Techniques" Organized by

the Department of Mechanical Engineering held on 3rd and 4th March 2016 at Sir M.VIT - Bangalore.

- 21. Attended two days Subject Based Pedagogy Workshop on "Applied Thermodynamics" Organized by the Department of Mechanical Engineering held on 8th and 9th Feb 2016 at VTU Regional Centre Mysuru.
- 22. Attended two days Workshop on "Advances in Mechanical Measurements" Organized by the Department of Mechanical Engineering held on 29th and 30th Jan 2016 at Vemana Institute of Technology Bangalore.
- 23. Attended one day FDP on "Introduction to Latex" Organized by the Department of Electrical and Electronics Engineering held on 28th Jan 2016 at HKBKCE Bangalore.
- 24. Attended two days Work Shop on "Smart Materials and its Application" Organized by the Department of Mechanical Engineering held on 21st and 22nd Dec 2015 at MSRIT- Bangalore.
- 25. Attended five days FDP on "Mechanical Properties of Engineering Materials and Their Interpretation" Organized by the Department of Mechanical Engineering held on 25th to 29th Aug 2015 at HKBKCE Bangalore.
- 26. Presented a paper on "Effect of MgO Nanoparticles on Mechanical Properties of Aluminum Alloy LM6" held on 27th & 28th March-2015 at BMS Institute of Technology in National Conference on "Emerging Trends in Nano Applications".
- 27. Attended One day seminar on "SOLAR ENERGY- Today's Resource for Brighter Tomorrow" held on 24 th Aug 2013 at Siddaganga Institute of Engineering and Technology.
- 28. Attended one day Work Shop on "Rapid Prototyping & Product Design" Organized by the Department of Mechanical Engineering at SIET in association with NTTF- Bangalore.
- 29. Attended Three days Work Shop On "Basic Hydraulics & Pneumatics" Organized by the VTU-Bosch Rexroth Centre of Competence in Automation Technology, Mysore.
- 30. Presented a paper in TANTRA, a State Level Technical Symposium held at SSIT, Tumkur.

### **Achievements**

- Invited Speaker for
  - 1. Invited Speaker on Automation and Robotics for 5<sup>th</sup> Sem students in Government Polytechnic, Tumkur on 23/11/2023.
  - 2. Invited Speaker on Robotic Components in Government Polytechnic, Tumkur on 08/12/2022.
- Professional Membership:
- 1. Institute of Engineers (IEI)
- 2. Life Member Indian Society for Technical education (MISTE)
- 3. Life Member International Association of Engineers (IAENG)

#### **Other Activities:**

1. NPTEL: SWAYAM Online Course Certification on STUDENT PSYCHOLOGY from July to December 2023.

<ol> <li>Compare Stock Returns with Google Sheets.</li> <li>Introduction to Project Management.</li> <li>Intro to Time Series Analysis in R.</li> <li>Introduction to Google Docs</li> </ol>	