

T. NAGARAJU

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RESIDENTIAL ADDRESS:

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ACADEMIC QUALIFICATIONS

- ❖ Ph.D - Manufacturing Engineering (Pursuing)
- ❖ M.Tech - Machine design
- ❖ B.Tech - Mechanical Engineering

CERTIFICATIONS:

- ❖ Auto Cad 2000 to 2010
- ❖ Microstation-J
- ❖ Pro-E 2001
- ❖ ANSYS
- ❖ Small World PNI 4.0
- ❖ Arc Map, Arc Info.

ACHIEVEMENTS / RECOGNITIONS:

- ❖ Ratified as Assistant Professor in Department of Mechanical Engineering, GEC, Gudlavalleru by JNTUK in the year 2015
- ❖ Reviewer for the Journals:
 - Materials Research Express (Scopus and ESCI Journal)
 - Applied Engineering Letters (Scopus Indexed Journal)

PROFESSIONAL EXPERIENCE

Designation	University/College	Period
Assistant Professor	Seshadri Rao Gudlavalleru Engineering College	25.09.2014 to Till Date
Assistant Professor & HOD- ME	Gandhiji Institute of science and Technology, Jaggayapeta, India.	Feb 2014- Sep 2014
Assistant Professor	Gudlavalleru Engineering College, Seshadri Rao Knowledge Village Gudlavalleru. A.P, India	Dec 2010-Jun 2011
Associate-Geospatial Service	AVINEON INDIA PVT LTD Hyderabad, India.	Nov 2008-Nov 2010
GIS Engineer	INFOTECH ENTERPRISES LIMITED, Hyderabad, India.	Aug 2005-Oct 2008

PROJECTS GUIDED

PhD	Post Graduation	Under Graduation
Nil	05	20

SPECIALIZATION:

- ❖ Mechanical Engineering (Machine Design)

RESEARCH PAPERS / BOOKS

- ❖ **BOOKS PUBLISHED IN PUBLICATIONS: 01**

Published a chapter, “An Investigation of Alumina Reinforcement Effect on Mechanical Properties of Al 356 Based Metal Matrix Composite” in *Mechanical Engineering for Sustainable Development: State-of-the-art Research*, CRC Press, 2019.

- ❖ **PAPERS PUBLISHED IN JOURNALS:**

Journals: **National** : Nil **International** : 12

Conferences: **National** : Nil **International** : 01

- ❖ **Patents Granted** : 1

Published a patent on A Novel Method for Developing High Performance Pneumatic Arm Hammer, application number 202541003030, Sanction Date, 31 January, 2025

Journals:

a) **National** - Nil

b) **International:**

1. Paper published “An Investigation on the Influence of 'SiC- Particulates Reinforcement' on the Mechanical Behaviour of Al 6061/SiC Composites”, *Journal of Advancements in Material Engineering*, Volume 10, 2025, <https://doi.org/10.46610/joame.2025.v10i01.001>.
2. Paper published “Taguchi-based grey relational analysis for multi-response optimization of the characteristics of HRAMMCs reinforced with agro-waste and SiC produced by ultrasonic-assisted bottom pour two-stage stir casting”, *Materials Research Express*, IOP Publishing, Volume 11, Issue 10, 2024, ISSN: 20531591, DOI: 10.1088/2053-1591/ad62bb.

3. Paper published “**A study on the effects of hybrid (SIC- PSSA) nano sized reinforcement on mechanical and tribological behaviour of Al alloy-based metal matrix composite produced by ultrasonic assisted stir casting**, *Materials Research Express*, IOP Publishing, Volume 11, Issue 7, 2024, ISSN: 20531591.
4. Paper published “**An Investigation on the Mechanical and Tribological Properties of An Ultrasonic-Assisted Stir Casting Al-Cu-Mg Matrix-Based Composite Reinforced with Agro Waste Ash Particles**”, *Applied Engineering Letters*, DOI: 10.46793/aeletters.2024.9.1.5, ISSN: 2466-4677, 2024.
5. Paper Published “**Analysis on Mechanical Properties of Mould Vibrated Aluminium [Al 6063] Alloy Casting**”, in *International Journal of Engineering Technology Science and Research (IJETSR)*, Volume 5, Issue 3, March 2018, ISSN 2394 – 3386.
6. Paper published “**Studies on Al6061-B 4 c Metal Matrix Composites Fabricated By Stir Casting Process**”, *SSRG International Journal of Mechanical Engineering (SSRG-IJME)*, Seventh Sense Research Group, Volume 1, Issue 1, Pages 296-299, 2017.
7. Paper Published on **Design & Fabrication of 4-Stroke S.I Engine Connecting Rod of A Two Wheeler using A356 Alloy/Aluminum Oxide (Al₂O₃)** in –*International Journal for Innovative Research in Science & Technology*, Volume 4, Issue 5, October 2017, ISSN (online): 2349-6010.
8. Paper Published on “**Effect of Mould Vibration on Mechanical and Metallurgical Properties of Aluminum 6063 alloy Casting**” in *International Journal for Innovative Research in Science & Technology (IJIRST)* Volume 4, Issue 2, July 2017 ISSN (online): 2349-6010.
9. Paper published on “**Vibrational Analysis in Condition Monitoring and faults Diagnosis of Rotating Shaft - Over View**” in *International Journal of Advanced Engineering Research and Science (IJAERS)*, ISSN: 2349-6495(P) 2456-1908(O), Vol-4, Issue-1, Jan- 2017
10. Paper published on “**An investigation of Effect of Mould Vibrations on Mechanical and Metallurgical properties of Aluminum 356 Casting**” in *Invention Journal of Research Technology in Engineering & Management* ISSN: 2455-3689 Volume 10, Issue 10. Dec 2016.
11. Paper published on “**An Investigation on Weld Quality Characteristics of Plasma Arc Welded Mild Steel Plates**” in *International Journal of Mechanical Engineering and Robotic Research* ISSN 2278-0149 Volume 4, No. 2, April, 2015

12. Paper published on “**Rotor Dynamic Analysis of Steam Turbine Rotor Using Ansys**” in *International Journal of Mechanical Engineering and Robotic Research* ISSN 2278-0149 vol.3, January 2014.

Publications In Conferences: 01

b) International:

1. Presented a paper entitled “**Effect of Mould Vibrations on Mechanical and Metallurgical properties of Aluminum 356 Casting**” at the *first international and Eighteenth National ISME Conference on Mechanical Engineering: Enabling Sustainable Development*, held during February-23-25, 2017 at National Institute of Technology Warangal, India.

LIST OF WORKSHOPS ORGANIZED:

1. Coordinator for one day workshop on “Characterization of metal matrix composites” organized by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru on 11th August 2018.
2. Coordinator for Technical Activities organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College on the eve of Engineers’ Day celebration 2018.
3. Coordinator for the GEMSMEET’17 organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College on the eve of GECFEST 2K17.
4. Coordinator for Technical Activities organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College on the eve of Engineers’ Day celebration 2016.
5. Coordinator for Model Contest & Poster Contest on the eve of GECFEST 2016, GEMSMEET’16 organized by Mechanical Department, Gudlavalleru Engineering College on 12th February 2016.
6. Convener for Three day hands on training programme on “Computational Fluid Dynamics” during 4th to 6th February 2016 in Department of Mechanical Engineering, Gudlavalleru Engineering College.
7. Coordinator for Technical Activities organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College on the eve of Engineers’ Day celebration 2015.

LIST OF WORKSHOPS /SEMINARS ATTENDED:

1. Attended A Two-Week Online Faculty Development Program on "Advances in Mechanical Engineering", organised by PVP Siddhartha Institute of Technology, Vijayawada, 20-05-2024 to 25-05-2024.
2. Attended One Week Virtual FDP on "Current Trends in Mechanical Engineering - Case studies from Industries and Academia to promote Innovation, Design thinking and startups", organised by Shri Vishnu College of Engineering for Women, Bhimavaram, during 20-05-2024 to 25-05-2024.
3. Attended One Week Online FDP on "Advancements in Thermal and Renewable Energy Technologies, organised by Lakireddy Bali Reddy College of Engineering, Mylavaram, during 04-07-2022 to 9-07-2022.
4. Attended two-day Faculty development program on "Advances in Manufacturing" organized by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru on 16th & 17th November, 2018.
5. Attended one day workshop on "Characterization of metal matrix composites" Sponsored by **The institute of Engineers (India)** organized by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru on 11th August 2018.
6. Attended AICTE-ISTE Sponsored One week refresher Course on Computational Fluid Dynamics organized by Department of Mechanical Engineering, Gudlavalleru Engineering College during 18th -23rd June 2018.
7. Attended 2 day National workshop on "Modeling and analysis of composite materials using ANSYS", organized by Department of Mechanical Engineering, DVR & Dr.HS MIC College of Technology, during 28th and 29th August 2017.
8. Attended two-day workshop on Attended one day workshop on "**Smart Manufacturing**" organized by **Indian institute of information Technology, Design and Manufacturing**, Kancheepuram, Chennai, India on 3rd December 2016.
9. Attended one week Faculty Development Program on **Matlab Applications in Mechanical Engineering** organized by Department of Mechanical Engineering GEC Gudlavalleru, during 7th -11th September 2015.
10. Attended one week workshop on "**TRAINING PROGRAM ON ANSYS**" organized by the Department of Mechanical and Civil Engineering, GEC Gudlavalleru during, 22nd -27th June 2015.

GUEST LECTURES DELIVERED:

- Delivered guest lecture on “Robots & its application” in Little Angles school, Jaggayapeta on 5th April 2013.

MEMBERSHIP IN PROFESSIONAL BODIES:

- Member in IE(I) MIE. M-163710-4
- Member in SAEINDIA(7190410544)

CONSULTANCY ACTIVITIES: Nil

GRANTS FETCHED/FUNDED R&D PROJECTS:

1. Title of the project : Effect of Organic- Ash Based particulate Reinforcement on Fatigue Behavior of Aluminium Based Metal Matrix Composite
Funding Agency : Gudlavalleru Engineering College
Sanctioned Amount : Rs.0.30 Lakhs
Project Duration : 1.5 Year (March 2021 - September 2022)
Status : Completed