

VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

KNOWLEDGE ASSET (2023-2024)

Name: Dr Shiva Kumar N

Designation: Assistant Professor

Department: Mechanical Engineering

Mail Id: Shivakumar_n@vnrvjiet.in

Experience (in years): **Teaching:** 8 Years **Research:** 5 Years



1. Educational / Technical qualifications:

S.No	Level (Ph.D./PG/UG)	Year of Passing	Specialization
1	Ph.D.	2018	Nanocomposites Materials
2	M.Tech	2010	Manufacturing Engineering
3	B. Tech	2005	Mechanical Engineering

2. Teaching and Learning:

2.1. Teaching Interests:

Manufacturing Technology, Advanced Manufacturing Processes, 3D Printing and Design, Reverse Engineering, Engineering Materials, Industrial Engineering and Management, Production Planning and Control, Total Quality management, Entrepreneurship, Composite Materials, Material Characterizations, Engineering Drawing

2.2. Novel Teaching & Learning Techniques adopted: PPTs, Seminars, Animations, NPTEL Videos, WIT AND WIL.

2.3. Involvement in curriculum updating / Design: Nil

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Reading Books, Listening Music, Playing cricket.

3.2. CCA/ECA Organized: Nil

3.3. CCA/ECA Participated: Nil

3.4. Counseling and Mentoring Activity: Actively contributed in mentoring students.

3.5. Committees involved in:

Department level: Department Level responsibilities include MOOCs Co-Ordinator, Engineering Workshop Co-Ordinator.

Institute Level: Disciplinary Committee

4. Conference / FDP/ Workshop / Seminar / Guest Lectures:

4.1 Conducted: 01

4.2 Attended: 30

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: Nil

5.2. Articles published in Peer Reviewed Journals:

1. Dry Sliding Tribological Studies of ZA-27/Al₂O₃ Metal Matrix Nanocomposites by using Response Surface Methodology, Journal of Chinese Society of Mechanical Engineers, (SCI)
2. Mechanical properties and dry sliding wear behaviour of molybdenum disulphide reinforced zinc-aluminium alloy composites, Transactions of the Indian Institute of Metals- Springer. DOI: 10.1007/s12666-017-1037-6. (SCI).
3. Processing and dry sliding wear behavior of Al₂O₃ nanoparticles reinforced ZA-27 composites, Materials today proceedings –ELSEVIER. DOI: 10.1016/j.matpr.2017.02.302. (SCOPUS).
4. Synthesis and Characterization of nano-sized Al₂O₃ particle reinforced ZA-27 metal matrix composites”, Procedia Materials Science - ELSEVIER. (Aug 2015), vol.10, pp.159-167. (SCOPUS).
5. Mechanical and wear behavior of ZA-27/Sic/Gr hybrid metal matrix composites, Materials Today: Proceedings, DOI: 10.1016/j.matpr.2018.06.363, 5 (9), 19969-19975. (SCOPUS)

5.3. Books published as single author or as editor: Nil

5.4. Projects Guided:

a) UG: 06

b) PG: Nil

5.5. Research Interests:

Fabrication and characterisation of Micro and Nano Metal Matrix Composites, Mechanical Properties, Tribological characterisation and Optimization Techniques

5.6. Ph.D students: Nil

5.7. Papers Published in Reviewed Journals:

Publications in Conference Proceedings

1. Processing and dry sliding wear behavior of Al₂O₃ nanoparticles reinforced ZA-27 composites, Materials today proceedings (SCOPUS)
2. Synthesis and Characterization of nano-sized Al₂O₃ particle reinforced ZA-27 metal matrix composites”, Procedia Materials Science (SCOPUS)

3. Mechanical and wear behaviour of ZA-27/Sic/Gr hybrid metal matrix composites, Materials Today: Proceedings, (SCOPUS)

5.8. Attended International Conferences:

1. Attended 6th International & 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR), 16 -18 December 2016, College of Engineering Pune, India.
2. Attended 5th International Conference of Materials Processing and Characterization (ICMPC). 12-13 March 2016, GRIET, Hyderabad, India.
3. Attended 2nd international conference on Nanomaterials and Technologies (CNT). 17-18 October 2014, Vardhaman College of Engineering, Hyderabad, India.

5.9. Sponsored Research Projects: Nil

5.10 Consultancy Projects: Nil

6. Awards / Honors Received:

Received MHRD Financial Assistance while Pursuing M.Tech. at NIT Warangal.

Received MHRD Financial Assistance while Pursuing Ph.D. at NIT Warangal.

7. Motto:

Start each day by being thankful for another opportunity.