

VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

KNOWLEDGE ASSET (2023-2024)

Name: S.V. Satya Prasad

Designation: Assistant Professor

Department: Mechanical Engineering

Mail Id: vsatyaprasad_s@vnrvjiet.in

Experience (in years): Teaching:09 Years **Research:** Nil **Others (If any,**

Specify): Industry: 0.5 Years



1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of Passing	Specialization
1	B.Tech	2010	Mechanical Engineering
2	M.Tech	2016	Industrial Engineering
3	Ph.D	Submitted	Composite Materials

2. Teaching and Learning:

2.1. Teaching Interests:

Composite Materials, Material Characterizations, Manufacturing Technology, Advanced Manufacturing Processes, Industrial Engineering and Management, Production Planning and Control, Quality Engineering, Mechanics of Solids, Engineering Mechanics, Engineering Drawing

2.2. Novel Teaching & Learning Techniques adopted:

PPTs, Seminars, Roleplays, Debates.

2.3. Involvement in curriculum updating / Design: Nil

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies:

Reading Books, Singing, Playing Cricket, Badminton

3.2. CCA/ECA Organized: Nil

3.3. CCA/ECA Participated: Nil

3.4. Counseling and Mentoring Activity:

Been a Class Coordinator, Student Counseling Mentor.

3.5. Committees involved in:

Department level:

Department Level responsibilities include ISO Coordinator, IEI Coordinator and Coordinator for seminars and Guest Lectures, Training and Placement Coordinator, Departmental Cultural activities Coordinator, Engineering Workshop In-charge, Mechanics of Solids Lab In charge, Established Manufacturing Technology Lab and served as In-charge.

Institute Level:

Headed the Anti-Ragging Committee at the College Level.

4. Conference / Workshop / Seminar / Guest Lectures:**4.1 Conducted:****Seminar and Workshops**

1. One-Day National Workshop on “Role of Mechanics in Sustainable Energy Technologies”
2. Two-day workshop, “ROBOFEAST-2015” National Quadcopter Championship Workshop in association with IIT Roorkee.

4.2 Attended:**Seminars and Workshops**

1. Workshop on Recent Advances in Modelling, Machining and Materials by TEQIP at NIT Jamshedpur (2019)
2. Workshop on Advances in Materials, Manufacturing and Quality at JNTUK (2014).
3. 2-Week ISTE WORKSHOP on Fluid Mechanics by IIT Kharagpur (2014).
4. One day Seminar on “Advanced Optimization Techniques” by S.S. Rao at Gayathri Vidya Parishad College of Engineering (2013)
5. Workshop on “Engineering Mechanics” by MHRD and IIT Bombay (2013)
6. Workshop on “Research Methods in Educational Technology” by MHRD and IIT Bombay (2012).
7. Workshop on “Akash for Education” by MHRD and IIT Bombay (2012).
8. Seminar on “Introduction to Research Methodologies “by MHRD and IIT Bombay (2012).

Conferences

1. International Conference on Nanoscience and Nanotechnology (ICNAN-2019), Vellore Institute of Technology, Vellore, India, November 29th- December 1st (2019).
2. International Conference on Manufacturing, Material Science and Engineering (ICMMSE-2019) organized by CMRIT Hyderabad (2019)
3. International Conference on Advances in Mechanical, Civil and Construction Engineering at IRAJ Forum (2019)

ORIENTATION / REFRESHER / STTTP / FACULTY DEVELOPMENT PROGRAMMES

Faculty Development Programs

1. One Week online FDP on “Engineering Graphics Through Auto CAD” by Department of Automobile Engineering at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad during 3-7th April 2023
2. Participated in the Professional Development Programme on “Instructional Design and Delivery Systems” Conducted by VNRVJIET in association with NITTTR Chennai from 20.03.2023 to 25.03.2023 at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad
3. Faculty Development Program on Advanced Materials for Engineering Applications by Vignan’s Institute of Engineering for Women in association with IAAC from 6-10 June 2020
4. Faculty Development Program on Recent Advances in Material Characterization organized by NITTTR Chandigarh from 23-28 May 2020
5. Faculty Development Program on Outcome based education system organized by Lendi College from 21-23 May 2020
6. Faculty Development Program on Artificial Intelligence by Vignan’s Institute of Engineering for Women from 22-26 May 2020
7. Faculty Development Program on “Outcome Based Education” at Sri Sivani College of Engineering (2015).

Certification Courses

1. Certification course on Heat Treatment of Steel by Tata Steel on 11th May 2020
2. Certification course on Measuring Instruments by Tata Steel on 11th May 2020
3. Certification Course on Forces and Moments, Mechanics by Udemy on 10 May 2020
4. Certification Course on Introduction to Mechanical Engineering by Udemy on 30 April 2020
5. Certification Course on Fundamentals of Manufacturing Processes by NPTEL 2019

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: Nil

5.2. Articles / Chapters published in Books:

1. Introduction and Origin to Nanomanufacturing in Nanomanufacturing and Nanomaterials Design, CRC Press 2023 (Scopus).

2. Fabrication of Shape Memory Polymers in Fabrication and Machining of Advanced Materials and Composites, CRC Press 2023 (Scopus).
3. 3D Printing Processes for Biomedical Applications in Fabrication and Machining of Advanced Materials and Composites, CRC Press 2022 (Scopus).
4. Introduction, History, and Origin of Two Dimensional (2D) Materials in Advanced Applications of 2D Nanostructures, Springer Publication 2021(Scopus).
5. Nanostructured 2D Materials as Nano Coatings and Thin Films in Advanced Applications of 2D Nanostructures, Springer Publication 2021(Scopus).
6. Electron Paramagnetic (spin) Resonance Spectroscopy for Biomedical Nanotechnology, accepted in IOP Publishing 2023 (Scopus).

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

5.4. Projects Guided:

a) UG: 08

b) PG: Nil

5.5. Research Interests:

Composite Materials, Materials Characterization, Machining, Coating.

5.6. Ph.D students: Nil

5.7. Papers Published in Reviewed Journals:

Publications in Conference Proceedings

1. Sustainable Manufacturing of Advanced Mg-Zn-HAp/rGO Hybrid Nanocomposites and Evaluation of Mechanical and Microstructural Properties, Accepted in Int. J. of Internet Manufacturing and Services, May 2022 (Scopus).
2. The role and significance of Magnesium in modern day research-A review, Journal of Magnesium and Alloys, June 2021 (Sci).
3. Experimental Investigation on Pitting Corrosion Resistance Through Nano Coatings, IJMPERD, Volume-10 Issue-3 June 2020 (Scopus).
4. Optimization and Comparative Study of the Turning Parameters of DCT Tool in the Machining of Commercial Steel, IJMPERD, Volume-10 Issue-3 June 2020 (Scopus).
5. Optimization for Machining Parameters in Turning of AISI 52100 Steel for Manufacturing Services-Genetic Algorithm Approach, IJITEE, Volume-9 Issue-3 Jan-2020 (Scopus).
6. A Novel Approach Over Inverse Kinematic Analysis Of 5-Axis Hybrid Parallel Manipulator for Contour Trajectory, IJMET, Volume-9, Issue-11, Nov-2018 (Scopus).

7. Experimental Investigation and Comparison of Flank Wear and Surface Roughness in Turning of AISI 4340 Steel Using Ceramic Coated and Uncoated Carbide Inserts, IJMPERD, Vol. 8, Issue 5, Nov-2018 (Scopus).
8. Design and Analysis of an Excavator, IJERT, Vol. 2, Issue 4, April-2013.

Publications in Conference Proceedings

1. A review on the corrosion process in magnesium, AIP Conference Proceedings, Volume 2341, Issue 1, 2021 (Scopus)..
2. Functioning mechanism of nanomaterial and significance on machinability: A review, Materials Today: Proceedings, Volume 19, Part 2, 2019 (Scopus).
3. A review on 2D materials for bio-applications, Materials Today: Proceedings, Volume 19, Part 2, 2019 (Scopus).
4. A comprehensive review on contemporary materials used for blades of wind turbine, Materials Today: Proceedings, Volume 19, Part 2, 2019 (Scopus).
5. Effect of Cryogenic Treatment on Tool Life of HSS Tool (S400) and Surface Finish of the Material in Turning of SS304 in Institute of Physics Conference Series: Materials Science and Engineering, Volume 149, 012010, October-2016 (Scopus).

5.8. Papers Presented at National / International Conferences/Journals:

1. A Review on Corrosion in Magnesium, at National Conference on Materials, Manufacturing and Modelling (NCMMM-2020) organized by National Institute of Technology Jamshedpur.
2. A comprehensive review on contemporary materials used for blades of wind turbine, at International Conference on Manufacturing, Material Science and Engineering (ICMMSE-2019) organized by CMRIT Hyderabad
3. Functioning mechanism of nanomaterial and significance on machinability: A review, at International Conference on Manufacturing, Material Science and Engineering (ICMMSE-2019) organized by CMRIT Hyderabad
4. A review on 2D materials for bio-applications at International Conference on Manufacturing, Material Science and Engineering (ICMMSE-2019) organized by CMRIT Hyderabad.
5. Comparative evaluation of surface finish during turning of AISI 1045 steel using annealed and conventional HSS tool at International Conference on Advances in Mechanical, Civil, and Construction Engineering (ICAMCCE-2019)

6. “Effect of Cryogenic Treatment on Tool Life of HSS Tool (S400) and Surface Finish of the Material in Turning of SS304” at International Conference on Advances in Materials and Manufacturing Applications (2016).
7. “Study of Wear Behavior and Hardness of Aluminum Metal Matrix Composite Reinforced with Tungsten Carbide” at National Conference on Emerging Trends of Advanced Functional Materials (2015).
8. “Effect of LiCoO₂ Particle Size on Performance of Lithium Ion Batteries” at National Conference on Emerging Trends of Advanced Functional Materials (2015).
9. “Efficiency Analysis of an Omni-Directional Wind Mill” at International Conference on Computer Science and Mechanical Engineering, Bengaluru (2015).
10. “Effect of Geometric Modification on the Performance of Vortex Tube” at International Conference on Computer Science and Mechanical Engineering, Bengaluru (2015).

5.9. Sponsored Research Projects: Nil

5.10 Consultancy Projects: Nil

6. Awards / Honors Received: Nil

Other Details:

1. Lifetime Associate Member in The Institution of Engineers(India)
2. Lifetime Member in The International Association of Engineers (IAENG)

7. Motto:

Follow your heart and Believe in yourself to achieve everything you wish for!!!