

# MECH VIDYA

**Bi-Annual News Letter**

**2024, Issue 2 (July-December)**



**VIDYA JYOTHI INSTITUTE OF TECHNOLOGY**  
**An Autonomous Institute**  
**Aziz Nagar Gate, C.B. Post, Hyderabad**  
<http://vjit.ac.in/mechanical/>  
**DEPARTMENT OF MECHANICAL ENGINEERING**

## **Editorial Board**

**Dr. G.Sreeram Reddy,**

Head of the Department, MED

**Dr.V.V.Satyanarayana**

Professor, MED

**Mr.S.Prasad Kumar**

Editor, Assistant Professor, MED

**I Sai Rohit (21911A0309)**

Student Coordinator

## **Patrons**

**Dr. P. Rajeshwar Reddy,**

Correspondent, VJES

**Dr. E. Sai Baba Reddy**

Principal, Director, VJIT

**Dr. A. Padmaja**

Dean, VJIT

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### **From Correspondent's Desk**

I congratulate Dr. G. Sreeram Reddy and his team for the achievement of National Board Of Accreditation (NBA) for a period of 3years. I wish them All The Best for the Future Endeavour.

**Dr. P. Rajeshwar Reddy, Correspondent, VJES**



### **From Director Desk**

I extend my hearty congratulation to the Mechanical Engineering Department on the successful completion of their Accreditation Process and getting Accredited for 3years.

**Dr. E. Sai Baba Reddy, Principal VJIT**



### **Message from Principal**

I appreciate and congratulate whole heartedly the efforts of the Mechanical Engineering Department for their hard work they put for the Accreditation and subsequent achievement of Accreditation for 3years.

**Dr. A Padmaja, Dean VJIT**

### **Overview of the Department**

Mechanical Engineering has been on an integration phase with other disciplines of Science and Technology for the past few decades and offers many challenging career opportunities for the students. The Department of Mechanical Engineering in VJIT was established in 1999 and is accredited by NBA in 2018 & reaccredited till June 2025.. Going by the technological advances the Department has been actively engaged in transforming the learning systems and creating a sound knowledge base in the minds of the students. Innovations, hands-on-workshops, community projects & industry internships fine tune the students into industry ready.

### **Program Assessment Committee**

Department of Mechanical Engineering has constituted Program Assessment Committee with the following members:

<b>S.No</b>	<b>Name</b>	<b>Designation</b>	<b>Position</b>
1	Dr. Sreeram Reddy	HOD	Chairman
2	Dr. V.V.Satyanarayana	Professor	Convener
3	Dr. B. Ravinder Reddy	Associate Professor	Members
4	Dr.L.Madan Anand Kumar	Associate Professor	
5	Mr. K. Rajesh Kumar	Associate Professor	
6	Mrs. J Emeema	Associate Professor	
7	Mr. J. Pradeep	Assistant Professor	

### Department Advisory Board

Department of Mechanical Engineering has constituted a Departmental Advisory Board with the following members for the academic year:

S.No	Name	Designation	Position
1	Dr. G. Sreeram Reddy	HOD & COE	Chairman
2	Dr. V.V. Satyanarayana	Professor	Convener & Program Coordinator
3	Dr. B. Ravinder Reddy	Associate Professor	Members
4	Dr. Naseeb Khan	Professor, Shadan Institute of Technology	
5	Mr. P. Ashok Kumar	Parent	
6	Mr. Chepuri Sai Teja	Student, 3rd year Mechanical	

### LIST OF PROFESSIONAL SOCIETIES IN THE DEPARTMENT OF MECHANICAL ENGINEERING

- Indian Society for Technical Education (ISTE)
- Indian Institute of Welding (IIW)
- Industrial Engineering and Operations Management (IEOM)
- Society of Automotive Engineers (SAE)
- Institution of Engineers (India) (IE)

### Research Publications

Faculty have published 09 technical papers in peer reviewed Journals with diverse specializations from materials to manufacturing methods.

S.No	Name of the Author	Title	Journal	Month/year
1	Dr.V.V.Satyanarayana	Effect of Al <sub>2</sub> TiO <sub>5</sub> powder coating on the tribological, corrosion and mechanical properties of AISI 316L stainless steel	Materials Research Express	June 2023
		Exploring thermal dynamics of polyaniline-modified parafn wax phase change material with varied PANI loadings (1-4% wt.)	Heat and Mass Transfer	29 January 2024
		Entropy Weighted TOPSIS Taguchi Analysis of Notch Geometry on the Fatigue Performance of UNS S32760 Grade Stainless Steel	SSRGIME	June 2024

		Application of Taguchi based entropy weighted TOPSIS method for AZ 91D magnesium alloy friction stir welded joints with cerium addition at interface	Journal of ceramic processing research	June 2023
2	Dr.B.Ravindar Reddy	Deviation analysis of reverse engineered freeform surface with rapid prototyping	AIP Conference Proceedings	Nov 2023
		Effect of Al <sub>2</sub> TiO <sub>5</sub> powder coating on the tribological, corrosion and mechanical properties of AISI 316L stainless steel	Materials Research Express	June 2023
3	Dr.L.Madan Anand Kumar	Design and development of metal with plastic replacements by reverse engineering.	AIP Conference Proceedings	Nov 2023
4	Dr.J.Jagadesh Kumar	Effect of Al <sub>2</sub> TiO <sub>5</sub> powder coating on the tribological, corrosion and mechanical properties of AISI 316L stainless steel	Materials Research Express	June 2023
		Deviation analysis of reverse engineered freeform surface with rapid prototyping	AIP Conference Proceedings	Nov 2023
		Finite Element Fatigue Analysis of Notched F55 Super Duplex Stainless Steel		22, June 2024
5	Mrs.J.Emeema	Investigations on a novel composite phase change material comprising paraffin wax and CQDs for thermal conductivity enhancement	Thermal Science	Aug 2023
		Exploring thermal dynamics of polyaniline-modified parafn wax phase change material with varied PANI loadings (1-4% wt.)	Heat and Mass Transfer	29 January 2024
6	Mr. K.Rajesh Kumar	Analysis of friction stir welding of AZ91D magnesium alloy with boron application using TOPSIS Taguchi method	Journal of Ceramic Process Research	June'2023
		Tensile and impact properties of hybrid composites based on woven fabrics made of sisal, jute,	A Journal of Composition Theory	Dec'2023

		and basalt fiber		
		Analysis of friction stir welding of AZ91D magnesium alloy with boron application using TOPSIS Taguchi method	Journal of ceramic processing research	June 2023
7	Mr.P.Samath Kumar	Direct metal deposition of alloys using laser as a heat source	A Journal of Composition Theory	Dec'2023
		Tensile and impact properties of hybrid composites based on woven fabrics made of sisal, jute, and basalt fiber	A Journal of Composition Theory	Dec'2023
8	Mr.T.Pavan Kumar	Tensile and impact properties of hybrid composites based on woven fabrics made of sisal, jute, and basalt fiber	A Journal of Composition Theory	Dec'2023
		Direct metal deposition of alloys using laser as a heat source	A Journal of Composition Theory	Dec'2023
9	Mr.S.Prasad Kumar	Direct metal deposition of alloys using laser as a heat source	A Journal of Composition Theory	Dec'2023

**FDP Attended by faculty:**

S.NO	Name of the faculty	Name of the Event	PLACE
1	Dr.V.V.Satyanarayana	An International Conference on "Computational Techniques & Smart Manufacturing"	VEMU Institute of Technology(Autonomous) , Andhra Pradesh
2	Mr.DRS.Narsingh Rao	A National workshop on "Concepts and Practices of Physical Sciences in the rich tapestry of Indian Knowledge System"	IQAC, VJIT, Hyderabad
3	Dr.B.Ravinder Reddy	A National workshop on "Concepts and Practices of Physical Sciences in the rich tapestry of Indian Knowledge System"	IQAC, VJIT, Hyderabad
4	Mr.C.Ravi	A FDP ON "EMERGING TRENDS IN MECHANICAL ENGINEERING'	VARDHAMAN COLLEGE OF ENGINEERING
5	Mr.J.Pradeep Kumar	A FDP on "Emerging Trends in Mechanical Engineering"	Lords Institute of Engineering & Technology, Hyderabad
6	Mr.P.Raghuram Reddy	A FDP ON "EMERGING TRENDS IN MECHANICAL ENGINEERING'	VARDHAMAN COLLEGE OF ENGINEERING

7	Dr.J.Jagadesh Kumar	A National workshop on “Concepts and Practices of Physical Sciences in the rich tapestry of Indian Knowledge System”	IQAC, VJIT, Hyderabad
8	Mr.K.Rajesh Kumar	A FDP ON "EMERGING TRENDS IN MECHANICAL ENGINEERING'	VARDHAMAN COLLEGE OF ENGINEERING
9	Mr.Ismail Shaik	A National workshop on “Concepts and Practices of Physical Sciences in the rich tapestry of Indian Knowledge System”	IQAC, VJIT, Hyderabad

### Information Bulletin for Students

- ✓ The last date to register for the Graduate Aptitude Test in Engineering (GATE) 2025 without a late fee was October 3, 2024. The last date to register with a late fee was October 11, 2024.
- ✓ Students of final year will be given the award for BEST Project depending upon the work done for their project.

### Vision of Department

To be recognized as a center of excellence in providing Mechanical Engineering education of international standards leading to well qualified engineers who are innovative, immediate contributors to their profession, successful in advanced studies and employable globally.

### Mission of Department

To educate, prepare and mentor students to excel as professionals and grow throughout their careers in the field of Mechanical Engineering. This can be accomplished by:

Providing the facilities and environment conducive to a high quality education, strong foundation in the fundamental principles of Mechanical Engineering and preparing them for diverse careers.

Engaging in academic activities, which strengthen the students regional, national and international reputation.

### Program Educational Objectives (PEOs)

**PEO-I:** Successful career in mechanical and allied industries through strong foundation in basic sciences, mathematics and engineering fundamentals.

**PEO-II:** Ability to update knowledge on dynamically changing industrial practices.

**PEO-III:** Capability to work in a global environment imbuing team spirit with ethical responsibility.

**PEO-IV:** Ability to enrich knowledge, communication and leadership skills through perpetual learning with zeal towards research.