



Sri Venkateswara
College of
Engineering

Department of Mechanical Engineering

NOVEMBER 2024 IGNITION NEWSLETTER

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About the Department

The department of Mechanical Engineering started its successful journey in 1985 and has been accredited by the NBA since 1998. It is recognized as a research center approved by Anna University, as well. The UG/PG courses offered by the department cover the thrust areas such as Thermal, Design, Manufacturing and Industrial Engineering and is supplemented by well - equipped laboratories, reputed research supervisors and dedicated faculty members. The department has the privilege of housing research cells - namely the Fibre Reinforced Composite (FRP) Cell, Engine Testing and Bio - Fuel Research cell, Tribology research cell, Welding research cell which are used extensively for research and consultancy projects. The department has completed sponsored research projects for a worth of more than 1.5 crore and consultancy projects for more than 75 lakhs. The department has established a center of excellence in Additive Manufacturing and Computer Integrated Manufacturing, which houses the facilities such as Digital Manufacturing, Robotics and HMI based Automation and 3D printers. The department has published more than 150 papers in peer reviewed journals during the last 4 years.

The following programs are offered by the department

1. B.E. Mechanical Engineering
2. B.E. Mechanical and Automation Engineering
3. M.E. Industrial Automation and Robotics

Vision

To be a leader in Higher Technical Education and Research by providing the state of the art facilities to transform the learners into global contributors and achievers.

Mission

1. To be renowned for offering Programs in the field of Mechanical Engineering that imparts competent technical knowledge along with skill, research & innovation, leadership and life skills needed for the students to contribute and achieve at global level.
2. To provide quality education encompassing recent technological developments by continuously upgrading the academic infrastructure thereby enhancing the technical knowledge of students, teachers and supporting staff which facilitates technical assistance to industrial and societal needs.
3. To offer need based training to the students in tools relevant to mechanical engineering.
4. To continuously upgrade the research facility and provide a conducive environment leading to continuous learning, development and transfer of knowledge.
5. To inculcate in students minds about Professional ethics, Human Values and Environmental issues in Engineering.

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Patent Published: **Dr. M. Prem Ananth**, along with students **Mr. Rohith Ram R** (III Year, Mechanical and Automation Engineering), **Mr. Adnan Khader**, **Mr. Hari Kiran M.G.**, and **Mr. Harish Madhavan S** (IV Year, Mechanical Engineering), has successfully published a patent titled "**Smart Flood Barrier**" under Application No. 202441080899. The patent was filed on 24th October 2024 and published on **1st November 2024**. Congratulations to the team for this innovative contribution!



Office of the Controller General of Patents, Designs & Trade Marks
Department for Promotion of Industry and Internal Trade
Ministry of Commerce & Industry,
Government of India

(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

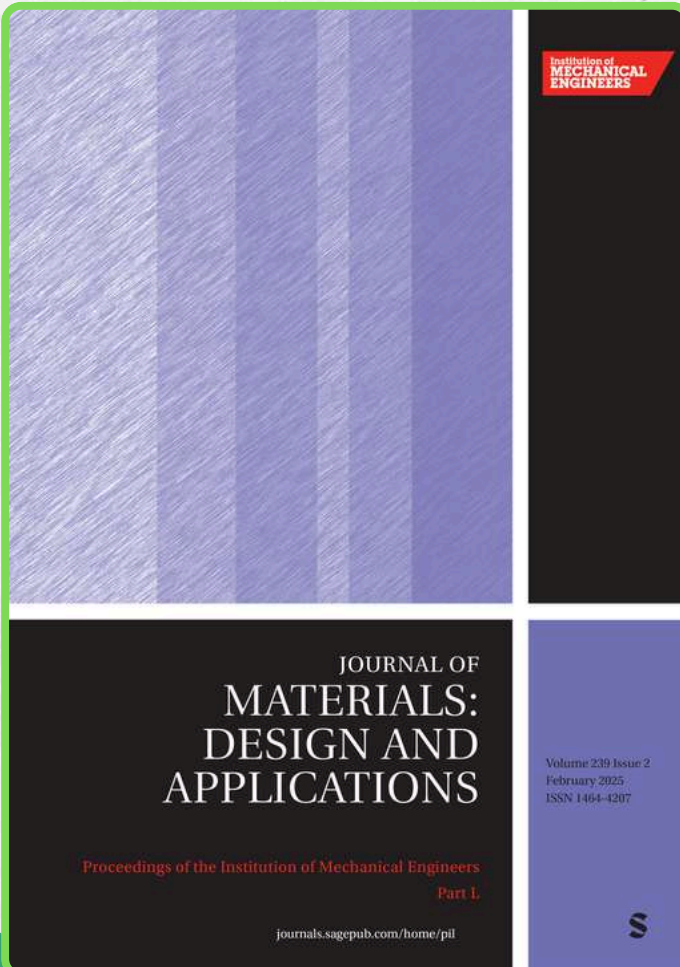
Application Details	
APPLICATION NUMBER	202441080899
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	24/10/2024
APPLICANT NAME	1 . SRI VENKATESWARA COLLEGE OF ENGINEERING 2 . PREM ANANTH M 3 . ROHITH RAM R 4 . ADNAN KHADER M 5 . HARI KIRAN M G 6 . HARISHMADHAVAN S
TITLE OF INVENTION	"SMART FLOOD BARRIER"
FIELD OF INVENTION	CIVIL
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	01/11/2024

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



Journal Published: **Dr. G. Girish** has published a research paper titled "**Impact of Laser Shock Peening on Microstructure, Hardness, and Corrosion Properties of AA6061 Alloy**" in the Proceedings of the **Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications**. This SCIE-indexed journal has an impact factor of **2.5**. Congratulations to Dr. Girish on this significant academic contribution!



Restricted access | Research article
First published online November 18, 2024

Impact of laser shock peening on microstructure hardness and corrosion properties of AA6061 alloy

[G. Girish](#) [View all authors and affiliations](#)

[OnlineFirst](#) | <https://doi.org/10.1177/14644207241298933>

Contents | Get access | More

Abstract

In recent times, laser shock peening (LSP) has emerged as a pioneering technique to modify the surface properties of various aluminium-based alloys. In this study, AA6061 was treated by single and multi-pass LSP, and its microstructure, hardness, and corrosion behaviour were investigated. Microstructural studies were performed using X-ray diffraction, electron back-scattered diffraction, and transmission electron microscopy methods. Texture studies were conducted using the neutron diffraction method, while hardness measurements were carried out using a Vickers hardness tester. Corrosion studies were conducted using the potentiodynamic method, and surface examination was performed using scanning electron microscopy. The results

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



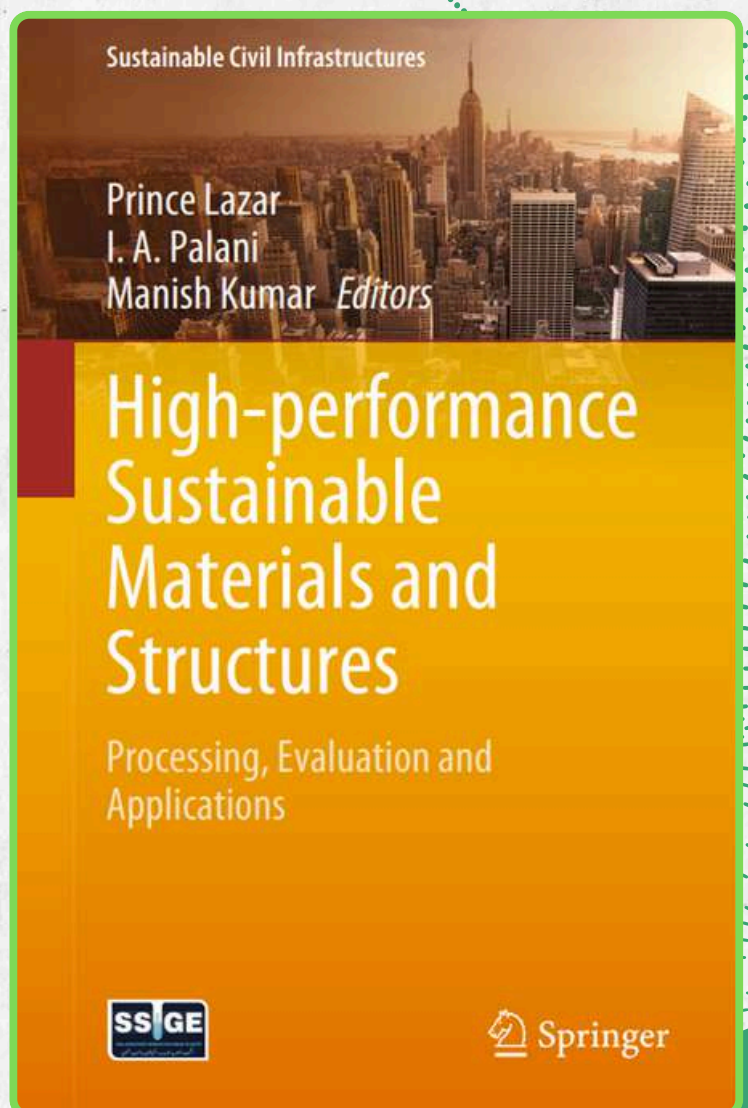
Prize Won: *Dr. S. Gopinath and Mr. Bhaskar* (Instructor, Department of Mechanical Engineering) won the **Gold Award** in the **KAIZEN** (Continuous Improvement) Competition organized by the **Quality Circle Forum of India (QCFI), Chennai Chapter**. Congratulations to both for this outstanding achievement!



FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

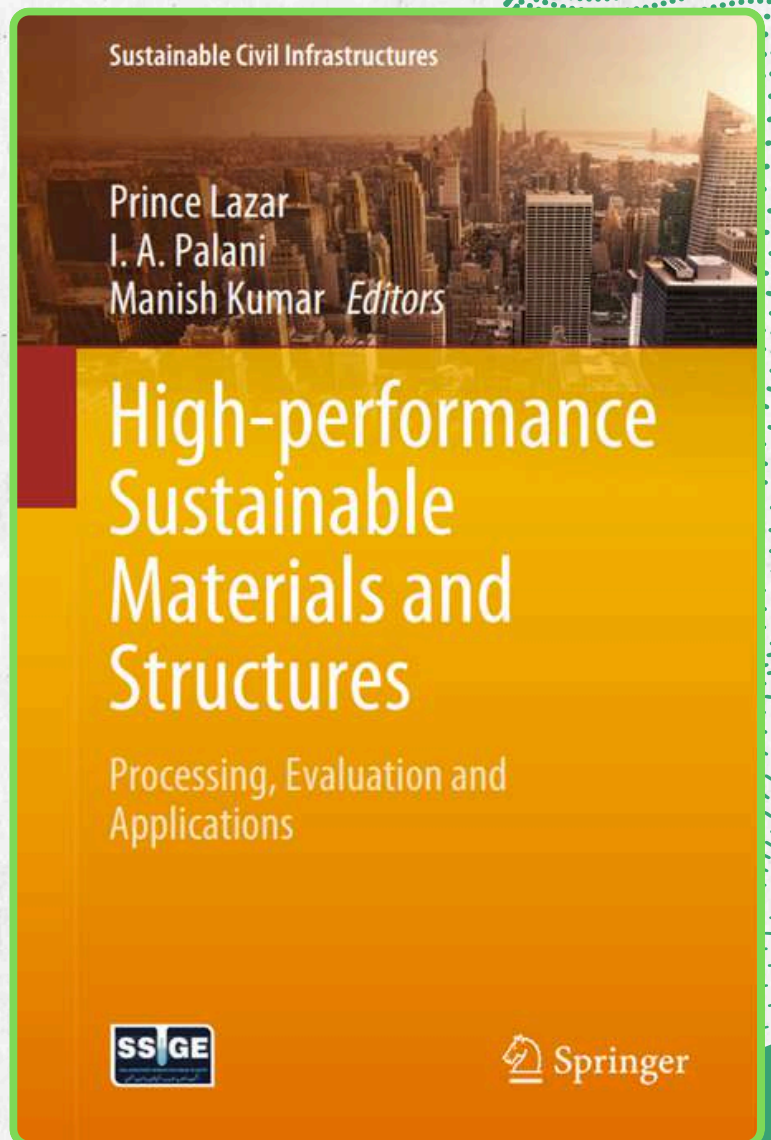
Bookchapter Published: Dr. S. Muniraj and Mr. A. Kumaraswamy, along with students Mithun Aravind O and J. Madhava Rajan, published a chapter titled **"Prediction of Improved Surface Quality by Optimized Influential Milling Process Parameters with Different Cutters on Magnesium Alloy"**. Their chapter is featured in the book **"High-Performance Sustainable Materials and Structures"** and highlights advancements in milling process optimization for enhanced surface quality on magnesium alloys. Congratulations to the team for their contribution to sustainable materials research



FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Bookchapter Published: Mr. Arulkumar M. and Dr. Prem Ananth M. published a book chapter titled **"Predictive Modelling of Wear and Friction in Surface Textured TiAlN Coated Ti6Al4V Alloy Using Artificial Neural Networks"** in the **High-Performance Sustainable Materials and Structures Book Series** under the Sustainable Civil Infrastructures series. The chapter, spanning pages 131–142, was published by Springer Nature Switzerland in 2024. Congratulations to the authors on their significant contribution to sustainable materials research!



FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



Conference Presentation: Mr. Arulkumar M. along with **Krithik Raj A.** final year student, Participated and Presented a paper Titled: **Artificial Intelligence-based Autonomous Pesticide Spraying Drone Management for Sustainable Agriculture in the International Conference on Advanced Materials, Manufacturing and Sustainable Development (ICAMMSD-2024)** organized by the Mechanical Engineering Department during **22-23 November 2024** at **G.Pulla Reddy Engineering College (Autonomous), Kurnool, Andhra Pradesh - 518007.India.**



FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



NPTEL course completion: **Dr. C. Senthamaraikannan** successfully completed the NPTEL 12-week course on "Automation in Manufacturing" with a consolidated score of 82% during the July–October 2024 session. Congratulations on this accomplishment!



Elite NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to
C SENTHAMARAIKANNAN
for successfully completing the course



Automation in Manufacturing

with a consolidated score of **82** %

Online Assignments	25/25	Proctored Exam	57/75
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Total number of candidates certified in this course: **1559**

Jul-Oct 2024
(12 week course)

Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL24ME139S1056310007

To verify the certificate



No. of credits recommended: 3 or 4

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



NPTEL course completion: Dr. R Ramesh successfully completed the NPTEL 12-week course on "Automation in Manufacturing" with a consolidated score of 67% during the July–October 2024 session. Congratulations on this accomplishment!



Elite NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to
RAMESH R
for successfully completing the course



Automation in Manufacturing

with a consolidated score of **67** %

Online Assignments	24.69/25	Proctored Exam	42/75
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Total number of candidates certified in this course: **1559**

Jul-Oct 2024
(12 week course)

Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL24ME139S961300416

To verify the certificate



No. of credits recommended: 3 or 4

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



NPTEL course completion: Dr. S PONNUVEL successfully completed the NPTEL 12-week course on "Automation in Production Systems and Management" with a consolidated score of 86% during the July–October 2024 session. Congratulations on this accomplishment!



Elite NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to
S PONNUVEL
for successfully completing the course



Automation in Production Systems and Management

with a consolidated score of **86** %

Online Assignments	23.44/25	Proctored Exam	63/75
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Total number of candidates certified in this course: **317**

Jul-Oct 2024
(12 week course)


Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24MG117S1056309983

To verify the certificate




No. of credits recommended: 3 or 4

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



Guest lecture: On 15th November 2024, Dr. M. Gajendiran delivered a webinar lecture on Fluid Mechanics and Machinery for the Department of Mechanical Engineering at DMI College of Engineering, Chennai. The session began at 10:45 AM, providing valuable insights into core mechanical engineering concepts.




DMI College Of Engineering

Palanchur, Chennai -600123
(An Autonomous Institution)

Department Of Mechanical Engineering

DATE: 15-11-2024 **Webinar on** **TIME** 10.45 AM
Fluid mechanics and machinery

Resource Person:  Dr. M. Gajendiran
Assistant professor
Department of Mechanical engineering
SVCE

Rev.Sr.M.K.Teresa Dr.Sujatha Jamuna Anand Da.A.Amala Mithin Mr.Saravanan
Correspondent Principal HOD/Mechanical Staff Coordinator

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Guest lecture: Mr. J. Sivaramapandian served as a resource person for a webinar titled "**Design Concepts of Springs and Bearings**" organized by the Department of Mechanical Engineering, DMI College of Engineering, on **17th November 2024**. His session provided valuable insights into the design and applications of springs and bearings.



DMI COLLEGE OF ENGINEERING
AN AUTONOMOUS INSTITUTION
APPROVED BY AICTE, AFFILIATED TO ANNA UNIVERSITY
NBA ACCREDITED PROGRAMMES, ISO CERTIFIED INSTITUTION
PALANCHUR, CHENNAI - 600123

DEPARTMENT OF MECHANICAL ENGINEERING
ORGANIZES
WEBINAR
ON
**DESIGN CONCEPTS OF
SPRINGS AND BEARINGS**
RESOURCE PERSON
J SIVARAMAPANDIAN
ASSISTANT PROFESSOR
SRI VENKATESWARA
COLLEGE OF ENGINEERING
Sriperumbudur

Date 17-11-24 **Time** 09:00 AM

Rev.Sr.M.K.TERESA
CORRESPONDENT

Dr.SUJATHA JAMUNA ANAND
PRINCIPAL

Dr.A.AMALA MITHIN
HOD/MECH

MrDr.V N ANBAZHAGAN
Coordinator

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Workshop attended: Dr. P. Raghu, Dr. G. Girish, and Mr. M. Maheswaran attended a PALS program as representatives of the Partner Institute for PALS 2024–25. As part of the program, they visited Shibauro Machine India Private Limited, Chennai, on **25th October 2024**, gaining insights into advanced manufacturing processes and machinery.



CERTIFICATE OF PARTICIPATION

IS AWARDED TO

Mr.MAHESWARAN. M



CERTIFICATE OF PARTICIPATION

IS AWARDED TO

Dr.G.Girish

ASSISTANT PROFESSOR, MECHANICAL ENGINEERING,
from SRI VENKATESWARA COLLEGE OF ENGINEERING.



CERTIFICATE OF PARTICIPATION

IS AWARDED TO

Dr.Raghu

ASSOCIATE PROFESSOR, MECHANICAL ENGINEERING,
from SRI VENKATESWARA COLLEGE OF ENGINEERING,
a Partner Institute of PALS 2024 – 25.

Faculty visited the
SHIBAURA MACHINE INDIA PRIVATE LIMITED, Chennai
on 25th October 2024.



Chandrasekaran

C N Chandrasekaran

Chairman, PALS

PALS an initiative of volunteers from Alumni Fraternity of IIT's, focussed on assisting engineering education. Details in www.palsom.com

25th Oct 2024 - IV-SHIBAURA-028

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

FDP attended: Dr. C. Senthamaraikannan and Mr. A. Kumaraswamy successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on "IoT Enabled Techniques for Industrial Processes" held at M. S. Ramaiah Institute of Technology from 25th to 30th November 2024. Congratulations to both for their active participation and achievement!



FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



FDP attended: Dr V Sridharan and Mr. Aravindan M, participated in a **Five-Day Online Faculty Development Program (FDP)** on **"Metal Additive Manufacturing: From Advances to Adaptability"** organized by the Department of Mechanical Engineering, **St. Joseph's Institute of Technology**, from **4th to 8th November 2024**.



STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Third-year Mechanical Engineering students **Mr. Akash K** (Reg. No. 2127221001301) and **Mr. Mohana Sundaram V.R** (Reg. No. 2127221001302) secured the Best Paper Award for their paper titled **"Adopting IoT in Agriculture for Irrigation Systems"** at **"KRIDA-YANTHRIK'24"**, a National Level Technical Symposium organized by the Department of Mechanical Engineering, Rajalakshmi Engineering College, Chennai, on 28th October 2024. They were awarded a cash prize of ₹1,000, and the work was guided by **Dr. A. Saravanan**, Assistant Professor, Department of Mechanical Engineering. Congratulations to the team!



STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Sports Achievements:

Mithun Aravind O (IV Year, Mechanical Engineering) represented the college **basketball** team and secured the **Runners-Up position** in the

State-Level Inter-Collegiate Basketball Independence Day Cup 2024, organized by **Shiv Nadar University** on **28th & 29th October 2024**, and received a cash award of **₹7,000**.



Sri Ramana Kishore (I Year, Mechanical Engineering) secured the **Third Prize** in the **Handball** Tournament 2024-25.



Jeeva Karuna S (II Year, Mechanical Engineering) secured the **Third Prize** in the **Hockey** Tournament 2024-25.



INDUSTRIAL VISIT

“Factory Chronicles: Where Learning Takes Shape”

Industrial visit was organized for **50 students** from the 3rd year Mechanical (25 students) and Final Year A Section (25 students) on 7th October 2024 to **M/s Indwel Precision Gears Pvt. Ltd.**, located in Sriperumbudur. The students were accompanied by **Dr. S. Ponnuel** and **Mr. M. Arulkumar**, faculty members from the Department of Mechanical Engineering. The visit provided valuable insights into precision gear manufacturing and its industrial applications.



INDUSTRIAL VISIT

“Factory Chronicles: Where Learning Takes Shape”

Industrial Visit to ACE Designers Limited, Bengaluru

Dr. C. Senthamarai Kannan and **Mr. A. Kumaraswamy** visited ACE Designers Limited, Bengaluru, on **29th November 2024**. The visit was arranged through **M. S. Ramaiah Institute of Technology**, providing valuable industry exposure to advanced manufacturing and CNC machining technologies.



INDUSTRIAL VISIT

“Factory Chronicles: Where Learning Takes Shape”

*Industrial visit was organized for **48 students** for 2nd year Mechanical and Automation engineering students on 8th November 2024 to **M/s Delphi-TVS. Ltd.**, located in Sriperumbudur. The students were accompanied by **Dr. S. Natrajan** and **Mr. A. Ranjith Raj**, faculty members from the Department of Mechanical Engineering. The visit provided valuable insights into precision gear manufacturing and its industrial applications.*



PLACEMENT

"Opening Doors to Career Opportunities"

Congratulations!



BINU N

(2127211001010)



Expedit Joe L

(2127211001017)



Gokul P

(2127211001018)



Gokulakrishnan S

(2127211001019)



Gowshick Sugin I M

(2127211001020)

Congratulations to **Binu N, Expedit Joe L, Gokul P, Gokulakrishnan S,** and **Gowshick Sugin I M** on their placement at M/S **Infosys** as **System Engineers**. Wishing them great success in their professional journey!

PLACEMENT

"Opening Doors to Career Opportunities"

Congratulations!



Dharun Prakash M
(2127211001014)

Congratulations to **Dharun Prakash M** (2127211001014) for securing placement at M/S **Rishab Enterprises** as a **Graduate Engineering Trainee**. Wishing him success in his new role!

EDITORIAL TEAM



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Professor & Head
Mechanical Engineering



Dr. M. Mohandass
Associate Professor
Mechanical Engineering



Dr. S. MUNIRAJ
Assistant Professor
Mechanical Engineering



Mr. A. Ranjith Raj
Assistant Professor
Mechanical Engineering

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Mechanical Engineering



Mr. Mithun Aravind O
IV Year
Mechanical Engineering



Mr. G Bharath Kumar
III Year
Mechanical Engineering



Mr. Lokesh P
III Year - Mechanical and
Automation Engineering



Mr. M Sanjay
II Year
Mechanical Engineering



Mr. Lithesh C
II Year - Mechanical and
Automation Engineering