



## DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE

(Approved by AICTE and Affiliated to Anna University, Chennai, Chennai)

Accredited with 'A' Grade by NAAC

Perambalur - 621212, Tamilnadu

### "MECH ARENA"

#### NEWSLETTER

DEC 2020 ISSUE

### DEPARTMENT OF MECHANICAL ENGINEERING

### Chairman's Message



The newsletter which is being rolled out today marks the launch of an effervescent activity that would enable the Management to bring out to the eyes of the competitive world, the academic achievements of our prestigious institution. Dhanalakshmi Srinivasan engineering College has grown in leaps and bounds, hurtling across barriers along the way. This has been made possible with the collaborative effort of the Management, the Staff and the Students. I congratulate everyone for their commitment.

#### In this Issue,

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#### Editorial Board

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## About The Department

- The Department of Mechanical Engineering was started in the year 2005. The Department offers Undergraduate Programme (B.E) in Mechanical Engineering and Postgraduate Programmes (M.E.) in CAD/CAM. The Department of Mechanical Engineering offers an excellent teaching-learning environment with modern state-of-the-art facilities and well-experienced faculty members. The Department has an active students technical association. It disseminates knowledge through various activities like special lectures/workshops/seminars/conference, competitions, technical quiz by eminent practitioners of the profession. Regular industrial visits/training/Internships to bridge the gap between theoretical and practical knowledge are arranged.
- The Department involves in value added courses and international certification programmes in association with leading training providers in the areas of drafting, modelling, simulation and analysis of engineering systems during semester holidays. The faculty members consistently interact with technical societies, to promote innovation and enrich the knowledge, skill and behaviour of students. The Department encompasses professional associations such as International Association of Engineers (IAEng), Institution of Engineers (IE), Institute of Research Engineers and Doctors (IRED) which provides students a platform to acquire various hard and soft skills.
- The department boasts of well-qualified and committed faculty ably supported by the technical supporting staff. The students have access to state of the art laboratories and workshops, which enable them to face the challenging needs of the industries and research institutions. The students are provided enough opportunities to specialize in the areas of CAD, CAM, ROBOTICS, MECHATRONICS etc. With expertise over a wide range of domain specialization. The Department aims to attain excellence in academic teaching and learning, research and extension activities. The areas of research focus include design, manufacturing, materials and thermal engineering.

## VISION

- To develop highly skilled Mechanical Engineers dedicated to serving society.

## MISSION

- To develop competency in emerging technologies through knowledge and skill based education
- To provide conducive environment for research and innovation to cater the societal needs
- To inculcate moral and ethical values to become socially responsible engineers

## PROGRAM EDUCATIONAL OBJECTIVES

This Course is conducted to achieve the following Programme Educational Objectives

(PEOs):

- Academic Excellence Excel as successful engineers or entrepreneurs.
- Leadership Quality Become effective leaders, demonstrating professionalism and a commitment to lifelong learning.

## PROGRAM SPECIFIC OUTCOMES

**PSO1:** Apply fundamental and advanced concepts in mechanical engineering across multiple domains, such as materials, design, manufacturing, and thermal engineering, to effectively design, develop, and implement complex products and systems.

**PSO2:** Identify, select, and effectively utilize ICT tools commonly employed Mechanical Engineering such as Computer-Aided Design (CAD) software, simulation software, and data analysis tools to create and apply innovative solutions for the betterment of society.

## EVENTS ORGANIZED

### ➤ **WEBINAR on How to Create a Better Tomorrow Dated**

**01/08/2020**

A webinar focused on How to Create a Better Tomorrow was held on 1st August 2020, inspiring participants with strategies and insights for personal and collective improvement.

Key highlights of the webinar included:

1. **Visionary Thinking:** Participants were encouraged to adopt a visionary mindset, envisioning a better future for themselves and society. The webinar emphasized the power of positive thinking and proactive planning in shaping a brighter tomorrow.
2. **Goal Setting and Action Plans:** The session delved into the importance of setting achievable goals and creating action plans to turn dreams into reality. Attendees learned practical strategies for goal setting, prioritization, time management, and overcoming obstacles.
3. **Social and Environmental Responsibility:** The webinar highlighted the role of individuals and communities in promoting social justice, sustainability, and environmental conservation. It encouraged participants to contribute positively to their communities and the planet.
4. **Innovative Solutions:** The webinar showcased innovative solutions and initiatives that contribute to a better tomorrow, such as technology-driven advancements, social entrepreneurship, community development projects, and sustainable practices.

The webinar fostered discussions on personal growth, societal progress, and collective responsibility in building a brighter and more inclusive future for generations to come.

### ➤ **WEBINAR on Future Opportunities in Germany for Indian**

**Engineers Dated 18/07/2020**

A webinar focusing on Future Opportunities in Germany for Indian Engineers was conducted on 18th July 2020, providing valuable insights into career prospects and pathways for engineering professionals in Germany.

Key highlights of the webinar included:

1. **Introduction to German Engineering Sector:** Participants gained an overview of the thriving engineering sector in Germany, known for its innovation, advanced technology, and high-quality engineering education and research.

2. **Job Market Trends:** The webinar discussed current job market trends in Germany for Indian engineers, including demand for specialized skills in fields such as automotive engineering, mechanical engineering, electrical engineering, software development, and renewable energy.
3. **Work Culture and Visa Requirements:** Attendees learned about the work culture in German companies, visa requirements for working in Germany, language proficiency expectations, and cultural adaptation tips for successful integration into the German workforce.
4. **Education and Skill Development:** The session highlighted opportunities for further education, skill development programs, and research collaborations in Germany, encouraging participants to explore avenues for advancing their careers in the country.

The webinar stimulated discussions on international career opportunities, cross-cultural experiences, and the benefits of pursuing professional growth in a global engineering hub like Germany.

## FACULTY PUBLICATIONS

Sl. no.	Authors Name	Title	Name of the Journal	Volume /Issue/ pp	Year
1	J Arunprasad, R Thirugnanasambantham, R Rajesh, S Sugumar, T Elango	An influence on wear characteristics of benthic-diatom navicula sp. algae oil by using four ball tribometer	Advances in industrial automation and smart manufacturing: select proceedings of ICAIASM 2019 springer	865-878	Oct-2020
2	D.Manikandan	Investigation on friction stir welding of Aluminium AA7075 alloy and optimizing the process parameters to obtain maximum strength	International journal for scientific research & development	8(7): 117-123	Oct-2020
3	D.Manikandan	Wear behaviour of aa8011-fly ash composites by stir casting techniques	International journal for scientific research & development	8(7): 363-366	Oct-2020
4	R Thirugnanasambantham, T Elango,	Emission analysis of chlorella sp. microalgae biodiesel with oxide nano additives in diesel engine	Journal of scientific & industrial research (SCIE)	0975-1084 (ONLINE); 0022-4456 (PRINT)	Nov-2020

## PATENT DETAILS

Sl. No.	Inventor Name	Year of Filing	Title	Reference Number	IP Status	Applied For
1	S. Sugumar T. Jayakumar	07-08-2020	Sensor Based Artificial Limb for Physically Challenged People	20204103404 5 A	Published	INDIAN PATENT

## STUDENT'S PARTICIPATION

S.NO	STUDENT NAME	TITLE OF THE EVENT	PLACE OF THE EVENT	DATE
1	ASHOK S	Non Destructive Testing and its Industrial applications	SRM Institute Of Science And Technology	26.07.2020
2	BALAMURUGAN A			
3	CAPTAN P			
4	RAJESHWARAN S			
5	RAJKUMAR S			
6	M.RAMPRAKASH			
7	L.RENGANATHAN			
8	SIVA G	Design Thinking For Next Industrial Revolution - Industry 4.0	Arasu Engineering College	09.07.2020
9	C.SIVAMOORTHY			
11	KARTHICK RAJA S			
12	SIRANJEEVI RAJAN K			
13	VIGNESH. S			
15	VIMALRAJ. R			
16	P.VINOTHKUMAR			
17	ARJUN R			
19	SATHAM USAIN J			
20	ANVIN THOMAS			
21	SURYA S	Composite for Beginners	Vignan Institute Of Technology & Science, Telangana	09.07.2020
22	S.SURYA PRAKASH			
23	SYED FAROOK BASHA J			
24	A.VENGATESH	Functionally Graded Metal Matrix Composites	Vignan Institute Of Technology & Science, Telangana	27.07.2020
25	SATHISH BABU P			
26	GURU BARAN T			
27	YUVARAJ M			