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Learn Beyond

**KPR Institute of  
Engineering and  
Technology**

(Autonomous, NAAC "A")

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## CONTENTS



**Department  
Events**



**Faculty  
Publications**



**Students  
Achievements**



**Students  
Placement**



**Students  
Internship**

# SPARK



## VISION

To be recognized as a premier centre in the field of mechanical engineering education, research and development to meet the changing needs of industry and society.

## MISSION

The Department of Mechanical Engineering is committed to,

- ✦ Provide fundamental and skill-based education in mechanical engineering through innovative practices in teaching and learning.
- ✦ Establish centers of excellence in collaboration with reputed industries, professional bodies and research laboratories.
- ✦ Promote entrepreneurship with leadership qualities, ethics, and human values for the society at large.

## PROGRAM EDUCATION OBJECTIVES (PEO)

**Graduates of BE Mechanical Engineering four years after graduation will:**

- ✦ **PEO1:** Excel in their professional career with competencies in the field of mechanical and allied engineering.
- ✦ **PEO2:** Apply modern research and simulation tools to solve industrial and societal needs.
- ✦ **PEO3:** Practice professional and ethical values in respective organizations and society.

## PROGRAM SPECIFIC OUTCOMES (PSO)

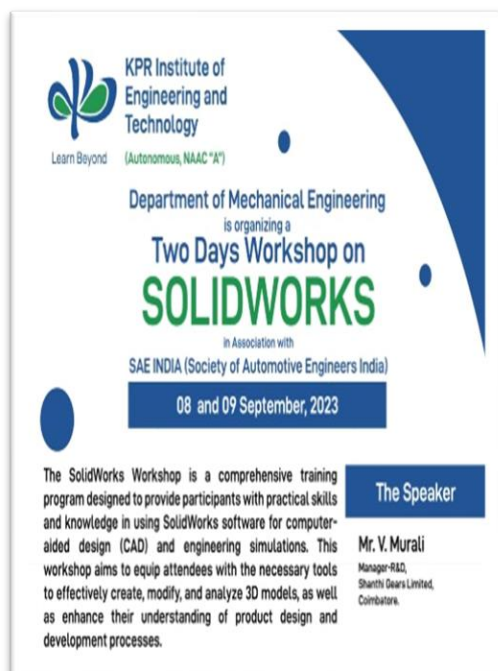
**Graduates of Mechanical Engineering should:**

- ✦ **PSO 1:** Design, develop and implement advanced mechanical systems by applying engineering principles for improved performance and less human effort.
- ✦ **PSO 2:** Apply quality tools to ensure quality, articulate maintenance principles and demonstrate managerial skills to comprehend the mechanical engineering processes, products and services.

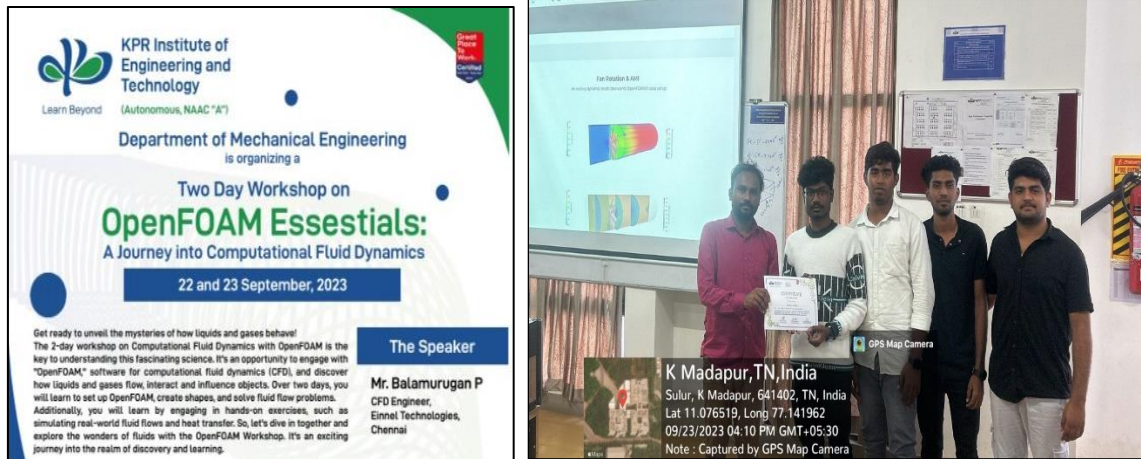
## DEPARTMENT EVENTS

### PROGRAMS ORGANIZED

- ✦ The Two-day SolidWorks Workshop held on September 8th and 9th, 2023, marked a significant milestone for our organization and the participants from various institutions who attended. This workshop was designed to provide in-depth knowledge and hands-on experience with SolidWorks, a leading software tool in the field of engineering and design. A total of 63 external participants representing 14 different institutions participated in the workshop.
- ✦ Each session was led by Dr.N.Karthi and Dr.S.Gokulkumar, ensuring that participants received comprehensive training in SolidWorks. In addition, Mr. V. Murali, the Head of R&D at Shanthi Gears Pvt Ltd, Coimbatore, delivered his insights during the Day 2 of the workshop. Participants gained a deeper understanding of SolidWorks, its applications, and its relevance in the field of engineering and design. The knowledge and skills acquired during this workshop will undoubtedly benefit both individuals and their respective institutions.



- ✎ The 2-day workshop on Computational Fluid Dynamics with OpenFOAM is the key to understanding this fascinating science. It's an opportunity to engage with OpenFOAM software for computational fluid dynamics (CFD), and discover how liquids and gases flow, interact and influence objects. Over two days, the participants will learn to set up OpenFOAM, create, shapes, and solve fluid flow problems.



## FACULTY PUBLICATIONS

### INTERNATIONAL JOURNALS:

- ✎ Noyon, A.R., Karim, S., Rouf, A., Jamal, M., Layek, R.K., **Sivanantham, G.** and Uddin, E., 2023. Fabrication of biodegradable kraft paper from buffing dust and jute fiber: Green solutions for packaging. *Polymer Engineering & Science*.
- ✎ **Gokulkumar, S.**, Suyambulingam, I., Divakaran, D., Priyadharshini, G.S., **Aravindh, M.**, Iyyadurai, J., Edwards, M.S. and Siengchin, S., 2023. Facile exfoliation and physicochemical characterization of biomass-based cellulose derived from Lantana aculeata leaves for sustainable environment. *Macromolecular Research*, pp.1-16.
- ✎ **Kannan, T.**, **Arulmurugan, B.**, **Balaji, D.**, Ramesh, R., Logeaswaran, M., Boopathy, S.M. and Mouliswer, P., 2023, September. Design and analysis of automatic toilet cleaning machine for Indian style toilets. In *AIP Conference Proceedings* (Vol. 2764, No. 1). AIP Publishing.

### STUDENTS ACHIEVEMENTS

The achievements of students from the Department of Mechanical Engineering in various events are displayed below.



**Secured Second Prize at Indian Institute of Space Science and Technology, Kerala**

### STUDENTS PLACEMENTS

The placement achievements of the students of the Department of Mechanical Engineering in various reputed companies are listed below.

S.NO	ROLL NO	NAME OF THE STUDENT	COMPANY NAME
1	20ME025	DHEEPAK G	AKKODIS
2	20ME049	KAVIN KISHORE K	SEYYON
3	20ME054	MADHUMITHRA C	AKKODIS
4	20ME077	SENTHIL L	AKKODIS
5	20ME095	VISHNU P G	SEYYON
6	711321208025	SKYWINDURAI R	TEREX