

**VOL NO.11
ISSUE NO.02
FEBRUARY 2022**



LEARN BEYOND
KPR INSTITUTE
of
ENGINEERING AND TECHNOLOGY
(Autonomous)
Avinashi Road, Arasur, Coimbatore - 641 407

EDITORIAL

Chief patron (s) : **Dr. A. M. Natarajan**
Chief Executive
Dr. M. Akila
Principal

Patron : **Dr. S. Ramesh Babu,**
Head of the Department

Editor : **Mr. S. Deepan**
Assistant Professor

Student Members :

IV Year Mech
Mr. A. S. Atharsh Kumar
Ms. S. Varuna

III YearMech
Mr. P. Sethu
Mr. S. Logesh Kumar

CONTENTS

1. Department Events
2. Faculty Publications & Achievements
3. Students Achievements



SPARK

**DEPARTMENT OF
MECHANICAL ENGINEERING**

VISION

To produce globally competent mechanical engineers to meet the changing needs of industries through innovative academic processes, research and value based education.

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
- ❖ Collaborate with reputed industries, professional bodies and research laboratories for establishing Centre of Excellence
- ❖ Imbibe ethical behavior and morality for social upliftment to uphold human values.

PROGRAM EDUCATION OBJECTIVES (PEO)

- ❖ **PEO1:** The graduates of mechanical engineering will have a successful professional career in their related field of engineering to meet the changing needs of various stakeholders.
- ❖ **PEO2:** The graduates of mechanical engineering will involve in technology advancements through continuing education.
- ❖ **PEO3:** The graduates of mechanical engineering will practice their profession with good leadership skills and ethical values.

PROGRAM SPECIFIC OUTCOMES (PSO)

A graduate of Mechanical Engineering should:

- ❖ **PSO 1:** Apply mechanical engineering principles to design, develop and implement advanced machine/mechanical systems or process for better performance and less human effort.
- ❖ **PSO 2:** Ensure quality by applying quality tools, maintenance principles and managerial skills to comprehend the mechanical engineering processes, products and services.

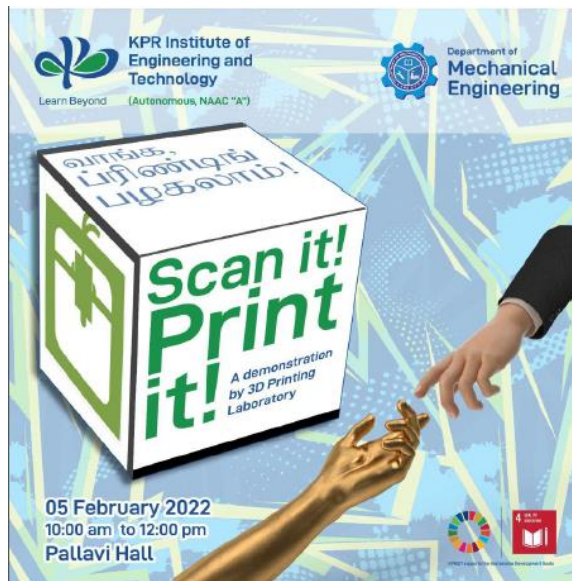
DEPARTMENT NEWS

PROGRAMS ORGANIZED

1. Department of Mechanical Engineering organized a Faculty orientation program on “**Demonstration of 3D scanner**” on 03.02.2022 in 3D Printing Laboratory. Mr. Anish Arumugaraj, Altem Technologies Pvt. Ltd Bangalore was the guest speaker.



2. Department of Mechanical Engineering and the Centre of Excellence organizes One-day workshop on ‘**Scan it Print it**’ for the Industry people on 05.02.2022, 10AM to 12PM at Pallavi Hall, KPRCAS. Faculty provided the hands on experience on Fused Deposition Modeling, Reverse Engineering demo using 3D Scanners and Laser Engraving cum Cutting Machine.



3. Department of Mechanical Engineering and CIED jointly organizes a seminar on “**Startup Avenues in Industrial Automation**” on 05.02.2022 at Thanam Hall. Mr. S Kavin Pradeep, Marketing Director, 4K Technologies and also Alumini of Mech 2017-2021 Batch was the guest speaker.



4. Mr. P Boobalkrishnan AP(Sr.G) of Department of Mechanical Engineering in association with SAE INDIA organizes a Webinar on “**Fundamentals of Engines Performance and Emission Tuning**” on 12.02.2022 through online google meet. Mr. V. Ashwinraj, Deputy Manager, Ashok Leyland, Chennai was the guest speaker.



5. Department of Mechanical Engineering presents an Industry Expert Interaction with students on “**Project Management**” on 18.02.2022 through Online Google meet. Mr. V Ganesh

Srinivas, Retd. Senior Deputy General Manager, Development and Engineering, Bharat Electronics Lmt, Bangalore was the guest speaker.



6. Department of Mechanical Engineering organizes a MTMx Series in “**Awareness Program about Onsite Education**” on 18.02.2022. Mr. Yogesh Kumar R, M.Sc, Alumini 2014-2018 batch, Pursuing Ph.D on Univerzita Pavla Jozefa was the guest speaker.



7. Department of Mechanical Engineering organizes an Inauguration program of “**The Institute of Indian Foundrymen – Students chapter**” on 26.02.2022 in Pallavi Hall. Mr S Balraj, Chairman, IIF - Coimbatore Chapter and Joint Managing Director, Bright Foundries Coimbatore Pvt. Ltd, - Mr S Muthukumar, Vice – Chairman, IIF - Southern Region- Dr M

Arasu, Past Secretary, IIF - Coimbatore Chapter and Dr V S Saravanan, Jr. Vice President (Foundry), Indo Shell Cast Pvt. Ltd were the guest speakers.

KPR Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC "A")

Department of Mechanical Engineering

Department of Mechanical Engineering organizes

**Inauguration of
The Institute of Indian Foundrymen -
Students Chapter**

Chief Guest:
Mr S Balraj
Chairman,
IIF - Coimbatore Chapter and
Joint Managing Director,
Bright Foundries Coimbatore Pvt. Ltd.
Coimbatore

Special Guest and Speaker:
Dr V S Saravanan
Jr. Vice President (Foundry),
Indo Shell Cast Pvt. Ltd.
Coimbatore

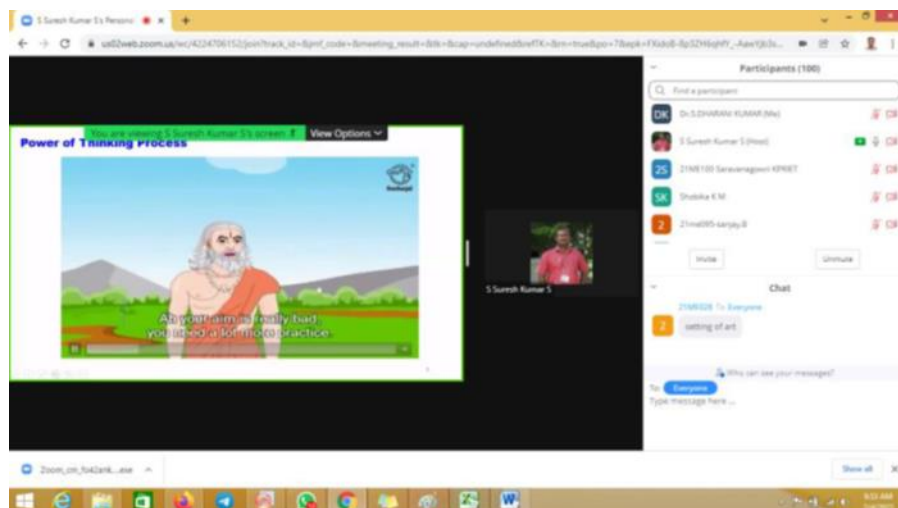
Guests of Honour:
Mr S Muthukumar
Vice - Chairman,
IIF - Southern Region.
Dr M Arasu
Past Secretary,
IIF - Coimbatore Chapter.

FEB 26 10:00 AM TO 12:00 PM

Pallavi Hall, KPRIET

kpriet.ac.in
/KPRIETonline

8. Department of Mechanical Engineering and Centre for Machining and Material Testing (CMMT) jointly organizes a webinar on “**Insights of Design Thinking**” on 04.02.2022 through online google meet. Dr. S. Suresh Kumar, Associate Professor, Department of Mechanical Engineering, SSN College of Engineering, Chennai was the guest speaker.



9. Department of Mechanical Engineering and Centre for Machining and Material Testing (CMMT) jointly organizes a webinar on “**Introduction to Fracture Mechanics**” on 25.02.2022 through online google meet. Dr. S. Suresh Kumar, Associate Professor, Department of Mechanical Engineering, SSN College of Engineering, Chennai was the guest speaker.

KPR Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC "A")

Department of Mechanical Engineering

Department of Mechanical Engineering
In Association with Centre for Machining and Material Testing [CMMT]
is Organizing a Webinar on

Introduction to Fracture Mechanics

Guest Speaker:
Dr. S. Suresh Kumar M. E, Ph.D
Associate Professor
Department of Mechanical Engineering
SSN College of Engineering
Chennai

25 February 2022
09.30 am to 10.30 am

Convener:
Dr.S.Ramesh Babu
Professor and Head
Department of Mechanical Engineering

Co-ordinators:
Dr.S.Dharani Kumar, AP (SLG)/Mech
Dr.S.Sathish, AP (SLG)/Mech

Join using Zoom:
Meeting ID: 422 470 6152
Passcode: DME2020

kpriet.ac.in
#KPRIETonline

10. ISHRAE Coimbatore Chapter & ISHRAE Students chapter KPRIET, Coimbatore and Department of Mechanical Engineering organizes a technical talk on “Heat Load Calculation” on 18.02.2022 through online google meet. Mr.D. Balaji, Partner, SRB & Associates-HVAC Consultants, Chennai was the guest speaker.



11. Department of Mechanical Engineering In Association with Centre for Machining and Material Testing (CMMT) jointly organizes a webinar on “MAT lab for Mechanical Engineers” on 19.02.2022 through online google meet. Mr. A. Vishnu Pragash, Matlab Developer, Inspire Network Technology Solution Pvt Lmt, Chennai was the guest speaker.

Department of Mechanical Engineering
In Association with Centre for Machining and Material Testing [CMMT]
Organizes a

**Webinar on
MATLAB for
Mechanical Engineers**

19 February 2022
11:00 am to 12:00 pm

Resource Person:
Mr. A. Vishnu Pragash
Matlab Developer
Inspire Network Technology Solutions Pvt Ltd
Chennai

Convener
Dr. S. Ramesh Babu
Professor and Head
Department of Mechanical Engineering

Co-coordinators
Dr. S. Sathish, AP (SL.G)/Mech
Dr. S. Dharani Kumar, AP (SL.G)/Mech

KPR Institute of Engineering and Technology
(Autonomous, NAAC "A")

kprnet.ac.in
/KPRIE:online

12. Department of Mechanical Engineering, Career Development Center and Office of Alumni Association organizes a series of webinar on 26.02.2022 through online Google meet.

Department of Mechanical Engineering & Career Development Centre Organize

A JOURNEY TO B/S/H

11 am to 12 pm | February 26, 2022
KPR Institute of Engineering and Technology

Naveen R
SAP CRM IT Business Consultant,
M&S Residential Appliances
Manufacturing Pvt. Ltd

Muthukumar R
M&S Test Engineer,
M&S Residential Appliances
Manufacturing Pvt. Ltd

Event Coordinators:
Mr. T.Kannan, AP(Dr./G)/Mech
(Placement Coordinator)
Mr. S.Gokulkumar, AP/Mech
(Alumni Coordinator)

11 am to 12 pm | February 26, 2022

DEPARTMENT OF MECHANICAL ENGINEERING & CAREER DEVELOPMENT CENTRE ORGANIZES

MECHANICAL TO SOFTWARE

DATE: 26.02.2022 TIME: 10 AM TO 11 AM

SPEAKER
JEEVA KUMAR D
ASSISTANT SYSTEM - ENGINEER, TCS
ALUMNUS OF 2021 BATCH

Event Coordinators:
Mr. T.Kannan, AP(Dr./G)/Mech
(Placement officer)
Mr. S.Gokulkumar, AP/Mech
(Alumni Coordinator)

10 AM TO 11 AM

Department of Mechanical Engineering & Career Development Centre Organize

THE ROAD TO B/S/H

11 am to 12 pm | February 26, 2022
KPR Institute of Engineering and Technology

Naveen Kumar J M
M&S Application Engineer(M&S),
M&S Residential Appliances
Manufacturing Pvt.Ltd

Monith V
M&S Application Engineer(M&S),
M&S Residential Appliances
Manufacturing Pvt.Ltd

Event Coordinators:
Mr. T.Kannan, AP(Dr./G)/Mech
(Placement Coordinator)
Mr. S.Gokulkumar, AP/Mech
(Alumni Coordinator)

11 am to 12 pm | February 26, 2022

DEPARTMENT OF MECHANICAL ENGINEERING & CAREER DEVELOPMENT CENTRE ORGANIZE

A JOURNEY OF MECHANICAL TO SOFTWARE

DATE: 26.02.2022 SATURDAY TIME: 10 AM TO 11 AM

SPEAKER
MOHANDAS T
ASSOCIATE SOFTWARE ENGINEER
ACCENTURE, BANGALORE
ALUMNUS OF 2021 BATCH

Event Coordinators:
Mr. T.Kannan, AP(Dr./G)/Mech
(Placement Coordinator)
Mr. S.Gokulkumar, AP/Mech
(Alumni Coordinator)

10 AM TO 11 AM

DEPARTMENT OF MECHANICAL ENGINEERING & CAREER DEVELOPMENT CENTRE ORGANIZE

Engineer to Marketing

Guest Speaker
Mohamed Imram M
Business Development Associate, Byjus
An alumna of 2021 batch.

Time: 11 am to 12 pm

Feb 26

Event Coordinators:
Mr. T.Kannan, AP(Dr./G)/Mech (Placement Coordinator)
Mr. S.Gokulkumar, AP/Mech (Alumni Coordinator)

11 am to 12 pm

FACULTY PUBLICATIONS

INTERNATIONAL JOURNALS:

1. M. Aravindh, S. Sathish, R. Ranga Raj, Alagar Karthick, V. Mohanavel, Pravin P. Patil, M. Muhibbullah, Sameh M. Osman, "A Review on the Effect of Various Chemical Treatments on the Mechanical Properties of Renewable Fiber-Reinforced Composites", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 2009691, 24 pages, 2022. <https://doi.org/10.1155/2022/2009691>
2. Senthil Kannan, N., Parameshwaran, R., Saravanakumar, P.T. et al. Performance and Quality Improvement in a Foundry Industry using Fuzzy MCDM and Lean Methods. *Arab J Sci Eng* (2022). <https://doi.org/10.1007/s13369-022-06627-6>.
3. Vinayagam Mohanavel , K. Ravi Kumar, T. Sathish , Palanivel Velmurugan , Alagar Karthick , M. Ravichandran , Saleh Alfarraj, Hesham S. Almoallim, Shanmugam Sureshkumar, and J. Isaac JoshuaRamesh Lalvani, Investigation on Inorganic Salts K₂TiF₆ and KBF₄ to Develop Nanoparticles Based TiB₂ Reinforcement Aluminium Composites, *Bioinorganic Chemistry and Applications*, <https://doi.org/10.1155/2022/8559402>
4. M.Sathish kumar, S.Senthilkumaran, M.Vignesh, **B.Arulmurugan**, N.Arivazhagan, M.Manikandan, S.Rajkumar, Hot corrosion behaviour of constant and pulsed current welded Hastelloy X in Na₂SO₄, V₂O₅, and NaCl salt mixture at 900 °C, **Material Research Express, SCI Indexed, IF=1.62**

FACULTY ACHIEVEMENTS

1. Dr. M Kumar, Associate Professor, Department of Mechanical Engineering received a grant from Science and Engineering Research Board (SERB) fund of **Rs. 18,30,000/-** under Teachers Associate for Research Excellence (TARE), Mechanical & Manufacturing Engineering & Robotics in the title “**DEVELOPMENT AND CHARACTERIZATION OF NOVEL ADDITIVE MANUFACTURED FUNCTIONALLY GRADED ALUMINIUM COMPOSITE FOR ENERGY EFFICIENT BRAKE ROTOR APPLICATION**” for the duration of 3 years.



2. Dr. RaviKumar K , Professor, Department of Mechanical Engineering received a grant from Science and Engineering Research Board (SERB) fund of **Rs. 70,000/-** in the title **“Processing and characterization of Additive manufactured components for Engineering and Medical applications”**

STUDENTS ACHIEVEMENTS

1. Mr. Vibin R A (Leader)(Technical), Mr. Poovarasu E (Technical), Mr. Siva Prasad M S (software) and Mr. Samvel R (Software) participated in **CII MILCA AWARD 2022** organized by Institute of Quality in the project title “Advanced Irrigation System” and won the **“GOLD Award”**.



STUDENT PLACEMENT

Placement achievement of the final year students of Department of Mechanical Engineering in various reputed company is shown below.

S.NO	NAME OF THE STUDENT	COMPANY NAME	SALARY
1	Mr. Balaji S V	SCHUF VALVES	2 LPA
2	Mr. Adhithya J	BSH	4.5 LPA
3	Mr. Hari Prasath V	FLOW LINK	2 LPA
4	Mr. Naveen Kanna E	FLOW LINK	2 LPA
5	Mr. Chinthamani P	MILACRON	3.6 LPA
6	Mr. Sathya R	FLOW LINK	2 LPA
7	Mr. Umar Sherif M Y	SCHUF VALVES	2 LPA