

EASWARI ENGINEERING COLLEGE

An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY

RAMAPURAM CHENNAI

DEPARTMENT OF

MECHANICAL ENGINEERING

CHEIF EDITOR:

DR. M VETRIVEL SEZHIAN PROF & HEAD MECH

FACULTY:

Dr.K.R.SURESH KUMAR ASST.PROF

MECHANICAL DEPARTMENT

NEWS

LETTER

JULY - SEPTEMBER 2021

STUDENT EDITORS

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VISION

To be an acknowledged leader in imparting Mechanical Engineering education, research and be a recognized resource center for industry and society

MISSION

- M1:To make the students understand the basic and advanced Engineering concepts in the core fields of Mechanical Engineering through Under-Graduate and Post-Graduate Courses.
- **M2**:To prepare the students and expose them to the basic and applied research, thus fostering creativity through recognized research canters.
- **M3**:To make the students undergo training in the Industries, identify the current problems and solve them with multidisciplinary and professional approach.
- **M4**:To prepare the students to integrate Engineering with business that encourages technological commercialization by inviting eminent entrepreneurs for seminars and workshops.
- **M5**:To make the students do application oriented projects which identify the current problems, solving them and thus contribute to the societal needs.
- **M6**:To inculcate the value of ethics, lifelong learning and widening the knowledge frontiers through long term interaction with other academia and industry.

PROGRAM OUTCOMES (PO)

- **PO1:** Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2: Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO3:** Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO4:** Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO5: Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **PO6:** The Engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent
- **PO7:** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8:** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9:** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO11: Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

- **PEO1**: Our graduates will have fundamental technical knowledge and develop core competency in diversified areas of Mechanical Engineering along with Mathematics, Science and other allied engineering subjects in a view to expand the knowledge horizon and inculcate lifelong learning.
- **PEO2:** A fraction of our graduates will pursue advanced studies, research and develop products in the field of Mechanical engineering by developing partnerships with industrial and research agencies thereby serving the needs of the industry, government, society and scientific community.
- **PEO3:** Our graduates will be capable of building their own career upon a solid foundation of knowledge and with a strong sense of responsibility serve their profession and society ethically.
- **PEO4:** Our graduates will be prolific professionals with effective communication, leadership, teaming, problem solving, decision making skills by understanding contemporary issues and improve their overall personality for career development

PROGRAM SPECIFIC OUTCOMES (PSOs)

- **PSO1**: Students will be competent in design and analysis of thermal and fluid systems.
- **PSO2**: Students will possess the skill to apply design concepts for mechanical structures and systems.
- **PSO3**: Students will be able to design and develop industrial products using modern machines in the field of manufacturing.
- **PSO4**: Students will be able to use software to solve structural, thermal, fluid and manufacturing problems.

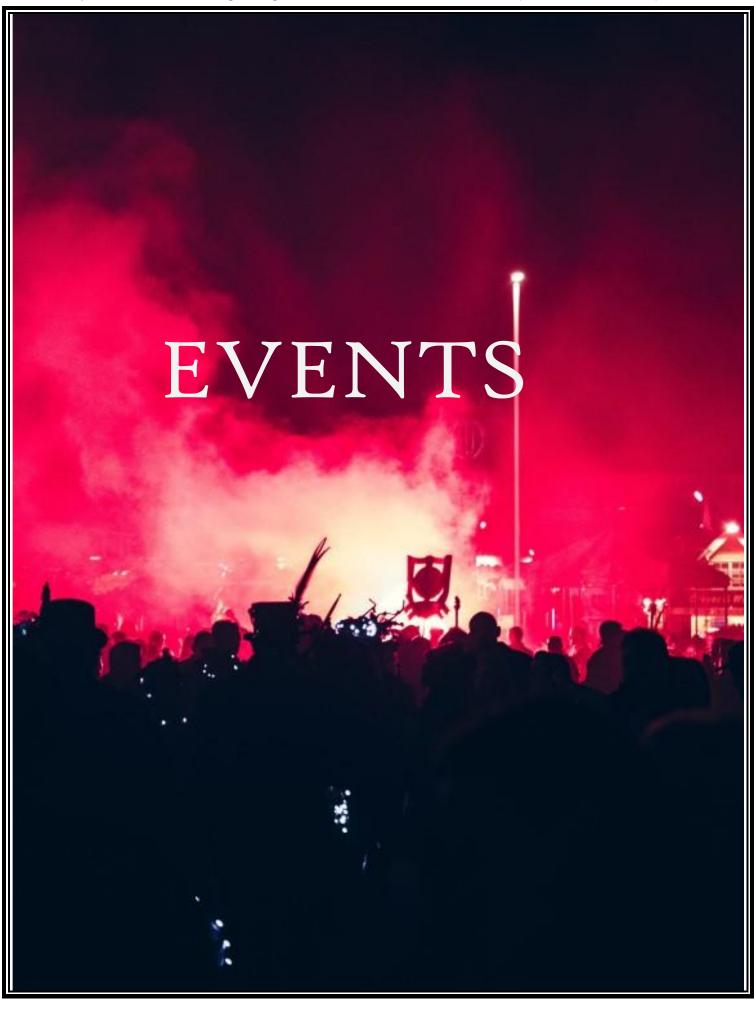


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" நமது பிறப்பு ஒரு சம்பவமாக இருக்கலாம் ஆனால் இறப்பு சரித்திரமாக இருக்க வேண்டும் "

LIST OF EVENTS (JULY – SEPTEMBER 2021):

Event No	Date	Event	Remarks
EEC/DME/008	28.06.21 – 04.07.21	Energy Simulation and CFD Analysis in Buildings	Resource Person : Dr. V. Antony Aroul Raj, Professor, Department of Mechanical Engineering, Easwari Engineering College
EEC/DME/009	19.08.21	Recent Trends and Innovations in Manufacturing and Automation	Mr.C.Deepan Chakaravarthy, Manager Product Development , Alhamad Industries, UAE
EEC/DME/013	08.07.21	Drawing competition for kids	School kids competition
EEC/DME/014	11.08.21	Webinar – National Education policy (NEP) 2020	Resource Person : Dr. V. Antony Aroul Raj, Professor, Department of Mechanical Engineering, Easwari Engineering College
EEC/DME/015	20.08.21	CAE Applications in Comfort and Driving Assistance Systems"	Resource person – Mr.Kartic Sethuraman Senior Engineer manager Valeo India Pvt Ltd
EEC/DME/016	06.09.21	1st International Virtual Conference on Emerging Trends in Mechanical Engineering (ICETME-21)	Chief Guests of the conference Dr. M.Pradeep Kumar, Professor and Director, AU-FRG Institute of CAD/CAM, Anna University, Dr. Muhammad Rafiq Mirza bin Julaihi, Swinburne University of Technology Sarawak Campus, Malaysia. Mr.R.Srinivasan, General Manager, Product Development, Ashok Leyland, Chennai.
EEC/DME/017	25-09-21	Webinar on Battery management system in EV and application	Resource person – Mr.S.Jagannathan, Engineer- Hardware, Mobeveil



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Topic		Drawing Competition for Kids		
Type	:	K12 School Outreach Program		
Date		08.07.2021		
Time	:	6.30 pm to 8.00 pm		
Venue		Easwari Engineering College via Video Conference		
Staff coordinator		Dr. D. Peter Pushpanathan, Assistant Professor		
		Mr. S. Thiagarajan, Assistant Professor		
		Mr. C. Hariharan, Assistant Professor		
		Mr. D. Paulmer Pushparaj, Assistant Professor		
Target Participants	:	KG – 4 th standard		
Participants count	:	82		

Report:

SAE Collegiate Club & ISHRAE Student chapter of Easwari Engineering College conducted a "Drawing Competition for Kids" on 08-07-2021 from 6.30pm to 8.00pm exclusively for the school students of LKG to 4th standard school students. The event was conducted through online mode and 80+ participants from various schools from all districts took part in it. The event was conducted through Google meet and it was divided by two panels. 1st panel is conducted by Dr. V Antony Aroul Raj, Professor & Research Coordinator and the 2nd panel was conducted by Head of Mechanical Department in Easwari Engineering College.

The rules and regulation of the event given were deliberated to the participants. They are:-

- Materials allowed: A4 Drawing sheet, Pencil (black & color), scale, Eraser, Sketch pencils, crayons, oil pastels. (Paints not allowed)
- Participants are advised to keep the materials required ready before the programme starts. Duration of the programme: 1 hour 30 minutes. Topic will be announced 30 minutes at 6.00 pm.
- Camera must be kept on throughout the event. Parents are not allowed to help the child with their
 artwork. Usage of any images / other artworks from the internet for the artwork is not allowed.
- Once the child has completed, they're requested to call out and show their artwork to the camera. Submit the artwork through WhatsApp group along with their name, standard and school name.
- Evaluation is based on Topic relevance, Creativity, Originality, Neatness and Artistic talent. Decision of Judges would be final and no further correspondence would be entertained in this regard. Violators will be disqualified from the event.

Event Judges:

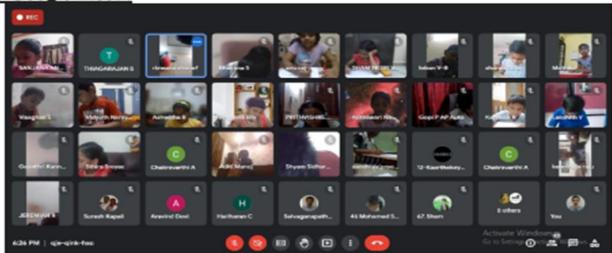
1st Panel - Dr. V Antony Aroul Raj and Dr. Naresh Babu

2nd Panel - Dr. M. Vetrivel Sezhian and Mr. C. Chakravarthi

Panel 1 Google meet:



Panel 2 Google meet:



Poster Made:



RESEARCH INNOVTION AND RANKING:







Dr. V. Antony Aroul Raj Conducted a Meet on 11th August 2021 Regarding "Research Innovation And Ranking". This meeting was held in google meet from 3:00pm to 4:00pm. Nearly 100 students and 50 faculty members has joined the meet and made the meet grand successful.

Chief Guests of the conference

Dr. M.Pradeep Kumar, Professor and Director, AU-FRG Institute of CAD/CAM,

Anna University,

Dr. Muhammad Rafiq Mirza bin Julaihi, Swinburne University of Technology Sarawak Campus,

Malaysi

Mr.R.Srinivasan, General Manager, Product Development, Ashok Leyland, Chennai.





DEPARTMENT OF AUTOMOBILE & MECHANICAL ENGINEERING SAE COLLEGIATE CLUB

Presents

Webinar on

"CAE applications in Comfort & **Driving Assistance systems**"

RESOURCE PERSON:

Mr. Karthic Sethuraman Senior Engineering Manager, CDA & Valeo Mechanical Simulation Expert Valeo India Private Limited.





20.08.2021



(L) 4.00 P.M to 5.30 P.M

FOR FURTHER DETAILS:

Registration link: https://forms.gle/ZSKWcmzdPGuBEnBZA



STAFF COORDINATORS

Dr.D.Peter Pushpanathan, A.P/MECH Mr.C.Hariharan,A.P/AUTO

STUDENT COORDINATORS

Mr.B.Sham: 6369242396 Mr.P.Sooraj Nivesh: 9087153076

Keynote Speaker of the conference

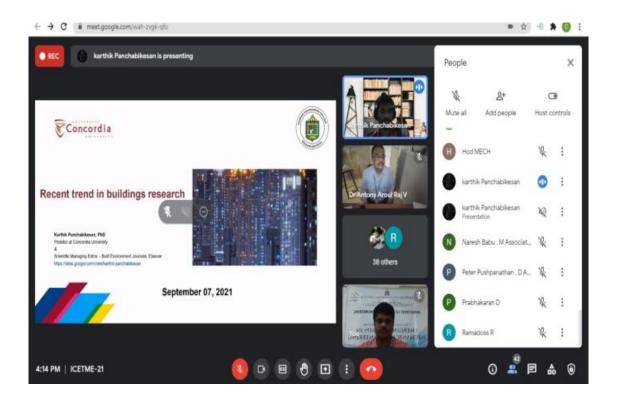
Dr. Elammaran Jayamani, Swinburne University of Technology Sarawak Campus, Malaysia

Dr.G.Kumaresan, Deputy Director, Centre for Research, Anna University, Chennai

Dr.B. Stalin, Anna University, Regional Campus, Madurai.

Dr. Karthik Panchabikesan, Concordia University, Canada.

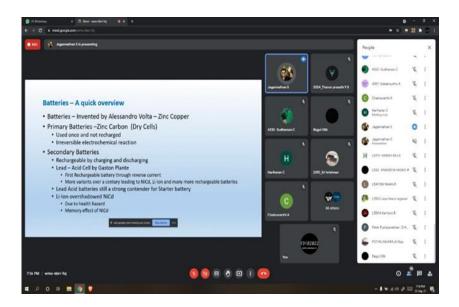
Dr. Kazem Fayazbakhsh, Ryerson University, Canada



Webinar on Battery management system in EV and application



This webinar included technical power point presentation which highlighted the key points. The webinar session concluded with a Q & A session. Expert gave clear explanation and insight knowledge in battery management system in EV Application. Rechargeable batteries are used to deliver power to the auxiliary systems and motors in electric vehicle applications.





EXTRA & CO - CURRICULAR ACTIVITIES FOR ACADEMIC YEAR 2020 -21

(JULY- SEPTEMBER)

S.NO	Name of the Student	Year & Sec	Name of the Event	Name of the Institute/University/Industry Organized	Award/ Participation	Date
1.	Surendar S	IV C	SAEISS Electric Two Wheeler Design Competition – 2020	SAE India	Participation	4/7/2021
2.	Raguladhithya K S	III B	SAEISS Electric Two Wheeler Design Competition – 2020	Sae India	Participation	4/7/2021
3.	Sidharth S R	III C	Ideathon 2021	Nitte Meenakshi Institute of technology ,Bengaluru	Participation Certificate	6/8/2021



DEPARTMENT OF MECHANICAL ENGINEERING – ACADEMIC YEAR 2020-2021 (BATCH 2017-2021)

S. No	Name of the Student Placed	Enrollment No.	Name of the Employer	Appointment letter reference no. with date
1.	GOKHUL SHRIRAM R	310617114034	ACCENTURE	C9169651/15.02.21
2.	KARTHIK RAJA.R	310617114052	ACCENTURE	C9270651/10.03.21
3.	KISHORE KRISHNA G S	310617114062	ACCENTURE	C9200260/17.02.21
4.	MANIRATHINAM P	310617114072	ACCENTURE	C9169965/15.02.21
5.	KISHORE S	310617114311	ACCENTURE	C9169739/15.02.21
6.	THIYAGU	310617114145	ACCENTURE	C9155451/03.02.21
7.	VIJAY UDITH NARAYAN S R	310617114155	ACCENTURE	C9155453/03.02.21
8.	KOKUL AANANTH K K	310617114066	AMAZON	114066/28.07.21
9.	NARENDRAN S	310617114082	AMAZON	114082/28.07.21
10.	PRAVEEN KUMAR S	310617114094	AMAZON	114094/11.10.21
11.	T.SETHUPATHI	310617114127	AMAZON	114127/29.11.21
12.	AKASH V	310617114007	AGRI VALUE CHAIN	02/HR/AVC/20.07.21
13.	ATHITHYA VIKRAM B	310617114016	AGRI VALUE CHAIN	09/HR/AVC/20.07.21
14.	MIDHULESH L	310617114073	AGRI VALUE CHAIN	06/HR/AVC/20.07.21
15.	NITHYAN.M	310617114087	AGRI VALUE CHAIN	10/HR/AVC/20.07.21

DEPARTMENT OF MECHANICAL ENGINEERING – ACADEMIC YEAR 2020-2021 (BATCH 2017-2021)

S. No	Name of the Student Placed	Enrollment No.	Name of the Employer	Appointment letter reference no. with date
16.	SURYA PRAKASH S	310617114328	AGRI VALUE CHAIN	04/HR/AVC/20.07.21
17.	DINESH KUMAR M	310617114030	BYJU'S	114030/19.11.21
18.	KARTHIK RAJA.R	310617114057	BYJU'S	114057/19.11.21
19.	SAMVEL J	310617114118	BYJU'S	114118/19.11.21
20.	HARIHARAN B	310617114037	ELECTRO MECH	114037/05.07.21
21.	JOSEPH KENSTON CALVIN.C	310617114047	ELECTRO MECH	114047/05.07.21
22.	GOKULNATHAN S	310617114306	ELECTRO MECH	114306/05.07.21
23.	PRAVEEN S	310617114093	ELECTRO MECH	114093/05.07.21
24.	UDHAYAPRAKASH U	310617114147	ELECTRO MECH	114147/05.07.21
25.	VIGNESH N	310617114329	ELECTRO MECH	114329/05.07.21
26.	AAKASH R	310617114001	ILLUMINE INDUSTRIES	114001/05.08.21
27.	SHARAVANAKUMAR A	310617114028	ILLUMINE INDUSTRIES	114028/05.08.21
28.	ESSAKIRAJA S	310617114031	ILLUMINE INDUSTRIES	114031/05.08.21
29.	HARI HARAN.K	310617114039	ILLUMINE INDUSTRIES	114039/05.08.21
30.	MITHUL SHYAM G J	310617114074	ILLUMINE INDUSTRIES	114074/05.08.21

<u>Faculty Publications July – September 2021</u>

SI. No.	Name of the faculty	Research Paper Title	Index	Impact factor	Month & Year	Volume/ Issue/ Pg. no.	Journal Name
1	NareshBabu.M, VetrivelSezhian. M	Influence of graphene nanofluid on various environmental factors during turning of M42 steel	SCIE	5.684	Jul-21	Volume 68, Pages 90-103	Journal of Manufacturing Processes
2	Naresh Babu. M	Turning SKD 11 steel using silver nanofluids with minimum quantity lubrication	ESCI	1.03	Jul-21	Volume 11, Issue 3, Pages 74-95	International Journal of Manufacturing, Materials, and Mechanical Engineering
3	Antony Aroul Raj. V	Performance evaluation of phase change material integration in buildings using novel non-dimensional performance parameters for different cities and months in India	SCIE	6.583	Aug-2021	Volume 42	Journal of Energy Storage
4	ThavasilingamK ,Giridharan.K.	Effect of fumed silica in rice bran wax-epoxy coating on aluminum substrate: mechanical, thermal, and water absorption properties	SCIE	4.987	Sep-21	Volume 2021	Biomass Conversion and Biorefinery
5	VetrivelSezhian. M, Giridharan.K., Pushpanathan.D, Chakravarthi.G	Microstructural and Mechanical Behaviors of Friction Stir Welded Dissimilar AA6082- AA7075 Joints	SCIE	1.726	Sep-21	Vol 2021, Article number 4113895	Advances in Materials Science and Engineering

