



**EASWARI
ENGINEERING COLLEGE**

An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY

RAMAPURAM CHENNAI

DEPARTMENT OF
MECHANICAL ENGINEERING

NEWS

LETTER

**JANUARY – MARCH
2023**

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FACULTY :

**Mr. K.R. SURESH KUMAR
ASST.PROF
MECHANICAL DEPARTMENT**



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 centers.

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.



நம்பிக்கை நிறைந்த
ஒருவர்
யார் முன்னேயும்
எப்போதும்
மண்டியிடுவது
இல்லை.

EASWARI ENGINEERING COLLEGE

Department of Mechanical Engineering

List of Events (Jan 2023 – Till Now)

Event No	Date	Event	Remarks
EEC/DME/052	12.01.2023	ISHRAE HVAC&R Hackathon 2023 South Zonal Winners	Dr.K.R.Suresh Kumar, Mr.Thiagarajan Assistant Professor, Department of Mechanical Engineering
EEC/DME/056	06.02.2023	Inaugural Ceremony of SME	Chief Guest Mr.Vijayakumar Nagarajan Assistant manager Process plnning, BMW India
EEC/DME/057	10.02.2023	EEC ISTE Faculty & student chapters Inauguration	Shri.R.Baskar National Vice president, ISTE Dr.Suyambazhagan, Professor, Department of Mechanical Engineering
EEC/DME/058	24.03.2023	Leadership Training session	Mr. M. Manoharan, former General Manager (Product Development Department), Ashok Leyland limited
EEC/DME/059	05.04.2023	SAE Student convention Tier-II competitions	SAE India Southern division
EEC/DME/060	07.04.2023 - 08.04.2023	SAE India – Autonomous Drone development Competition	SAE India Southern division
EEC/DME/061	11.04.2023	ISTE guest lecture on Transformation in Automotive industry	Dr. A.Ragothaman , Divisional Manager, Ashok Leyland

ISHRAE HVACR HACKATHON NATIONAL FINALS 2022-2023

Multi-disciplinary Project (Mech & Civil) from Easwari Engineering College (Autonomous) titled Micro cooling Of Helmet using solar thermo electric generator won 2nd Runner up Place with the Cash Prize of Rs.50000/- in national level hackathon conducted by the Indian Society of Heating, Refrigerating and Air Conditioning Engineers on 6th March 2023

Team Members:

R.Sriram, III Mech Engg

K.G.Shyam Ganesh, III Mech Engg

Ms.E.Swetha, II Civil

Ms.S.Madhusree, II Mech Engg

Mentor:

Dr.K.R.Suresh Kumar,

Asst. Prof./Mech Engg



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RAMAPUZAM, CHENNAI

STUDENTS
ISHRAE



Congratulations ISHRAE HVACR HACKATHON

Mr.S.Sriram (III- Mech C) Mr.K.G.Shyam Ganesh (III- Mech C) Ms.S.Madhusree (II- Mech C) Ms.E.Swetha (II- Civil)

FACULTY MENTORS

Dr.V. Antony Aroul Raj Prof./Mech Dr.K.R.Sureshkumar AP/Mech

Has secured 2nd runner up position in the ISHRAE HVAC&R HACKATHON and won Rs.25,000/- cash prize

CONVENOR
Dr. M. Vetrivel sezhian HOD/Mechanical
Dr.V. Antony Aroul Raj Prof./Mech
Faculty Co-ordinator
Mr. Thiyagarajan AP/Mech
Mr. Paulmer Pushparaj AP/Mech

ISHRAE EEC <https://www.facebook.com/ishraeh> <https://ishrae.in/>

EASWARI ENGINEERING COLLEGE RAMAPURAM, CHENNAI



STUDENT GUEST LECTURE INDUSTRY 4.0

Organized

By

**DEPARTMENT OF MECHANICAL
ENGINEERING**

&

SOCIETY OF MECHANICAL ENGINEERS

EASWARI ENGINEERING COLLEGE

06th February 2023

EVENT REPORT

Topic	:	Society of Mechanical Engineers Inauguration
Type	:	Student Guest Lecture
Date	:	06-02-2023
Time	:	10.00 am to 12.00 pm
Venue	:	TRP auditorium, Easwari Engineering College
Guest Speaker/s	:	
With Affiliation :		Mr. N. Vijayakumar Nagarajan, Asst manager, Process planning, BMW Chennai plant, India. Mobile no. 9600678589 Dr. R. S. Kumar, Principal, Easwari Engineering College Dr. M. Vetrivel Sezhian, Head of the Mechanical Department
Target Audience	:	Students, Faculty members and Industry persons
Participant Count	:	180

REPORT :

The Student Guest Lecture of the Society of Mechanical Engineers of Easwari Engineering College was conducted at the TRP auditorium.

The event was graced by our chief guest Mr. N. Vijayakumar Nagarajan, HOD Dr.M Vetivel Chezian, Dr. Swayambuazhagan, Dr. Ramoodas & Faculties of Easwari Engineering College. The event began with an auspicious touch with Tamizhthaaai Vazhthu to mark the beginning through a pious tradition. Next, our beloved professor Dr. Ramoodas of the Mechanical Department gave a welcome address, followed by Dr. Swayambuazhagan, Professor EEC gave who also gave an insight about the topic followed by Dr. Ramoodas Professor Mech honored our chief guest with the momento.

Then Dr. K G Ashok Coordinator of SME gave a brief introduction about the chief guest. Then followed by which our chief guest Mr. N. Vijayakumar Nagarajan, Asst manager in Process planning, BMW Chennai plant, India started his speech about INDUSTRY 4.0. The session was quiet informative and interactive... A lot of questions were raised by the students which was really impressive. Together we shared a lot of knowledge. At the end he concluded by asking feedback from two students among the audience. Overall, this session was much more interesting and we the students were able to aspire many things form them. Then the vote of thanks was rendered by one of our office bearer by thanking our chief guest, Principal, HOD MECH & all the coordinators, Staffs & students who graced the event with their presence and valuable time. At last, the event was successfully come to an end with the National anthem that had been piercing through our hearts with patriotism for ages...

Photos 1



Photos 2





EASWARI ENGINEERING COLLEGE
An Autonomous Institution
(A Unit of SRM Group Of Educational Institutions)
Ramapuram, Chennai-600 089

[Approved by AICTE | Affiliated to Anna University, Chennai | NAAC-
Accredited 'A' Grade 2(f)&12(B) Status (UGC) | ISO 9001:2015 Certified |
NBA Accredited programmes | FIST Funded (DST) | SIRO(DSIR)]




Principal Dr.R.S.Kumar and ISTE Co-ordinator Dr.S.Suyambazhahan felicitating the Chief Guest Shri.R.Baskar with Shawl and Memento.

Indian Society for Technical Education is the leading non-profit making society. The main motto is to develop the carrier of teachers, personalities of students and there by developing technical education system. The inauguration of ISTE (Indian Society for Technical Education) is conducted in Easwari Engineering College on 10th Feb 2023 in TRP auditorium. Shri.R.Baskar, National Vice President of ISTE presided as a chief guest for the inauguration. The dignitaries along with chief guest lighted the lamp. Dr.S. Suyambazhahan, Professor Mechanical department and ISTE Co- coordinator of Easwari Engineering College addressed the gathering. Dr.R.S.Kumar principal Easwari Engineering College and Dr.S. Suyambazhahan felicitated the chief guest with the shawl and memento. Dr.Nirmala Assistant professor department of AI & DS gave overview speech about ISTE faculty chapter. Miss.Sowmya president of ISTE Student chapter of Easwari Engineering College, highlighted about ISTE students' professional society. Dr.R.S.Kumar highlighted the achievements of Easwari Engineering College. Chief guest Shri.R.Baskar highlighted the benefits and features of ISTE then badges were presented to the Office Bearers of ISTE Students chapter by him. The event ended with vote of thanks by Miss B. Bindu Assistant Professor of ECE department.



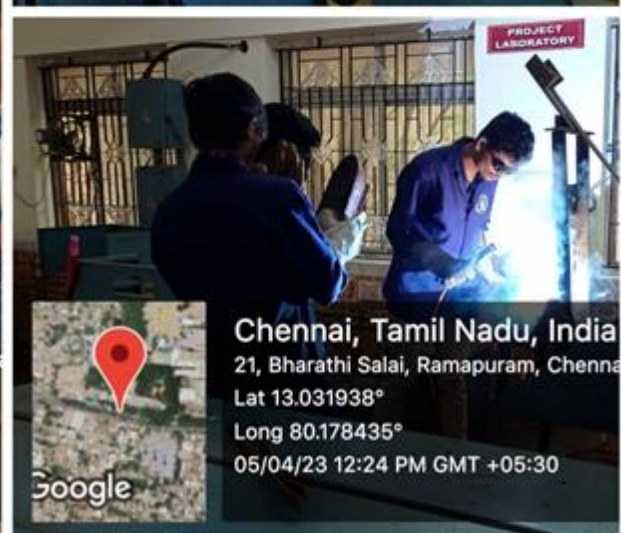
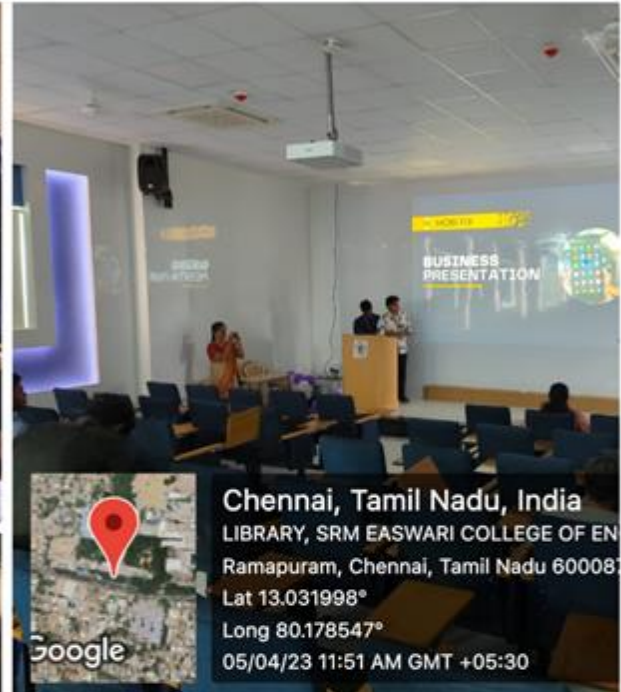
**EEC ISTE Faculty & Student Chapter
Inaugural Audience**



**EEC ISTE Faculty & Student Chapter
Inaugural Function**



The **Society of Automotive Engineers (SAE)** student chapter of **Easwari Engineering College**, conducted a **Leadership Training** session for the office bearers on 24-03-2023. The training session was handled by Mr. M. Manoharan, former General Manager (Product Development Department), Ashok Leyland limited.



The Society of Automotive Engineers (SAE) - student chapter of Easwari Engineering College conducted SAE Student convention Tier-II competitions (Chennai division) on 05-04-2023, in association with SAEISS.

Out of 20 competitions, 10 teams from Easwari Engineering College won First place and qualified for Tier-III competitions



The Society of Automotive Engineers (SAE) - student chapter of Easwari Engineering College conducted a workshop for the Autonomous Drone Design Competition in association with SAEISS on 07-04-2023 and 08-04-2023.

ISTE GUEST LECTURE ON TRANSFORMATION IN AUTOMOTIVE INDUSTRY

Indian Society for Technical Education (ISTE) is the leading non-profit making society. The main motto is to develop the carrier of teachers, and the personalities of students and thereby developing a technical education system. In order to achieve industry based technical skills, a Guest lecture is conducted by ISTE of Easwari Engineering College on 11th April 2023 at 11 AM for the student and faculty welfare of the Department of Mechanical Engineering. The Professor of the Mechanical department and ISTE Co-coordinator of Easwari Engineering College, Dr.S. Suyambazhahan, welcomed the chief guest and briefed the importance of the Guest Lecture. Followed by Dr. R. Ramados, Professor of the Mechanical department, overviewed the Mechanical department and Easwari Engineering College. The inaugural address and the guest lecture on the topic of “Transformation in Automotive Industry” are deliberated by the chief guest Dr. A. Ragothaman, Divisional Manager, Ashok Leyland, Chennai. He emphasised in the lecture various topics including performance steps: Load-Road, diverse mobility, autonomous driving and electrification. The lecture ended with a vote of thanks by Dr.

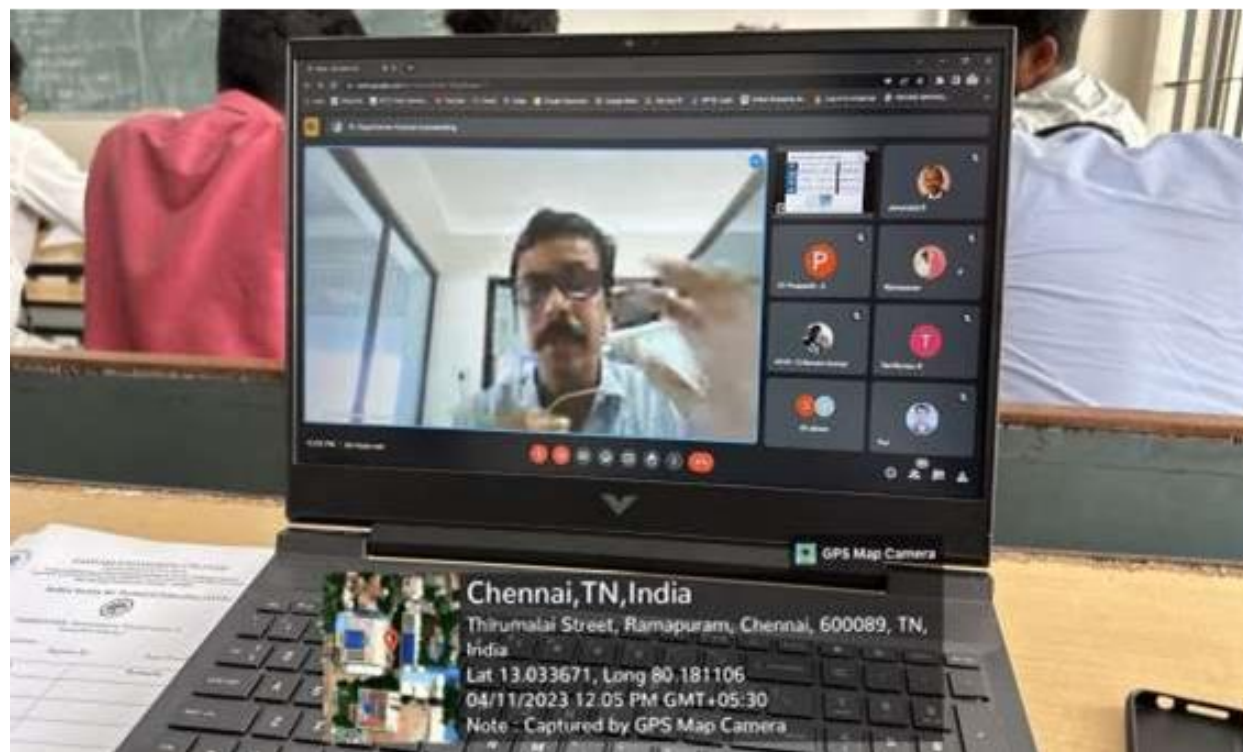
K. Gopi Kannan, Assistant Professor of the Mechanical department.



L-R: Dr R Ramados, Dr S Suyambazhahan and Dr. K. Gopi Kannan were present in the Guest Lecture



EEC STUDENTS ATTENDING THE GUEST LECTURE



GUEST LECTURE DELIVERED BY CHIEF GUEST ON THE TOPIC “TRANSFORMATION IN AUTOMOTIVE INDUSTRY”

CHIEF GUEST DR. A. RAGOTHAMAN SHARING THE GUEST LECTURE IN ONLINE

Faculty Publications January – March 2023

Sl. No.	Name of the faculty	Research Paper Title	Index	Impact factor	Month & Year	Volume/ Issue/ Pg. no.	Journal Name
1	S. Sathyanarayanan	Transesterification of waste cooking oil to biodiesel by walnut shell/sawdust as a novel, low-cost and green heterogeneous catalyst: Optimization via RSM and ANN	SCI	6.4	January 2023	Volume 193	Industrial Crops & Products
2	Dr. R. Ramadoss	Mechanical, Wear and Fatigue Behaviour of Neem Oil and Nanosilica Toughened Areca Fibre Reinforced Epoxy Resin Composite	SCI	2.941	January 2023	Volume 15	Silicon
	Dr. A. Praveen Kumar	Axial and radial crushing behaviour of thin-walled carbon fiber-reinforced polymer tubes fabricated by the real-time winding angle measurement system	SCOPUS	NA	January 2023	Volume 10 Issue 1	Forces in Mechanics
3	V. M. Jothiprakash	Optimization of Process Parameters for Friction Stir Welding of Different Aluminum Alloys AA2618 to AA5086 by Taguchi Method	SCI	2.09	February 2022	Volume 2022	Advances in Materials Science and Engineering
5	Dr. M. Babu	Electromagnetic interference shielding behavior of flexible PVA composite of tunicated onion bulb biochar/Co/carbon fiber shielding composite: effects on X and Ku band frequencies	SCI	4.05	March 2023	Volume 13 Issue 1	Biomass Conversion and Biorefinery

**THANK
YOU**

