

Dr. MAHALINGAM



COLLEGE OF ENGINEERING AND TECHNOLOGY

Enlightening Technical Minds

**Dr. MAHALINGAM**

**COLLEGE OF ENGINEERING AND TECHNOLOGY**

Affiliated to Anna University, Chennai. Approved by AICTE. Accredited by NBA and NAAC with Grade A++  
Udumalai Road, Pollachi - 642 003.

# DEPARTMENT OF AUTOMOBILE ENGINEERING

# NEWSLETTER

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**Executive Introduction**

In spite of these successes and the world- ranking of the institution, we are conscious that we cannot develop our position without a substantial increase in department facilities. Keeping in line with the Department's mission to address the world's most pressing challenges with science and technology, we are forging ahead with an exciting growth of our department. We recognize that it is harder to give in these difficult economic times but it is at such times that we depend even more on philanthropy and that the recognition we receive have an even greater impact.

**HoD's Message**

Greetings to faculties and Student friends in our journey towards perfection I sincerely hope that our department would provide a platform for the young minds to unleash their innovative ideas to develop the technical and professional skills of our student friends. As the change seems to be the buzz word of the modern are let us change our thoughts to empower and transform ourselves for a bright future.

**Department Vision & Mission**

DV: To offer cutting-edge technology in the broad area of automobile engineering and develop globally competitive engineers

DM1: To develop automobile engineering graduates for a successful career in global automotive industry through effective teaching-learning and training.

DM2: To develop the capability of graduates for creating innovative products / systems to enhance the quality of life.

DM3: To inculcate in them the ability to solve societal problems through engineering and professional skills.



**PEOs, POs & PSOs**

**PEO1:** Technical Expertise: Actively apply technical and professional skills in engineering practices to face industrial challenges around the globe

**PEO2:** Higher studies and Research: Own their professional and personal development by continuous learning to create new knowledge

**PEO3:** Ethical Knowledge: Conduct themselves in a responsible, professional and ethical manner supporting sustainable economic development, which enhances the quality of life.

**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 analyse 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 responsibilities relevant to the professional engineering practice.

**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.

**PSO1.** Analyze the systems behaviour and optimize for the results using modelling, simulation and experiments.

**PSO2.** Design automotive components with due considerations of environment and sustainability.

## Journal Publication

S.No	Name of the Faculty	Title of the Paper	Name of the Journal	Volume No., Issue No., Page No., and ISSN number	Month & Year of Publication
1	Dr. D.Shanmugam	Investigation of Static and Dynamic Mechanical Properties of Coconut Tree Primary Flower Leaf Stalk Fiber Reinforced Polymer Composites	JOURNAL OF NATURAL FIBERS	2023, VOL. 20, NO. 1, 2166645 1544-0478	DEC 2022
2	Dr. S.K.Ashok	A fuzzy model to predict the mechanical characteristics of friction stir welded joints of aluminum alloy AA2014-T6	The Aeronautical Journal	2059-6464	DEC 2022
3	Dr. D.Shanmugam	Investigation of static and dynamic mechanical properties of CPFLSF and PPLSF reinforced polyester hybrid composites	Biomass Conversion and Biorefinery	Volume not yet assigned ISSN: 2190-6823	Oct-22
4	Dr. M Selvakumar	Effect of various surface modifications on characterization of new natural cellulosic fiber from coconut tree secondary flower leaf stalk fiber (CSF)	JOURNAL OF NATURAL FIBERS	Volume not yet assigned ISSN: 1544-0478	Jun-22
5	Dr. M Selvakumar	Evaluation on Properties of Composite Materials Containing Caryota Fiber (CF) For Wall Roof Applications	Biomass Conversion and Biorefinery	Volume not yet assigned ISSN: 2190-6823	Nov-22



### Patent Publication

S.No	Name of the Faculty	Title of the Patent	Application No.	Date of Filing	Month & Year of Publication (MM/YYYY)
1	Mr. R. Manojkumar Dr.M.Selvakumar r.M.Thirunavukarasu Mr.R. VishnuRameSh Kumar Dr.T.Ramkumar Mr.B.Kishore Mr.K.Sathishkumar	Self Charging Bye Cycle with solar panel	202141016329 A	04-07-2021	23/04/2021

### Conference Publication

S.No	Name of the Faculty	Title of the Paper	Name of the Conference	Organizer & Venue	Month & Year of Publication
1	Dr.Calvin S. King	Outcome Based Education fTwo day National Conferemce on NEP readiness or Effective Implementation of NEP 2020	Two day National Conferemce on NEP readiness	Centre for Educational and Social Studies Bengaluru	01-09-2022

### Book & Book Chapter Publication

S.No	Name of the Faculty	Title of the Book	If Book Chapter, (Mention Title of Book Chapter)	Page No. & ISBN Number	Month & Year of Publication
1	Dr. M. Selvakumar Dr. S.K Ashok	Materials for Light weight Constructions	Data-driven optimization of manufacturing processes.	ISSN 9781003252108	13/09/2022

2	Dr. Calvin S. King	Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes	Performance Assessments in the Context of Developing and Assessing Competencies	ISBN10: 1668442108	01-06-2022
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Dr. Calvin S King Received Best paper award in National Conference



Events Organized by the Department

S.No	Title of the Event	No of Days	Date of the Event	No of Participants
1	Materials and Manufacturing Technology for future mobility	1 Day	19.09.2022	120
2	Outside world opportunities	1 Day	08.10.2022	55
3	Campus to Corporate Transformation	1 Day	30.09.2022	134



4	Career Guidance	1 Day	15.10.2022	127
5	Scope of Technical Publication	1 Day	26.10.2022	78
6	Scope of higher studies in Automotive sector-Germany	1 Day	15.11.2022	83
7	Plastic gears	1 Day	17.04.2023	79
8	Placement opportunities	1 Day	02.05.2023	75
9	Auto Quiz	1 Day	15.09.2022	66
10	Aero Modelling	1 Day	19.09.2022	33
11	Ice stick car building	1 Day	23.09.2022	75
12	Race on Track	1 Day	24.09.2022	75
13	Auto Quiz	1 Day	19.11.2022	33

### New Faculty Members

	<p>Mr.S.Mahalingam joined the institute on August 12, 2022 as Assistant Professor in Automobile Engineering Department with electronics background. He completed B.E( Electronics and Communication Engineering) in Karpagam College of Engineering and M.E(Communication System) in RVS Educational trust Group of Institution. He having 12 years of teaching experience.</p>
	<p>Mr.R.B.Rajeshkumar joined the institute on August 30, 2022 as Assistant Professor in Automobile Engineering Department with electrical background. He completed B.E( Electronics and Electronics Engineering) in Coimbatore Institute of Technology and M.E(Applied Electronics ) in Dr.Mahalingam College of Engineering and Technology. He having 13 years of teaching experience.</p>

## Students Participation

S.No	Name of the students	Event Name	Title	Venue	Date	Remarks
1	Santhosh K	Online Course	Introduction to the Internet of things and Embedded Systems	Univercity of California, Irvine	11/4/2022	Coursera
2	Santhosh K	Online Course	C for Everyone: Programming Fundamentals	UC Santa Cruz	11/6/2022	Coursera
3	Santhosh K	Online Course	C for Everyone: Structured Programming	UC Santa Cruz	11/25/2022	Coursera
4	Elladurai S	Online Course	Basic of Automobile	Self paced eLearning Course	9/2/2022	ASDC
5	Elladurai S	Online Course	Basics of Electricity		9/3/2022	ASDC
6	Gokul R	Vision Quest Episode - 1	Electric Monility is rising is india ready for electric vehicles	ISIEINDIA	8/12/2022	Participation
7	Karthi N	Quiz	Tata Crucible Campus Quiz 2023	Tata Group	2023	Participation
8	Vasanth Mani V	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation
9	Shafeek Ahmed K	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation
10	Mehul Krishna	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation
11	Elladurai S	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation



12	Sanjeev T K	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation
13	Gowthamraj P	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation
14	Thanikaivelan A	Internship	Build Your own Electric Vehicle	NIA Skill Foundation	20 days	Participation
15	Pughalarasan Y A	Paper Presentation	Techno-VIT - Paper Presentation	Vellore Institute of Technology, Chennai	24-09-2022	Participation
16	Mathesh S	Paper Presentation	Techno-VIT - Paper Presentation	Vellore Institute of Technology, Chennai	24-09-2022	Participation
17	Pughalarasan Y A	Paper Presentation	SRiSHTi 2K22	PSG College Of Tech	29/10/2022 to 30/10/2022	Participation
18	Pughalarasan Y A	Hackathon	Hackathon (Rigathon)	Kumaraguru Institutions	30/09/2022 to 02/10/2022	Participation & Achievement
19	Pughalarasan Y A	Symposium	Bug Bounty	Rathinam College of Arts and Science	19-10-2022	Participation
20	Pughalarasan Y A	Workshop	Workshop on Cyber Security	Indian Institute of Space Science and Technology	05-11-2022	Participation



III year Automobile students attended EV workshop





Students participation in SAEINDIA Events



Hackathon event in Kumaraguru College of Technology, Coimbatore





MBAJA Team Members – MCET RACERS



Industrial Visit at OZOTEC Automobile





Team winning first prize

**SAEINDIA**

S.No	Title of the Event	Date
1	Inauguration and Induction of Office Bearers	02.09.2022
2	Guest Lecture on Opportunities on Automobile Sales	05.10.2022
3	SAE Self Driving Car Challenge	June 2022



## INDUSTRIAL VISIT

S.No	Industry Name	Date	Participants
1	TVS Motor Company,Ashok Leyland Limited,Hosur	06-10-2022 to 08-10-2022	III Year/V Sem
2	EKKI Pumps,Coimbatore	14-10-2022	II Year/III Sem
3	Sakthi Sugars Ltd,Bhavani	25-11-2022	IV Year/VII Sem
4	Bimetal Bearings,Coimbatore	25-11-2022	III Year/V Sem

## Alumni Reflections



**Mr. Muthu Kumar R**  
**BATCH-2007-2011**  
 CAE Engineer Renault-Nissan  
 Technology and Business Centre India  
 Private Ltd Chennai

MCET is easily one of the best institutions in Tamil Nadu to pursue a course in Automobile Engineering. The college has experienced faculty, state of the art laboratories and library, computing facilities, strong industrial ties and the commitment to improving academic standards. What sets MCET apart is the immense student support structure, student empowerment and emphasis on developing the diverse range of skills an engineer is expected to possess today. All aspects of the curriculum and regulations are thoughtfully designed to mould a huKamar R professional capable of building a successful career in the automotive industry. This was not apparent to me as a student and the value of which I now greatly appreciate as an alumnus.



**Mr. Faraday Ram**  
**BATCH-2012-2016**  
 CAE Engineer  
 Hepatica Technologies Pvt. Ltd

Every person has a breaking point in his life. I would proudly say it happened to me in MCET. Four years of guidance from my precious Professors and unending support from the college management helped me to find my path. They are one of the main reasons for my success that I will cherish all through my life. MCET provided me experience, opportunities, innovation, freedom, friends and enlightenment

**Editorial Board :**

**Editor** : Mr.K R Ranjith Assistant Professor/Auto

**Student Coordinator:** G Sivakumaran( 21BAU304)

S Dhanush Narayanan (727621BAU009)

S Mathesh(727621BAU012)