



Velammal Engineering

SPARKZZZ-18

DEPARTMENT OF AUTOMOBILE ENGINEERING

VISION OF THE DEPARTMENT

To send forth into the world competitive graduates by providing knowledge through both theoretical learning and practical exposure to latest technologies in the field of Automobile engineering and inculcating in them a thirst for lifelong learning.

MISSION OF THE DEPARTMENT

- ◆ Maintaining state of art laboratory facilities to train the students with latest technology to cater to industrial needs
- ◆ To create awareness on the importance of research activities among the students
- ◆ To encourage creativity and innovation
- ◆ To produce young engineers with an ability to boldly face their future challenges
- ◆ To identify the top class R&D and academic institution in the field of automobile engineering and establish links with them for the mutual transfer of knowledge

PROGRAM EDUCATIONAL OBJECTIVES (PEOS):

- ◆ Graduates will have successful carrier in Automobile / Allied Industries and/ or Academics.
- ◆ Graduates will excel in Higher education / Entrepreneurship.
- ◆ Graduates will work as part of team / lead a team, use ethical attitudes in their profession and solve the engineering issues to broader social context through life-long learning.

PROGRAM SPECIFIC OUTCOMES

- ◆ Design and develop the automotive system and its components with due considerations of society impact and sustainability.
- ◆ Analyze the performance of automotive system using modeling, simulation and testing.

INSIDE THIS ISSUE:

- ◆ Over View of Our Department - 2018
- ◆ Student Activity
- ◆ SAE Achievements
- ◆ BAJA
- ◆ Faculty Achievements
- ◆ Guest Lectures
- ◆ Student Achievements

Guess the Car Name?

Answer in the next issue



STAFF COORDINATOR

Mr. M. SENTHAMIL SELVAN

STUDENT COORDINATORS

Mr. PRADHAN N (IV Year)

Mr. THARUN B (IV Year)

PROGRAMME OUTCOMES

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. 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.
- 11. 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.
- 12. 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.

நண்பனின் பிரிவு

என் கஷ்டங்களையும் கண்ணீரையும் உன்னுடையதாக எண்ணி

எனக்கென உன் இதயத்தில் ஒரு இடம் அமைத்த என் உயிர் நண்பன் நீ

உன் சிரிப்பு சத்தத்தையும் உன் மூச்சிக்காற்றையும்

உன்னதமான நட்பையும் உணர்கிறேன் இன்னும்

மலரின் உதிரவும் மனிதனின் மறைவும் உலகிற்கு புதிதல்ல - நண்பா

உன் பிரிவு எங்களுக்கு அவ்வாறல்ல!!!

பிரிவின் பின்னரும் இன்னும் எங்கள் கண்களில்

இருந்துகொண்டு தான் இருகிறாய் வடிந்தோடும் கண்ணீராயல்ல!!!

எங்கள் கண்களை கலங்கவைக்கும் கண்மணியாய்...!!!

படைப்பு - சா. இசைவாணன்

National Conference on Emerging Research and Advances in Mechanical Sciences - 2018



National Conference on Emerging Research and Advance in Mechanical Science - 2018 focuses on the theme “Preparing to meet manufacturing challenges to achieve Eco-Efficiency for Make in India”. The concept of eco-efficiency in design, manufacturing and disposal is given higher importance in order to tackle pollution, energy scarcity and global warming issues and to sustain consistent growth in the long term. The conference shall be providing a great opportunity where the researchers, academicians and professionals from industry will share their thoughts and experiences on their related domains.

On behalf of the Automobile department, we take great pleasure in welcoming all the innovative ideas and the great minds to the ERAMS- 2018 on 14th March 2018. We assure that the impact of the discussions on the research papers presented in this conference would offer new insights and kindle innovative thoughts and solutions for the challenges ahead of us in the ever-growing industrialization and the resulting effects on the mankind.

The conference will include keynote address by eminent people in the field of Mechanical, Production and Automobile Engineering and technical paper presentation by the delegates. It is not a wonder to see more than 60 participants from various colleges to participate and having a very good blend of Doctorates and industrialists made this Conference more interesting.

If we knew what it was we were doing, it would not be called research, would it?

- Albert Einstein

A NATIONAL TECHNICAL SYMPOSIUM (XLR8 - 2K18)



It is with immense pleasure we inform that the Automobile Department of Velammal Engineering College is organizing its First National Level Technical Symposium XLR8 - 2K18. We have an array of high octane events which would enthrall participants and spectators. The events are conducted to test the technical and non-technical virtue of the budding engineers.

Technical Events

- Workshop - 3D Printing
- Paper Presentation
- Mr. Mechanic
- Design Contest
- Technical Quiz

Non - Technical Events

- Gaming
- Best Meme Creator
- Short Film

Surprise Event



GUEST LECTURE

- ◆ Mr. Manoj, Design Engineer, Renault Nissan, Chennai, guest lecture on Automotive Engine and Chassis Design. (20.01.18)
- ◆ Dr. M. Senthil Kumar, Associate Professor, Madras Institute of Technology, Chennai, guest lecture on Combustion Modeling. (06.02.18)

E - CELL

- ◆ Shankar Ganes S Won I Prize in Visionaries at Ethiraj College for Women
- ◆ Nithin Raj won IInd Prize in Case maze VARTHAGA 2K18 at Velammal Engineering College. (30.03.18)
- ◆ Nithin Raj won Ist Prize in Idea Presentation VARTHAGA 2K18 at Velammal Engineering College. (30.03.18)

STUDENT ACTIVITIES

YRC

- ◆ Blood Donation Camp at Velammal Engineering College. (9.2.18)

SPORTS

- ◆ Harish Jayaraj Participate Basketball Tournament at Chennai Institute of Technology. (10.01.18 to 11.01.18)



NSS

- ◆ Republic Day Event at Velammal Engineering college. (26.1.18)
- ◆ Blood Donation Event at Velammal Engineering college. (9.2.18)
- ◆ Coastal cleanup event in Retteri. (22.3.18)

PAPER PRESENTATION

- ◆ Sanjith B presented a paper in National Conference at Hindustan Institute of technology & Science. (23 & 24.3.18)
- ◆
- ◆ Gopi Kannan J presented a paper in a national conference at TJS Engineering College. (17.3.18)



STUDENTS ACHIEVEMENTS

- ◆ Tamilarasan S won IInd Prize in Mini Turbo event held at MIT, Chennai . (05-01-2018 to 06-1-2018)
- ◆ Tamilarasan S won IIIrd Prize in Fire and Ice event held at IIT Madras. (2018)
- ◆ Sreesh T V won Ist Prize in National YOGA Championship 2018 competition held at AVIT, Chennai . (11-02-2018)
- ◆ Tamilarasan S Participated in RC Racing conducted by Automobile Engineers association & royalz motorsports club at MIT, Chennai. (05/01/2018 to 06/01/2018)
- ◆ Muges S, G.karthick, Sivakumar M participate in the Workshop on Automotive Electronics and vehicle diagnostics at Hindustan Institute of technology & Science. (23/03/2018 to 24/03/2018)
- ◆ Sivakumar M participate in Auto Sketching event at Hindustan Institute of technology & Science. (23/03/2018 to 24/03/2018)
- ◆ Gopi Kannan attended the training of Engine Mechanism at CADD Centre, Chennai. (24/02/2018)

FACULTY PARTICIPATION

INTERNATIONAL CONFERENCE

- ◆ A Review of combustion, performance and emission characteristics of Reactivity controlled compression ignition engine at Sri Venkateswara college of engineering. (ICAMME - 2018).

PAPER PUBLISHED IN INTERNATIONAL JOURNAL

- ◆ Experimental Studies on the Effect of Enhanced Thermal Conductivity of SiC+Water Nano fluid in the Performance of Small Scale Solar Parabolic Dish Receiver. - International Journal of Nanoscience.
- ◆ Evaluation of trembling effects of different sizes of waste tyre rubber in natural rubber composites on direct and indirect methods - Journal of Composite Materials .

NATIONAL CONFERENCE

- ◆ Higher Octane Oxygenated Fuels for Spark Ignition Engines – A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Analysis of Mechanical Characteristics of Coir Fiber With the Introduction of Different Composites A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Analysis and Improvisation of Nut Runner Machine Capability Using Statistical Process Control A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Automation of Adhesive Weight Compression Jig Using Pneumatic Circuitry and PLC Control A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Design and Fabrication of Full Circle Brake Pad Actuation by Using Diaphragm A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ An Emission Test of Aqua Silencer in SI Engine A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Investigation on NOX Limiting Combustion on CI Engine by Using Water Injection A Review at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Evaluation of biodiesel blending, engine performance and emissions Characteristics of Pongamia and bitter groundnut oil Methyl Esters at Velammal Engineering College - ERAMS 2018. (14.03.2018)
- ◆ Experimental Investigation of Effect of EGR on Performance, Combustion and Emission Characteristics of Reactivity Controlled Compression Ignition (RCCI) Engine at Velammal Engineering College - ERAMS 2018. (14.03.2018)

PROFESSIONAL BODIES MEMBERSHIP

- ◆ SAE
- ◆ ISTE
- ◆ IEI

WORKSHOP PARTICIPATION

- ◆ Workshop on Exploring patent Drafting & Filing at Velammal Engineering College, Chennai. (9.4.18)
- ◆ Workshop on Fabrication, Characterization and Analysis of Composite Materials at SA Engineering College, Chennai, Chennai. (30.1.2018 to 31.1.2018)

GALLERY



DIRT BIKE RIDE (XLR8 - 2018)





Mr.T.V. Sreesh, II year Automobile Engineering received Gold Medal in National Yoga Completion -2018 conducted by All India Yoga Masters Association at Aarupadai Veedu Institute of technology on 11.02.2018.



Students of Automobile Engineering Department along with Mechanical Department participated in SAE BAJA 2018 and secured third place for best design.



DEPARTMENT OF AUTOMOBILE ENGINEERING

VELAMMAL ENGINEERING COLLEGE

Velammal Nagar
 Ambattur—Redhills road
 Chennai—600 066