

# TWO DAY WORKSHOP ON "Engine Cooling System & Basics of Electric Vehicles"

**DATE:**

22<sup>nd</sup> & 23<sup>rd</sup> October, 2021

**TIMING:**

9:00 AM - 3:30 PM

Organised by  
Department of Mechanical Engineering  
&  
Department of Automobile Engineering  
in association with  
C T Research Institute

## CONVENERS

**Dr. S. Ramesh Babu**  
HoD/MEC  
**Dr. K. Pitchandi**  
Prof. & CoE  
**Dr. J. Venkatesan**  
HoD/AUTO

## COORDINATORS

**Dr. Ganesh V**  
Asso. Prof. & Asst. HoD/AUTO  
**Dr. S. Natarajan**  
AP/MEC  
**Mr. M. Maheswaren**  
AP/MECH  
**Mr. A. K. Boobalasantilraj**  
AP/ AUTO

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### **ABOUT MECHANICAL DEPARTMENT:**

The Department of Mechanical Engineering started its successful journey in 1985 and has been accredited by the NBA since 1998. It has grown to be a Research Centre approved by Anna University, as well. The Department of Mechanical offers UG in Mechanical Engineering and PG in Mechatronics and Industrial Automation and is supplemented by well-equipped laboratories, reputed research supervisors and dedicated faculty members. The department has the privilege to house the following research cells namely FRP Cell, Multi-Disciplinary Bio-Fuel Research Cell, Tribology cell, Composite fabrication cell, welding research cell, 3D printing and robotic cell which are used extensively for research and consultancy projects. The department has MOU's with many industries to jointly work on research and technological development.

### **ABOUT AUTOMOBILE DEPARTMENT:**

The department of Automobile Engineering was established in the year 1999 with a mission to educate and impart technical knowledge to the students to become globally competent in the field of Automobile Engineering. It has well-qualified and self motivated faculty members with relevant experience in their area of specialization. The department is equipped with most modern and state of art laboratories like Engine testing, Automotive components, Automotive Electrical and Electronics, Vehicle Maintenance and Re-conditioning, 2 & 3 Wheeler, Automotive Fuels and Lubricants, CAD/CAM, etc. The department is also equipped with 2/3/4 Wheeler Chassis Dynamometer to simulate the vehicle in on-road condition. The department provides consultancy services to research scholars and automotive industries in the field of engine performance and emission testing using alternate fuels with the help of advanced instruments like AVL Pressure pickup, Angle encoder and Data acquisition system. The department is accredited by NBA.

### **ABOUT CT RESEARCH INSTITUTE:**

CT Research Institute (CTRI) is the Research and Training wing of Western Thomson Group (WTG). Western Thomson Group (WTG) is a specialized auto-components group with a focus on Temperature Control and Precision engineered components. The companies that form WTG are Western Thomson(India) Ltd, Nippon thermostat (India) Ltd, Precialp Precision (India) Pvt Ltd, Riviera Auto Components Pvt Ltd, CT Research Institute, WTG Lazgill. The Institute carries out research activities in the field of automotive engine cooling systems and Training activities to enhance the skills of people working in the Automotive industry.

### **OUTCOME:**

After attending this workshop, participants will have a good understanding of Engine Cooling System, Basics of Electric Vehicles & AI in Electric Vehicles.

### **WHO CAN ATTEND:**

- Employees of CT Research Institute.

**SRI VENKATESWARA COLLEGE OF ENGINEERING**  
(Autonomous – Affiliated to Anna University)  
Pennalur, Sriperumbudur 602 117

**DEPARTMENT OF AUTOMOBILE & MECHANICAL ENGINEERING**

21.01.2022

**Sub: Report on Two day workshop on "Engine Cooling System & Basics of Electric Vehicles"**

The Department of Automobile Engineering and Department of Mechanical Engineering in association with CT Research Institute organized a Two Day workshop on “**Engine Cooling System & Basics of Electric Vehicles**” for the employees of Western Thomson Groups, from 22.10.2021 to 23.10.2021 with the approval from the management of SVCE. The workshop is sponsored by CT Research Institute with Rs.23,000/-. During the two day workshop the employees of Western Thomson Group had a good understanding of Engine Cooling System, Basics of Electric Vehicles & AI in Electric Vehicles. Totally 32 members were enrolled for this workshop from Western Thomson Group.

Welcome address was delivered by Dr. S. Ramesh Babu, HoD/MEC and welcomed the participants from Western Thomson Groups and also appreciated the longtime association with Western Thomson.



**Dr. S. Ramesh Babu, HoD/MEC delivering his welcome address**

Dr. S. Natarajan, AP/MEC introduced the chief guest to the gathering. The Programme was inaugurated by the Chief Guest Mr. B.Vijayakumar, Chief Executive Officer, Western Thomson Group, Chennai.



**Dr. S. Natarajan, AP/MEC introducing the Chief Guest**



**Mr. B. Vijayakumar, Chief Executive Officer inaugurating the workshop**

Dr. K. R. Santha, Vice- Principal & HoD/ EEE, Dr. S. Ramesh Babu, HoD/MEC and Dr. J. Venkatesan, HoD/AUT convened the workshop inauguration function. Dr. K. R. Santha, Vice- Principal & HoD/ EEE delivered the Presidential address.





Dr. K. R. Santha, Vice- Principal & HoD/ EEE delivering her Presidential address

During the inauguration function Western Thomson Group, Chennai donated a Wagon R car to the Department of Mechanical Engineering. Mr. B.Vijayakumar, Chief Executive Officer and Mr. M. R. Ramesh, Assistant General Manager, Western Thomson Group handed over the documents related to the donated car to Dr. K. R. Santha, Vice- Principal & HoD/ EEE and Dr. S. Ramesh Babu, HoD/MEC.



**WTI, Chennai donating the donated car documents**



**Mr. M. R. Ramesh, AGM, WTG hand overing the car to SVCE**

During the inaugural function the vote of thanks was given by Dr. V. Ganesh, Associate Professor & AHoD / AUT.



**Dr. V. Ganesh, ASP & AHoD/AUT delivering the Vote of Thanks**

Totally seven sessions were scheduled for this two day workshop covering the following topics Fundamentals of Battery Management System and Artificial Intelligence, Introduction to CFD for Thermal applications using ANSYS, Automotive Engine cooling system & Ignition system with Demo, Electrical Drives, Present Scenario of IC Engines & Electric Vehicles, Application of Nano-fluids in Automotive Industry, Automotive electrical and electronics with Demonstration by the Faculty members of Department of Mechanical and Automobile Engineering.

### Day 1 – Session: 1

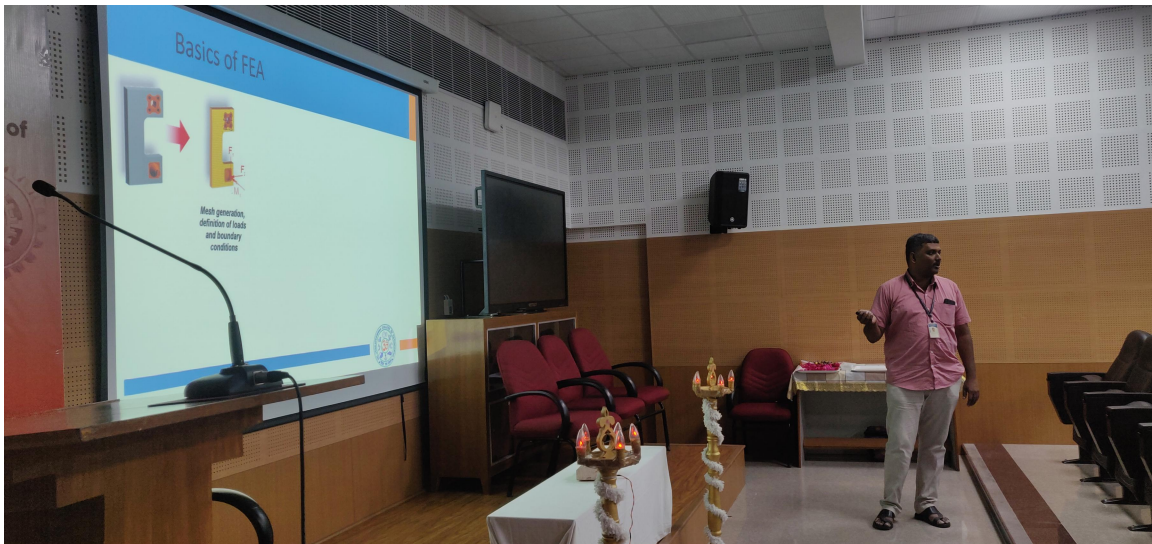
Mr. Joe Johnson, AP/MEC handled a session on “Fundamentals of Battery Management System and Artificial Intelligence”.



**Mr. Joe Johnson delivering his session in workshop**

### Day 1 – Session: 2

Mr. M. Maheswaren, AP/MEC handled a session on “Introduction to CFD for Thermal applications using ANSYS”.

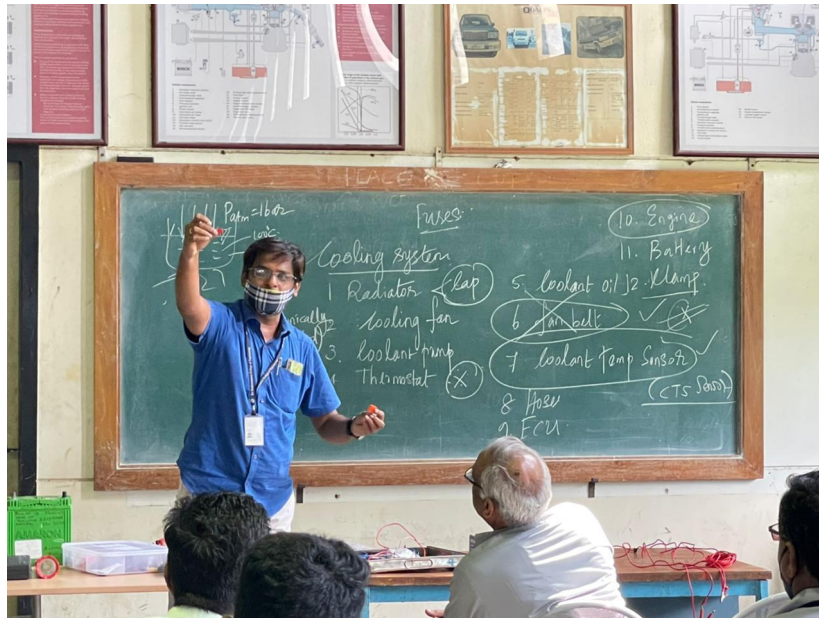


**Mr. M. Maheswaren delivering his session in workshop**



### Day 1 – Session: 3

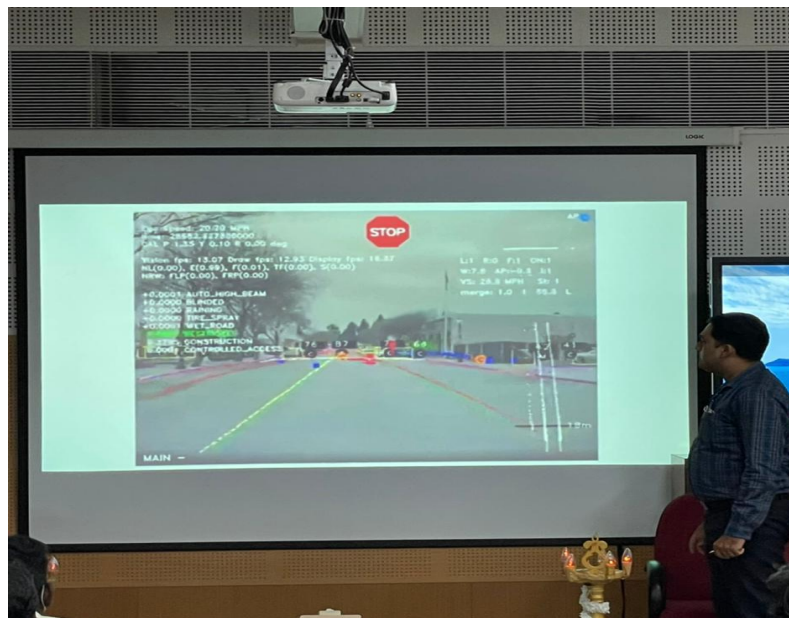
Dr. Ganesh V, ASP/AUT handled a session on the topic “Automotive Engine cooling system & Ignition system with Demo” at Automobile Lab – Department of Automobile Engineering.



**Dr. Ganesh V delivering his session in workshop**

### Day 1 – Session: 4

Mr. Joe Johnson, AP/MEC handled a session on the topic “Electrical Drives”.



**Mr. Joe Johnson delivering his session in workshop**



## Day 2 – Session: 5

Mr. A.K. Boobalaseenthilraj, AP/AUT handled a session on the topic “Present Scenario of IC Engines & Electric Vehicles”.



**Mr. A.K. Boobalaseenthilraj delivering his session in workshop**

## Day 2 – Session: 6

Dr. M. Gajendiran, AP/MEC handled a session on the topic “Application of Nanofluids in Automotive Industry”.



**Dr. M. Gajendiran delivering his session in workshop**

## Day 2 – Session: 7

Dr. Ganesh V, ASP/AUT handled a session on the topic “Automotive electrical and electronics with Demonstration”.



**Dr. Ganesh V demonstrating the electronics system in a CRDI engine**

After the completion of the demonstration session, valedictory function was held at Library Seminar Hall, Dr.A.C.Muthiah Central Library at 03.05 pm on 23.11.2021.

Introduction to the Chief guest during Valedictory function was given by Mr. A.K. Boobalasantilraj, Assistant Professor / Automobile Engineering. Valedictory address for the Two-day workshop on “Engine Cooling System and Basics of Electric Vehicles” was delivered by Prof. Dr. K.S. Badrinathan, Dean - Educational Development, SVCE.



**Mr. A.K. Boobalasantilraj introducing the Chief Guest to the gathering**



During the valedictory address Dean Educational Development emphasized his thoughts on the importance of industry-institution collaborations.



**Dr. K.S. Badrinathan delivering his Valedictory address**

### **Feedback from Participants**

Followed by the Valedictory address by Dean Educational Development, feedbacks were given by the participants. The participants expressed their fullest satisfaction regards the conduct of workshop. The lecture sessions were very much appreciated by the participants. The programme was very well received by the participants.



**Mr. M. R. Ramesh, AGM, Western Thomson Group giving the feedback about the programe**



We express our heartfelt thanks to the management of SVCE for giving an opportunity and support to conduct the programme smoothly.

Followed by the feedback session, Dr. S. Ramesh Babu, HoD/MEC delivered his special address to the participants. During his special address, he recalled the various activities done along with WTI and expressed his thanks to WTI groups and the management of SVCE for the continuous support.



**Dr. S. Ramesh Babu delivering his special address**

Followed by the special address, the certificates were distributed to the participants. Certificates were issued by Dr K.S. Badrinathan, Dean Educational Development.



**Dr. K.S. Badrinathan distributing the certificate to a participant**

Dr. V. Ganesh, Associate Professor, AHoD/AUT given the Vote of Thanks. He thanked the management of SVCE for motivating and giving the fullest support for organizing various events. Also, he thanked the WTI group for this collaborative workshop with SVCE for thier employees. Further he thanked the participants for their participation and interest on learning by interacting during the various sessions conducted during the workshop.




**Dr. V. Ganesh delivering the Vote of Thanks during the Valedictory**



**Group photo taken at end of the program**

**Sponsorship amount received from C T Research Institute:**

The workshop is sponsored by C T Research Institute with Rs.23,000/-

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**Two day workshop**  
**On**  
**Engine Cooling System and Basics of Electric vehicles**

**Schedule : 22nd & 23rd October 2021**

<b>S.No</b>	<b>Date</b>	<b>Speaker Name</b>	<b>Time</b>	<b>Topic</b>
	22-10-2021	<b>Inauguration</b>	09:00 to 09:45 A.M	
<b>Tea Break</b>			09:45 to 10.00 A.M	
1	22-10-2021	Mr. Joe Johnson, Asst. Prof. / MEC	10.00 to 11:30A.M	Fundamentals of Battery Management System and Artificial Intelligence
2	22-10-2021	Mr.M.Maheswaren, Asst. Prof. / MEC	11:30 to 01.00PM	Introduction to CFD for Thermal applications using ANSYS
<b>Lunch Break</b>			01:00 to 01:45P.M	
3	22-10-2021	Dr.Ganesh V Assoc. Prof / AUT	01.45 to 03.45 PM	Automotive Engine cooling system & Ignition system with Demo
<b>Tea Break</b>			03.45 to 04.00P.M	
4	23-10-2021	Mr. Joe Johnson, Asst. Prof. / MEC	09:00 to 10:45A.M	Electrical Drives
<b>Tea Break</b>			10.45 to 11.00 P.M	
5	23-10-2021	Mr.A.K.Boobalaseshthilraj, Asst. Prof. / AUT	11.00 to 12.30 P.M	Present Scenario of IC Engines & Electric Vehicles
6	23-10-2021	Dr.M.Gajendiran, Asst. Prof. / MEC	12:30 to 01:00P.M	Application of Nanofluids in Automotive Industry
<b>Lunch Break</b>			01.00 to 01:45 P.M	
7	23-10-2021	Dr.Ganesh V Assoc. Prof / AUT	01.45 to 03.00 P.M	Automotive electrical and electronics with Demo
<b>Tea Break</b>			03.00 to 03.15P.M	
<b>Valedictory Fuction</b>			03.15 to 03.45P.M	

**Program Conveners:**

Sl No	Coordinator Name	Designation	College Name
1	Dr. S. Ramesh Babu	Professor & Head /MEC	Sri Venkateswara college of Engineering
2	Dr. K. Pitchandi	Professor & CoE	Sri Venkateswara college of Engineering
3	Dr. J.Venkatesan	Professor & Head / AUT	Sri Venkateswara college of Engineering

**Program Coordinators:**

Sl No	Coordinator Name	Designation	College Name
1	Dr.Ganesh V	Associate Professor & AHoD / AUT	Sri Venkateswara college of Engineering
2	Dr. S. Natarajan	Assistant Professor / MEC	Sri Venkateswara college of Engineering
3	Mr. M. Maheshwaran	Assistant Professor / MEC	Sri Venkateswara college of Engineering
4	Mr. A.K Boobalasantilraj	Assistant Professor / AUT	Sri Venkateswara college of Engineering

**List of Participants**

S. No	Name	Designation	Organization
1	Mr. B. VIJAYAKUMAR	CEO	Western Thompson(I) Pvt Ltd
2	Mr. M.R. RAMESH	ASST. GENERAL MANAGER	Western Thompson(I) Pvt Ltd
3	Mr. S. LOGANATHAN	SHIFT OFFICER	Western Thompson(I) Pvt Ltd
4	Mr. V. ACHUTHAN	ENGINEER	Western Thompson(I) Pvt Ltd
5	Mr. K. HEMANAGARAJU	DEPUTY MANAGER	Western Thompson(I) Pvt Ltd
6	Mr. P. ARUN	SENIOR MANAGER	Western Thompson(I) Pvt Ltd
7	Mr. G. MURUGAN	SENIOR OFFICER	Western Thompson(I) Pvt Ltd
8	Mr. S. SUBHAKAR	SHIFT OFFICER	Western Thompson(I) Pvt Ltd
9	Mr. R. NIJANTHAN	SENIOR ENGINEER	Western Thompson(I) Pvt Ltd
10	Mr. P. MANIVANNAN	ENGINEER	Western Thompson(I) Pvt Ltd

11	Mr. D. BHARATHIDHASAN	SENIOR MANAGER	Western Thompson(I) Pvt Ltd
12	Mr. P. TAMILARASAN	ENGINEER	Western Thompson(I) Pvt Ltd
13	Mr. G. SIVARAM	ENGINEER	Western Thompson(I) Pvt Ltd
14	Mr. K. GOPINATH	GET	Western Thompson(I) Pvt Ltd
15	Mr. M. ELAVARASAN	JUNIOR OFFICER	Western Thompson(I) Pvt Ltd
16	Mr. D. MANI MANDIRA MOORTHY	ASST. MANAGER QA	Western Thompson(I) Pvt Ltd
17	Mr. P. MANIVANNAN	DESIGN ENGINEER	Western Thompson(I) Pvt Ltd
18	Mr. TEJASHVARA T. M	GET	Western Thompson(I) Pvt Ltd
19	Mr. B. SURESH	STAFF	Nippon Thermostat(I) Pvt Ltd
20	Mr. N. KUMARAN	OPERATOR	Nippon Thermostat(I) Pvt Ltd
21	Mr. C. SATHISH	ENGINEER	Nippon Thermostat(I) Pvt Ltd
22	Mr. T. SURESH	OPERATOR	Nippon Thermostat(I) Pvt Ltd
23	Mr. M. MURUGESAN	OPERATOR	Nippon Thermostat(I) Pvt Ltd
24	Mr. K. HAJ MOHIDEEN	JUNIOR OFFICER	Nippon Thermostat(I) Pvt Ltd
25	Mr. R. GANESH	ENGINEER	Nippon Thermostat(I) Pvt Ltd
26	Mr. M. DINESH	ENGINEER	Nippon Thermostat(I) Pvt Ltd
27	Mr. S. GOKUL	ENGINEER	Nippon Thermostat(I) Pvt Ltd
28	Mr. B. HARSHAVARTHAN	GET	Nippon Thermostat(I) Pvt Ltd
29	Mr. M. MANIKANDAN	STAFF	Nippon Thermostat(I) Pvt Ltd
30	Mr. T.V. NAVEENKUMAR	JUNIOR OFFICER	Nippon Thermostat(I) Pvt Ltd
31	Mr. V. MANOHARAN	SENIOR ENGINEER	Precialp Precision(I) Pvt Ltd
32	Mr. S. DHINESH KUMAR	ASST. MANAGER	Precialp Precision(I) Pvt Ltd

**Conveners:**

  
Dr. S. Ramesh Babu

Professor & Head / MEC

Dr. S. RAMESH BABU, M.E., Ph.D

Professor & Head

Department of Mechanical Engineering

Sri Venkateswara College of Engineering

Pennalur, Sriperumbudur (TK) - 602117

Tamilnadu, INDIA

  
Dr. K. Pitchandi

Professor & CoE

Dr. K. PITCHANDI, M.E., Ph.D.,

Controller of Examinations

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Dr. J. Venkatesan

Professor & Head / AUT

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