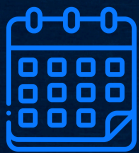




7<sup>th</sup>

# SAENIS TTTMS CONFERENCE & EXHIBITION 2024

THEME: INNOVATION FOR SUSTAINABLE MOBILITY



DATE

19-21 SEPTEMBER, 2024



Best Western Resort Country Club,  
Gurugram, Delhi NCR, India



#TTTMS2024

## EVENT-AT-A-GLANCE

**DAY-1**

**19th September, 2024 - THURSDAY**

**Note: Organizers reserves the right to change presentation schedule and speakers without any prior notice.**

<p><b>09:15 - 10:00 AM</b> <b>Registration</b></p>	<p><b>03:00 - 03:15 PM</b> eVehicle Cooling System Approach For Off -Highway Machines <b>Speaker:</b> Nitin Dewangan, Prathamesh Joshi, John Deere</p>
<p><b>10:00 - 11:00 AM : (Inaugural Session)</b> Mr. UD Bhangale   ED-SAENIS   Mentor-TTMS (Welcome Address &amp; Opening Remarks) <b>Lamp illumination by Chief Guests &amp; Opening Speech.</b> Dr. Tapan Sahoo   Chairman-SAENIS   Executive Director (Digital Enterprise -MSIL) Mr. Balraj Bhanot   Chairman, TEDC (BIS)   Mentor &amp; Executive Member, SAENIS   Mentor - TTMS'24; Mr. Saurabh Dalela   Director, ICAT   Mentor -TTTMS'24 Mr. AK Goel   Vice Chairman - Technical (SAENIS GB)   Mentor -TTTMS'24 Key Note by SAEINDIA/SAENIS GB Members, Sponsors, TTTMS Mentors &amp; OC Members</p>	<p><b>03:15 - 03:30 PM</b> Minimization Of Power Consumption In Fuel Cell Air Feed In System In Fuel Cell Electric Vehicle <b>Speaker:</b> Ayush Choubey, Daimler Truck Innovation Center</p>
<p><b>11:00 - 11:45 AM</b> <b>Theme: Innovation for Sustainable Mobility</b> Mr. SH Kapoor   Technical Chief - Climate Control, Tata Motors   Mentor - TTTMS'24 Mr. Sandeep Raina   Executive Vice President (Engg.) - MSIL   Mentor - TTTMS'24 Mr. Abhimanyu Sharaff   Executive Director - Vikas Group</p>	<p><b>03:30 - 03:45 PM</b> Numerical Analysis And Design Optimization Of Cooling System For Construction Vehicles <b>Speaker:</b> Nitin Dewangan, Mohit Goklani, John Deere</p>
<p><b>11:45 - 12:15 PM</b> <b>Tea Break &amp; Networking Session</b> <b>Session Break</b></p>	<p><b>03:45 - 04:15 PM</b> <b>Tea Break &amp; Networking Session</b> <b>Session Break</b></p>
<p><b>12:15 - 12:30 PM</b> Active Management of Energy Source in A Fuel Cell Electric Vehicle Considering Air Pollutants <b>Speaker:</b> Shilpa Prasad P, Daimler Truck Innovation Center</p>	<p><b>04:15 - 04:30 PM</b> Liquid Cooled Battery Coupled (1D+3D) Simulation Methodology For Thermal Performance And Range Prediction Of Electric Vehicle <b>Speaker:</b> Vivek Kumar, Mohit Shendre, Tata Motors Ltd.</p>
<p><b>12:30 - 12:45 PM</b> Analysis Of Electric Vehicle Battery Safety Enhancement Techniques Using Python <b>Speaker:</b> Aryan Sharma, Aditya Anand, MRIIRS Faridabad</p>	<p><b>04:30 - 04:45 PM</b> Invited Sponsor's Speakers Topics Case Studies / Technology Trends Presentations by Sponsor's Representatives (COMSOL)</p>
<p><b>12:45 - 01:00 PM</b> Exploring the Impacts Of Hydrogen Internal Combustion Engine (H2 Ice )Technology On Vehicle Thermal Systems (Radiator And Charge Air Cooler): A Review <b>Speaker:</b> Pravin Ganesh Menariya, Daimler Truck Innovation Center</p>	<p><b>04:45 - 05:00 PM</b> Magnetic Refrigeration At Room Temperature: A State-Of-The-Art Review <b>Speaker:</b> Sunil Meduri, Daimler Truck Innovation Center</p>
<p><b>01:00 - 02:00 PM</b> <b>Lunch Break</b></p>	<p><b>05:00 - 05:15 PM</b> Modelling Approach Of Thermal Runaway Propagation And Gas Venting Process In Lithium -Ion Batteries: A Comprehensive Review Study <b>Speaker:</b> Yogesh Nogdhe, Mahindra &amp; Mahindra</p>
<p><b>02:00 - 02:45 PM (Panel Discussion)</b> <b>Topic: Emerging Challenges &amp; Awareness Session on 'Phasing out Hydrofluorocarbons Under Kigali Amendment to the Montreal Protocol</b> Dr. R S Agarwal   Technical Advisor &amp; Consultant, Ozone Cell; Mr. Sumedh Agarwal   Director, AEEE Mr. Shriganesh Umbarkar   VP - HVAC &amp; EV, MSIL   Chair - OC TTTMS'24; Mr. Prasanna Nagarhalli   GM - CV, TML   Vice Chair - OC TTTMS'24; Mr. Kapil Singhal   MD - BP Refcool</p>	<p><b>05:15 - 05:30 PM</b> Effect Of Undercover Design On Vehicle Performance :An Investigation <b>Speaker:</b> Kishore Kumar Padakandla, Hyundai Motor</p>
<p><b>02:45 - 03:00 PM</b> Effect Analysis Of Material Properties On Thermo -Electric Generator Performance <b>Speaker:</b> Babu Rao Ponangi, Daimler Truck Innovation Center</p>	<p><b>05:30 - 05:45 PM</b> Transient Multi -Dimensional Conjugate Heat Transfer (CHT) Simulation Of An Oil -Cooled Automotive Electric Motor Operated In A Drive Cycle <b>Speaker:</b> Shyam Sundar Pasurthi, Simerics Inc.</p>
<p><b>02:45 - 03:00 PM</b> Effect Analysis Of Material Properties On Thermo -Electric Generator Performance <b>Speaker:</b> Babu Rao Ponangi, Daimler Truck Innovation Center</p>	<p><b>05:45 - 06:00 PM</b> Prediction Of Air Induced Noise Levels For Automotive HVAC Systems <b>Speaker:</b> Prashant Mohan Raut, Mahle Anand</p>

**Days Summary & Gala Dinner @8 PM**

DAY-2

20th September, 2024 - FRIDAY

Note: Organizers reserves the right to change presentation schedule and speakers without any prior notice.

<b>08:15 - 09:00 AM   Registration</b>	
<b>09:00 - 09:15 AM</b> Electro-Thermal Study Of Permanent Magnet Synchronous Motor For Electric Vehicle Application <b>Speaker:</b> Anand Shandilya, Tata Motors Ltd.	<b>12:30 - 12:45 PM</b> A Study On Cabin Heat Load Reduction Using Solar Reflective Glasses In Automotive Application <b>Speaker:</b> Sunny Kumar, Tata Motors Ltd.
<b>09:15 - 09:30 AM</b> Comparative Analysis Of Automotive Air Purification Systems And Efficacy In Indian Environment <b>Speaker:</b> Ankit Pimpalkar, Deepak Rajaur, Maruti Suzuki India Ltd.	<b>12:45 - 01:00 PM</b> HVAC Kinematic Noise Prediction By Using Multi -Body Simulation <b>Speaker:</b> Paulson Parayil, Subros Limited
<b>09:30 - 09:45 AM</b> Energy Saving By Deploying Adaptive Thermal Comfort In E-Mobile Heat Pump System <b>Speaker:</b> Prashant Jaiswara, Tata Motors, Ltd.	<b>01:00 PM - 02:00 PM</b> <b>Lunch Break</b>
<b>09:45 - 10:00 AM</b> Artificial Intelligence In Electric Vehicle Battery Management System: A Techniques For Better Energy Storage <b>Speaker:</b> Devendra Vashist, Rishi Raj, MRIIRS Faridabad	<b>02:00 - 02:30 PM (Panel Discussion)</b> <b>Topic:</b> Sustainable Mobility for India - Future Roadmap <b>Mr. Vivek Jakhmola</b>   Director @Companies Leading Clean & Green Initiatives <b>Mr. Sant Ranjan</b>   AVP and Head R&D (Innovation) - Appliances, Godrej & Boyce <b>Mr. Ajay Gupta</b>   Director - Embuilt Technologies
<b>10:00 - 10:15 AM</b> Smart Efficient ECO AC For Small Commercial Electric Vehicle <b>Speaker:</b> KIRAN R. Agalawe, Tata Motors, Ltd.	<b>02:30 - 02:45 PM</b> Modelling Of Energy Scavenging From Rolling Tyres Using Contact -Separation Mode Triboelectric Nano Generators For Self-Powered Electric Vehicles <b>Speaker:</b> Geetha P, Mohan Babu University
<b>10:15 - 10:30 AM</b> The Effect Of Thermal Management On A LFP Battery'S Life With Different Battery Cooling Methods And Triggering Temperatures For Cooling Activation For A Three-Wheeler <b>Speaker:</b> Ashish Chandna, Gamma Technologies	<b>02:45 - 03:00 PM</b> Electric Vehicle Lithium-Ion Battery Thermal Management By Numerical Simulation With PCM And Fins Over Shell <b>Speaker:</b> Dasari Yogeshwar, IIT Ropar
<b>10:30 - 10:45 AM</b> Cooling Module Fan Noise Simulation <b>Speaker:</b> Devesh Baghel, Tata Motors Ltd.	<b>03:00 - 03:15 PM</b> An Integrated Approach For Thermal Impact Based Reliability Analysis Of Electronic Components <b>Speaker:</b> Shantaram Jadhav, Aashay Mhaske, Uno Minda, Ltd.
<b>10:45 - 11:00 AM</b> Study To Establish An Evaluation Method For Selecting Suitable Packing Adhesives For A/C Ducts To Ensure Sustained Adhesiveness In Thermal And Condensation Conditions Over The Vehicle'S Lifetime <b>Speaker:</b> Amala M & Surabhi, Maruti Suzuki India Ltd.	<b>03:15 - 03:30 PM</b> Invited Sponsor's Speakers Topics Case Studies / Technology Trends Presentations by Sponsor's Representatives <b>(Gamma Technologies)</b>
<b>11:00 - 11:30 AM</b> <b>Tea Break &amp; Networking Session</b> <b>Session Break</b>	<b>03:30 - 03:45 PM</b> <b>Tea Break &amp; Networking Session</b> <b>Session Break</b>
<b>11:30 - 12:00 PM</b> Keynote Session: Corporate Average Fuel Economy (Impact on Vehicles Thermal Management Systems) - Challenges & Opportunities. <b>Mr. DM Mani</b>   Vice President, AITTR	<b>03:45 - 04:00 PM</b> Study Of Structural Noise Of A Multi -Cylinder Diesel Engine <b>Speaker:</b> Avadhesh Kumar Meena, Subros Limited
<b>12:00 - 12:15 PM</b> CFD Method For Predicting Thermal Cool-Down Behavior Of A School Bus Cabin <b>Speaker:</b> Sunil Meduri, Daimler Truck Innovation Center	<b>04:00 - 04:15 PM</b> Invited Sponsor's Speakers Topics Case Studies / Technology Trends Presentations by Sponsor's Representatives <b>(KULI by Magna Powertrain)</b>
<b>12:15 - 12:30 PM</b> Accurate Urea Consumption Prediction In SCR System Using CFD Simulation <b>Speaker:</b> Alok Subhash Chaudhary, Kundan Biswas, Tata Motors Ltd.	<b>04:15 - 04:30 PM</b> Performance Evaluation Of Various Fractional Order Control Strategies On A PEM Fuel Cell <b>Speaker:</b> Amjad Shaik, VNRVJIET

Tata EV Experience Centre Visit is Planned after the Session for the Day is Over (Date: 20th September, 2024).

Days Summary & Closeup Speech

Note: Organizers reserves the right to change presentation schedule and speakers without any prior notice.

<p><b>08:15 - 09:00 AM   Registration</b></p>	<p><b>12:00 - 12:15 PM</b> A Methodology For Temperature Control During Blending Operation In An Automobile HVAC System Without Using Heater <b>Speaker:</b> Shridhar Kulkarni, Geet Shah, Tata Motors Ltd.</p>
<p><b>09:00 - 09:15 AM</b> Cabin Heating Modelling And Simulation For ICE And EVs Through 1D CAE <b>Speaker:</b> Chandru M, Tata Motors Ltd.</p>	<p><b>12:15 - 12:30 PM</b> Correlation Improvement For Underhood Thermal Systems For Off-Highway Vehicles <b>Speaker:</b> Rohan Hemant Oza, John Deere</p>
<p><b>09:15 - 09:30 AM</b> Numerical Investigation: Thermal Management Of Lithium-Ion Batteries In Electric Vehicles Operating At High Discharge Rates <b>Speaker:</b> Dasari Yogeshwar, IIT Ropar</p>	<p><b>12:30 - 12:45 PM</b> Characterization Of HVAC Noise And Its Dynamic Interplay Within The Vehicle's Environment <b>Speaker:</b> Umesh Sadekar, Tata Motors Ltd.</p>
<p><b>09:30 - 09:45 AM</b> Design And Development Of A Green Mobile Air Conditioning System For Electric Vehicles <b>Speaker:</b> Anurag Maurya, Tata Motors, Ltd.</p>	<p><b>12:45 - 01:00 PM</b> Modelling Of Vibrational Energy Collection For Self -Powered Electric Vehicles Using Soft - Contact Triboelectric Nanogenerator <b>Speaker:</b> Geetha P, Mohan Babu University</p>
<p><b>09:45 - 10:00 AM</b> Thermal Management Of E-Components In Ev Using Passive Cooling Technique (An Overmould Concept) <b>Speaker:</b> Rathin Rajendran, Vitesco Technologies</p>	<p><b>01:00 PM - 02:00 PM   Lunch Break</b></p>
<p><b>10:00 - 10:15 AM</b> A Novel Methodology To Assess Effectiveness Of Passive Cabin Cooling Technology <b>Speaker:</b> Mohit Varma, Tata Motors, Ltd.</p>	<p><b>02:00 - 02:15 PM</b> A Case Study Of Engine Cooling System Simulation And Modelling For Air Conditioning Application In A Medium Duty Vehicle <b>Speaker:</b> Nalavadath Kiran, Vignesh M S, Ashok Leyland Ltd.</p>
<p><b>10:15 - 10:30 AM</b> Evaluations To Identify The Necessity Of Thermal Protector In Automotive Air Conditioning Compressor (Vane Type) In A Hot Climate Country <b>Speaker:</b> Sachin Mittal, Aniket Saha, Maruti Suzuki India Ltd.</p>	<p><b>02:15 - 02:30 PM</b> An Investigation Of Electric Vehicle Battery Safety Standards With Indian Perspective <b>Speaker:</b> Bhaskar Pandey, MRIIRS Faridabad</p>
<p><b>10:30 - 10:45 AM</b> In-Vehicle Evaluation Of A Rule-Based Look Ahead Controller For Mobile Air Conditioning: Impact On Energy Savings. <b>Speaker:</b> Sambhaji Jaybhay, Shridhar Diliprao Kulkarni, Tata Motors Ltd.</p>	<p><b>02:30 - 02:45 PM</b> Optimization Of Cooling Circuit For Electric Vehicle <b>Speaker:</b> Ram Anandan, Mahindra &amp; Mahindra Ltd.</p>
<p><b>10:45 - 11:00 AM</b> 1D And 3D Coupled Thermal Simulation Of HVAC At Defrost Mode Using Dual Stream Heat Exchanger Model <b>Speaker:</b> Taufeeq Ahmad, Nishant Sharma, Subros Limited</p>	<p><b>02:45 - 03:00 PM</b> Smart Dual Secondary Loop Thermal Systems For Automotive Applications <b>Speaker:</b> Nishant Sharma, Subros Limited</p>
<p><b>11:00 - 11:30 AM</b> <b>Tea Break &amp; Networking Session   Session Break</b></p>	<p><b>03:00 - 04:00 PM</b> Valedictorian Ceremony &amp; Closing Remarks <b>Mr. IV Rao</b>   Visiting Senior Fellow, TERI   Mentor &amp; Executive Member, SAENIS; <b>Mr. Anoop Bhat</b>   Executive Director - MSIL   Mentor - TTTMS'24 <b>Mr. SH Kapoor</b>   Technical Chief - Climate Control, Tata Motors   Mentor - TTTMS'24 <b>Mr. Roopak Agarwal</b>   VP - Technical Centre, Subros <b>Mr. Rohit Harkar</b>   Head of Marketing, Subros Ltd. <b>Mr. Tuhin Srivastava</b>   Asst. Professor, KIET   Vice Chairman SAENIS - Student Activities   OC Member-TTTMS'24 TTTMS Mentors, OC Members, Industry Volunteers Industry / Academia / Civil Society Delegates Sponsors Delegates &amp; Students Team Members</p>
<p><b>11:30 - 11:45 AM</b> Multiscale And Multidomain Digital Twins For Vehicle Thermal Management Applications <b>Speaker:</b> Geet Shah, Tata Motors Ltd.</p>	
<p><b>11:45 - 12:00 PM</b> Optimizing Thermal System Performance Of Electric Vehicles By Improving The Axial Fan Design Parameters <b>Speaker:</b> Aakash Dagar, Subros Limited</p>	



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