





SAENIS TTTMS SCONFERENCE S

Theme: Embracing emerging technologies

21-23 SEPTEMBER, 2023

Samskara Resorts, Jaipur, Rajasthan, India



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About The Conference

SAENIS TTTMS Thermal Management Systems Conference is an annual flagship conference organized by **SAE Northern India section** in collaboration with SAE International. It brings together industry experts, policymakers, and academia to highlight and address the concurrent issues, the latest technological trends, and advancements in thermal management systems for the automotive industry.

Think Tank for Thermal Management Systems (TTTMS) is a platform to address the evolving dynamics of the automotive thermal management systems, in association with the **Society of Automotive Engineers, Northern India Section (SAENIS)**.

The automotive industry is now at the cusp of a structural change brought in through innovation and technological advancements. The Indian automobile industry is a key pillar in the country's economy, be it growth, affordable mobility solutions, consumer confidence, or global standing.

Thermal management technologies have a critical role to play in enhancing automotive efficiencies, by making engines, transmissions, and HVAC systems more efficient, as well as enhancing passenger safety. With the **theme "Embracing emerging technologies**, the conference will highlight the need for the industry practitioners to put the technological advancements into practice and collectively address the thermal management challenges in modern automotive design.







Organizer



SAE India Northern Section (NIS), is one of the five sections of Society of Automotive Engineers India for promoting membership from industries, institutions and technical colleges and for organizing activities related to mobility engineering in the Northern India Region. The Northern Section has been regularly organizing technical lectures, seminars and conferences for its members. Besides, the society organizes technical lectures, expositions, training programs, visit to industrial facilities, scholarships, and awards for student members.



SAEINDIA is a premier professional society that serves the mobility engineering community engaged in the design, manufacturing and service of self-propelled vehicles and systems that move in and, air, space and sea. SAEINDIA is the largest strategic alliance partner of SAE International.



SAE International is a global association of more than 1,28,000 engineers and related technical experts from over 100 countries representing aerospace, automotive and commercial vehicle industries, committed to advancing mobility knowledge and solutions for the benefit of humanity.

www.saenis.org

Agenda At A Glance

Morning Session Plan • Veh	ia Cooling Action n (ICAP)	Faster Adoption & Manufacturing of Hybrid	
Morning Session Plan • Veh	· ·	-	
	nicle Climate ntrol	& Electric Vehicles (FAME) Thermal Systems for Electric & Hybrid Vehicles	• SAENIS TTTMS Student Case Study Championship-2023
Afternoon Session (RD	ermal Simulation/ odeling, Testing &	 Corporate Average Fuel Economy (CAFÉ) Alternate Heating & Cooling Concepts 	• SAENIS TTTMS Student Case Study Championship-2023

Technical Session Topics

Vehicle climate control	Vehicle underhood thermal management	Automotive power-train cooling	Human factors including thermal comfort and cabin air quality	Alternative refrigerants
Thermal	Thermal system and components	Thermal	Waste heat	Thermal
systems for		systems for	recovery and	simulation/
hybrid and		heavy and off-	regulatory	analysis/
electric vehicles		road vehicles	topics	modelling

Paper submission through SAE International

My Tech Zone and selected technical papers will be published through SAE International. The selected papers will be presented at SAENIS TTTMS Conference-2023.

The time limit for each paper presentation would be 20 minutes (15 Mins Presentation + 5 Mins Q&A).

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Who Should Attend

Personnel Profile

CEOs / CIOs / COOs / CTOs / SVPs / VPs / Global Heads / Directors / Divisional Heads / Team Leaders Specialists / Strategists / Officers / Planners

Organizational / Divisional Profile

OEMs / Research, Materials and Manufacturing / Energy and Systems / Charging Infrastructure Hybrid and Electric Systems / BEVs / Electrification / Vehicle Architecture / Thermal Management Thermal & Manufacturing Solutions / Energy Storage and Systems

Why Attend



Connect with experts and solution providers to address business challenges



Discover and be part of the future plans of OEMs, solutions providers and battery manufacturers



Examine short-term and long-term production roadmaps



Gain critical insight into the latest industry developments



Identity business opportunities through interactions with decision makers



Network with industry experts during speed networking breaks, coffee breaks, business lunches, and cocktail reception



Get full access to all event's presentations and conference materials



Expand networks, forge partnerships, drive growth, and create opportunities

Registration Fee

Category	Student	Industry	Academia
SAE Member	INR 1000	INR 7000	INR 2500
Non-SAE Member	INR 1500	INR 9000	INR 4000

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Air International-TTR

The global automotive thermal system market

is estimated to expand at a CAGR of 2.79% from 2022 to 2031, reaching **USD 50.38 bn** in 2031 from **USD 37.22 bn** in 2021

Source: Transparency research



Rise in demand

for luxury vehicles with advanced features and comfort, implementation of stringent emission regulations, increase in demand for front and rear A/C, heated steering, integration of turbocharger in commercial vehicles, and use of smart thermal management systems in vehicles are anticipated to boost the automotive thermal systems market across the globe.

Source: Transparency research



Electric Vehicle (EV) Thermal Management System Market

The global electric vehicle thermal system market is estimated to expand at a **CAGR of 18.5%** from 2021 to 2029, reaching **USD 9.62 bn** in 2029 from **USD 2.47 bn** in 2021

Source: Maximizemarketresearch



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Executive Committee Members - 2023



Mr. Yogendra Singh Kushwah **Executive Committee Member** Head **New Technology Group** Subros Ltd.



Principal Engineer Thermal Systems M&M



Asst Vice President Research & Development Maruti Suzuki India Limited



Mr. Prasanna V. Nagarhalli **Executive Committee Member** General Manager **Engineering Research Centre** Tata Motors Ltd.



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Mr. Anurag Maurya Senior Manager **Climate Control** Tata Motors Ltd.



Mr. Selvaraji Muthu cutive Committee Member Senior General Manager Design & Development **Mahle Engine**

Mentor-SAENIS TTTMS Conference



Homologation Expert, Chairman-Mentor-TTTMS



Dr. Prasad Kadle Fellow SAE | Fellow ASME Mentor-TTTMS



VP & Head-Auto Group Public Affairs Mahindra Group Mentor-TTTMS



Executive Vice President-Engg., MSIL Mentor-TTTMS



Mr. Sangeet H Kapoor **Technical Chief-Climate Control. TML**



Mr. Arun Kumar Goel VP & Advisor-Subros Technical Centre Vice-Chairman-Technical, SAENIS GB **Mentor-TTTMS**



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Mr. UD Bhangale Advisor, iCAT **Executive Director (Incoming), SAENIS** Mentor-TTTMS

Meet Our Coordination Team



Saurabh Suman



Aditya Pratap



Nasib Singh



Deepali Roy



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Conference Venue

