





Advanced Powertrains for Mobility & Power Generation Applications



Friday & Saturday 15th & 16th Sep 2023



Radisson Blu Pune Hinjewadi, Pune



8:30 am to 6:30 pm

CONVENER



Dr. Sushil S. Ramdasi Deputy Director, Incharge -Powertrain Design, ARAI

PATRON



Dr. Reji Mathai Director, ARAI Chairman, SAEINDIA Western Section

CO-CONVENER



Mr. Chandrakant Awate General Manager, Electric Vehicle. TPEM, Tata Motors Limited

Salient Features



Advances in ICE Technology

Technology Options & Challenges for meeting EURO VII Emission Norms for Gasoline & Diesel Engines / Flex Fuel & Hydrogen ICE Engines



Advances and Current updates: **Electric & Hydrogen Fuel Cell Electric Vehicles**

- Making of Efficient & Cost Effective Conventional / E Axle based Electric Vehicles
- Advances in Motors (IM / PMSM / SRM), Power Electronics, MCU, BMS, Battery & Charging
- Latest happenings in Hydrogen Fuel Cell Electric Technology for Mobility & Power Generation Applications from the perspective implementation on mass scale
- ✓ Front loading based advanced Testing, Validation and Certification of Electric & Hydrogen Fuel Cell **Electric Vehicles**
- ✓ CAPEX / OPEX considerations while making sustainable & Affordable EV& FCEV's
- ✓ Indigenous developed product-based Supply Chain and Eco System Creation and Challenges in case of EV & FCEV's

In case of any query please contact:

Mr. Onkar Deshpande 7558666825 ⊠ officer-ws@saeindia.org

Mr. Sagar Murugkar 99222 77224 ⊠sagarvm@saeindia.org

Keynote: 10 Nos. Technical Presentations: 13 Nos.

Panel Discussion: 2 Nos.

Product Gallery - Experiencing the Technology: Hydrogen IC Engine, E-Axle Powertrain, IM / PMSM Motors for CV Applications, VCU / MCU / FCU, HiL System, Hydrogen Electrolyser, Hydrogen Fuel Cell



Hybrid Electric Vehicles from an Indian Perspective

Strong Hybrids / Series Hybrids / Range Extender Based Hybrids



Future Generation Transmissions & Axles

Dual Clutch Transmission / AMT / Design Considerations viz Transmission Error and Gear Whine in case of EV Transmission & Axle Technology



Panel Discussion Topics

- Sustenance & Existence of Conventional Power Trains After EURO VII & Beyond while Meeting Challenges of CO2 Footprint & Depletion of Fossil Fuels
- 2. Accelerating Impementation of EV & Hydrogen FCEV Technology for SCV, LCV and HCV Applications: Challenges, Opportunities, Govt Policy Support & Intervention

Registration Fees (Including 18% GST)

ARAI Company Member or SAEINDIA Member: ₹9,440/-Non Member: ₹ 11,800/-Student: ₹5,900/-

Click Here to Register















Advanced Powertrains for Mobility & Power Generation Applications

Our Esteemed Speaker & Panelist



Dr. Reji MathaiDirector, ARAI
Chairman, SAEINDIA Western
Section



Mr. Anand Kulkarni Chief Product Officer (EV) Tata Motors Limited



Dr. Thomas KauffeldtGlobal Application Manager
AVL, Graz Austria



Mr. Sachin Agrawal
Executive Vice President – R&D
and Technology
VE Commercial Vehicles Ltd



Mr Tarun Aggarwal Executive Vice president, Maruti Suzuki India Ltd



Mr. Sudeep Dalvi Senior Vice President & Director-Technical, Toyota-Kirloskar Motors



Mr. Priyachandar P.
Country Head - Inside
Sales National Instruments



Mr. Vijay Sharma Managing Director FEV India Pvt. Ltd.



Mr. Anand Deshpande
Senior Deputy Director
Head - Automotive Electronics &
Electric Mobility, ARAI



Mr. Neelkanth V. Marathe
Executive Director
FCMA



Mr. Krishnan Sadagopan Senior Vice President, Engines Ashok Leyland Limited



Mr. Naresh Phansalkar Director Engineering, Global CTOH TENNECO



Dr. K. Subramanian Senior Vice President, Product Development Ashok Leyland Limited



Mr. P. K. Banerjee
Executive Director
SIAM



Dr. Asish LeleDirector
National Chemical Laboratory



Dr. S. S. Thipse Sr. Deputy Director HOD EDL & ERL, ARAI



Dr. Ajeet Kumar JindalFormer Senior Vice President
Tata Motors Ltd.,
Consultant TACO



Dr. Sushil S. Ramdasi
Deputy Director,
Incharge -Powertrain
Design, ARAI



Mr. Chandrakant Awate General Manager, Electric Vehicle. TPEM, Tata Motors Limited



Mr. Garrett Bailey

Dorleco, USA



Mr. Filip Forier
Vice President - Engineering
Taco Punch Powertrain Pvt. Ltd.



Mr. Shelav JainGeneral Manager – Embedded
System
Taco Punch Powertrain Pvt. Ltd.



Mr. Ramesh S. Pasarija

Executive Director

SAEINDIA Western Section







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Friday & Saturday 15th & 16th Sep 2023



Radisson Blu Pune Hinjewadi, Pune



2 6:30 am to 6:30 pm

Friday, 15th Sep 2023 - Schedule

08:00 to 09:00 Registration & Visit to Product Gallery Inauguration 09:00 to 09:30 ARAI's Role, Responsibilities & Endeavor towards Achieving Clean & Sustainable Mobility 09:30 to 10:00 Global Roadmap to Zero Carbon Footprint & Alignment of the Same from an Indian Perspective Keynote 1 - Future of Electrification of PV & SUV's by considering present experiences, 10:00 to 10:25 challenges & Opportunities 10:25 to 10:45 Tea Break

10:45 to 11:15 Technical Session 1 - Readiness for Implementation of EURO VII in Europe followed by India and its Cost Impact / benefit analysis

11:15 to 11:45 Technical Session 2 - Advances in Fuel Injection Technology and associated Calibration Efforts for meeting EURO VII & Beyond Emission norms

11:45 to 12:10 Keynote 2 - Future of Conventional Power Trains in HCV segment fueled with fossil liquid & gaseous fuels while meeting EURO VII & FE Norms

12:10 to 12:20

12:20 to 12:50 Technical Session 3 - Practical Considerations & Overcoming Difficulties while handling Hydrogen as a fuel for Heavy Duty based I C Engines

12:50 to 13:20 Technical Session 4 - Applicability of Flex Fuel Technology from the perspective of upcoming **EURO VII norms and affordability on CAPEX front**

13:20 to 13:45 Keynote 3 - Real Life Experience while spearheading Hydrogen ICE, Flex Fuel & HEV Technology on global horizons

13:45 to 14:30 Lunch

14:30 to 15:00 Technical Session 5 - Bringing Real life test scenarios during front loading phase of EV FCEV development using HiL Simulation based Technology

15:00 to 15:30 Technical Session 6 - Can Strong / Series Hybrids will be the solution for meeting Euro VII & **Beyond Emission and FE Norms?**

15:30 to 15:55 Keynote 4 - An integrated design, simulation & testing approach for development of future generation power trains

15:55 to 16:15 Tea Break

Technical Session 7 - Updating on PLI, Rules, Regulations and Certification of Electric 16:15 to 16:45 **Vehicles, Systems & Components**

Panel Discussion No 1 (Conventional Power Trains) - Conventional Power Trains for EURO VII 16:45 to 17:55 & Beyond

17:55 to 18:30 Visit to Product Gallery

End of the Day 1 18:30

In case of any query please contact:

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Friday & Saturday 15th & 16th Sep 2023



Radisson Blu Pune
Hinjewadi Pune

- 3 - 8:30 am to 6:30 pm Hinjewadi, Pune



Saturday, 16th Sep 2023 - Schedule

08:15 to 09:00 Registration & Visit to Product Gallery

09:00 to 09:25 Keynote 5 - Penetrating Electrification in Commercial Vehicles - Facts , Readiness & Acceptance for mass transportation

09:25 to 09:50 Keynote 6 - OEM's Perspective on Co-Existence of Conventional & Advanced Power Trains for Sustainable & Green Mobility

09:50 to 10:20 Technical Session 8 - An Overview of Dual Clutch Transmissions and AMT for Conventional & Electric Power Trains from an Indian Context

10:20 to 10:40 Tea Break

10:40 to 11:50 Panel Discussion No 2 (E mobility) - Accelerating EV & Hydrogen FCEV Technology for Long **Haul Mobility Applications**

11:50 to 12:15 Keynote 7 - Long Term & An Efficient Powering of xEV's through Indigenization Process: Battery & Motor Technologies

12:15 to 12:45 Technical Session 9 - An overview of advances in motor and controller Technology viz Axial Flux. IM & PMSM

12:45 to 13:30 Visit to Product Gallery

13:30 to 14:15 Lunch

14:15 to 14:40 Keynote 8 - Indigenization of Hydrogen Fuel Cell and Electrolyzer for Making a Viable **Business Case**

14:40 to 15:10 Technical Session 10 - Updates on Rules, Regulations, Certification & Testing of Gaseous Fuels - India Specific Scenario

15:10 to 15:35 Keynote 9 - Road Map for Present & Future Power Generation Technology (ICE & Fuel Cell **Based Solutions**)

15:35 to 15:55 Tea Break

15:55 to 16:20 Keynote 10 - Creation of an efficient / non interruptive supply chain & eco system for all kind of EV's for Indian Market

16:20 to 16:50 Technical Session 11 - An E Axle Based Power Train Solutions : A Case Study - Modern way of Making EV & FECV's

16:50 to 17:20 Technical Session 12 - An Effective Integration of Power Electronics, DC-DC, OBC, PDU, Battery, VCU, MCU & Motors to Make Robust EV Architecture

17:20 to 17:50 Technical Session 13 - Making of VCU for EV's - Case Study with Live Demonstration

17:50 to 18:15 Valedictory

18:15 onwards Closure

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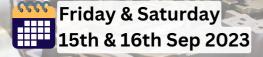








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8:30 am to 6:30 pm

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- Opportunity to participate as a speaker



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