

2 Day proficiency improvement programme (PIP) on

Automotive Transmission Design (including EV Powertrain & DVP)



Date: 02nd & 03rd December 2024



Venue: ARAI Academy, Chakan, Pune

SPEAKERS



Mr. Mukul Karnik

He has more than 27 years of experience in designing of gearboxes, transaxles, DCT, AMT, diesel engine, differentials, etc. He has worked with major OEMs (Tata Motors, Mahindra Tractors, Chrysler), consulting. houses (Magna Steyr, FEV). He has also worked abroad as resident engineer in Chrysler, USA and Magna Steyr, Austria

Mr. Rakesh Mullik (Dy. General Manager, PTD , ARAI Pune,)

He is pursuing PhD in fuel cell electric vehicles. He has overall 16 years of experience in engine valve train, design and development of automotive transmission systems (for 2W, passenger car, tractor, HCVs and HEVs), design and development of axles, electric axles, AMT, development of control logic functions for fuel cell electric vehicles.



Mr. Shashank Y. Badgajar (Dy. General Manager, DDC , ARAI, Pune,)

He is responsible for testing related activities at 'Drivetrain Development Centre' (DDC). which is state of the art facility in India which is capable to meet the current and upcoming requirements of automotive industry. It includes Research and Development and Evaluation of all types of Transmission systems.



Mr. Nilesh Sakle (Manager, ARAI Academy, ARAI, Pune)

He has done BE and ME in Mechanical Engineering. He has worked as a senior lecturer in Engineering College in Pune University for 8 years He was instrumental in establishment of ARAI Academy at Kothrud.



01 OBJECTIVES:

Automotive transmissions plays a crucial role in operation & performance of a vehicle and it has increased more in hybrid & electric vehicle. Design engineer requires a comprehensive understanding of various engineering principles and technologies. This training program covers Overview, opportunities, development cycle, components, theory, fundamental design principals and calculations. Development of advanced powertrains like E-axles and validation plan for drivetrain components are also discussed. Understanding these concept requires a multidisciplinary approach. This training will helps engineers to meet challenges and innovate in rapidly evolving automotive industry, ensuring the development of efficient, reliable, and environmentally conscious transmission systems. Continuous learning and adaptation to emerging technologies are crucial in this dynamic field.

02 REGISTRATION CONTACT:

Contact Person: Mr. P. A. Diwanji

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Venue: ARAI Academy, ARAI-FID, B-16/1, MIDC, Chakan, Mahalunge Ingale, Maharashtra 410501

03 REGISTRATION FEES:**Registration Fees (Rs.)**

(per participant) Rs.10,000 + 18% GST = Rs. 11,800

10% DISCOUNT if 5 or more delegates are registered from the same organization

Limited seats for Faculty/Student with a special discount.

Day One: 02 nd December 2024 (Monday)		
Start	End	Subject
08:30	09:00	Registration & Breakfast
09.00	09.45	Introduction, Overview, Transmission Development Cycle, Opportunities.
09.45	10.15	Basic Elements of Vehicle & Transmission Engineering
10.15	11.15	Need, Functions and Arrangement of Transmission in Passenger Cars / Commercial Vehicles
11.15	13.15	Design and Development of Axle based Advanced Powertrains for EV'
13.15	14.15	LUNCH BREAK
14.15	15.15	Basic Gearbox Concept in Passenger Car
15.15	15.45	Demonstration of Transmissions Systems on Cut-sections
15.45		Conclusion
Day Two: 03 rd December (Tuesday)		
Start	End	Subject
09.00	11.00	DVP Plan Driveline Components
11.00	12.00	Fundamental Performance Features of Vehicle Transmission
12.00	12.30	Final Drive and Drive Axles
12.30	13.30	LUNCH BREAK
13.30	15.30	Test Set Demo on E-Powertrain Setup
15.30	16.30	Feedback & Conclusion

05 PAYMENT INFORMATION:

Mode of Payment: Online Transaction

ARAI Pune Account No: 04470200000280

IFSC/RTGS/NEFT Code: BARBOKARVER (0=Zero)

Note: Participants from organization in SEZ must confirm the applicability for GST before making the payment.



Register Now!

Who should attend:

- Automotive Engineers
- Mechanical Engineers
- Researchers and Working Professionals in the Automotive Transmissions, Hybrid & Electric Vehicle
- Government Officials and Policymakers