



Engine pollutants – Principles of Formation, Measurement and their reduction technologies

Course code: MEA02

Location: Onsite delivery

Duration: 2 days

Knowledge on Automotive emission pollutants and their effects to health and environment is an urgent need for engineers as well as general public. Engineers working in this field should take the responsibility to effectively contribute to reduce the emission pollutants from automobiles. This course helps in providing the basic insights on how these pollutants form, how can we reduce the formation of these pollutants and also how to reduce these after formation. This course helps in understanding the various engine and vehicle layouts and the control strategies used to reduce the emissions from the vehicle. This course doesn't need any prior knowledge. This course clears all the fundamental questions.

Learning Objectives

By attending this seminar, you will be able to:

- Understand the reasons of CO formation and how to measure CO in exhaust and the appropriate technologies to reduce CO.
- Understand the reasons of HC formation and how to measure HC in exhaust and the appropriate technologies to reduce HC.
- Understand the reasons of PM formation and how to measure PM in exhaust and the appropriate technologies to reduce PM.
- Understand the reasons of NO_x formation and how to measure NO_x in exhaust and the appropriate technologies to reduce NO_x.

Who Should Attend

Engineering Management, Engineers charged with Calibration and Validation, OBD Engineers, Senior Management from Powertrain, Engine and Vehicles departments.

Topical Outline

- Emission formation principles
 - Principles of CO formation
 - Principles of CO measurement
 - Principles of HC formation
 - Principles of HC measurement



- Emission measuring equipments
 - Principles of CO measurement
 - Principles of HC measurement
 - Principles of NO_x measurement
 - Principles of PM measurement
 - Principles of PN measurement

- Emission reduction technologies
 - Technologies for CO reduction
 - Technologies for HC reduction
 - Technologies for PM reduction
 - Technologies for NO_x reduction