

REAL DRIVING EMISSIONS: ADAPTING TO CHANGING REGULATION

Institution of
**MECHANICAL
ENGINEERS**

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28 APRIL 2017

Automobile Division
Seminar

23 May 2017
Hilton Birmingham Metropole

SEMINAR SPEAKERS INCLUDE:

Phil Lawson, Advanced Emissions Manager
Jaguar Land Rover

Simon Williams, Senior Principal Calibration
Engineer
MAHLE Powertrain

Duncan Kay, Head of Vehicle Environment
Team, International Vehicle Standards
Department for Transport

Nick Molden, Founder and CEO
Emissions Analytics

Finn Coyle, Principal Technical Specialist -
Transport Emissions
Transport for London



SUPPORTING ORGANISATION:



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Save 10% before 28 April 2017 www.imeche.org/emissions

REAL DRIVING EMISSIONS: ADAPTING TO CHANGING REGULATION

23 May 2017
Birmingham

THIS SEMINAR WILL OFFER A UNIQUE OPPORTUNITY TO HEAR ABOUT HOW THOUGHT LEADERS IN THE AUTOMOTIVE INDUSTRY ARE ADAPTING TO COMPLY WITH CHANGING LEGISLATION.

With guidance from the Department for Transport and insight from industry specialists in emissions testing, this seminar will highlight the unique challenges in remaining compliant with changing regulation.

Core issues to be addressed include the technical challenges facing engineers in meeting emissions targets, and the role that emissions testing procedure plays in this. Issues surrounding the standardisation of equipment and procedure as well as best practice in developing reports from the data shall also be addressed.

KEY PROGRAMME HIGHLIGHTS:

- Hear from the **Department for Transport** about incoming changes to regulation and how this will impact engineers
- Learn from key OEMs about how to **address the challenges encountered when using Portable Emission Measurements Systems**
- Engage in technical round-table discussions on the **wider impact of changing regulation**
- Network with thought leaders in emissions testing and compliance and **gain insight in best practice**
- Discover how other experts in industry are improving **testing methods to comply with emissions regulations**

REAL DRIVING EMISSIONS: THE IMPACT ON ENGINEERS

Don't miss our follow-up seminar in November that will address the real-life impact on engineers after the introduction of RDE package three and WLTP test cycles. Book onto both the May and November seminars to receive a joint event booking discount.

ATTEND THIS SEMINAR TO:

- Discover how the change to Real Driving Emissions (RDE) package 3 testing will impact engineers
- Receive an update on the change to Worldwide harmonised Light Vehicle Test Procedure (WLTP) and how to prepare for the legislative updates
- Discuss the many factors that impact emissions test results, including vehicle design, fuel quality and environmental influences and how to mitigate these
- Learn from key OEM thought leaders including Jaguar Land Rover and Ford Motors on how manufacturers are adapting to changing regulation
- Take part in discussions with Tata Technologies and Ford Motors plus other industry leaders on the standardisation of equipment and procedure

WITH THANKS:

Paul Markwick,
Managing Director of Operations
The Manufacturing Technology Centre

BOOK EARLY AND SAVE UP TO 10%
OFFER ENDS 28 APRIL 2017

**TERMS AND
CONDITIONS
APPLY**

PROGRAMME

TUESDAY, 23 MAY 2017	
08:30	REGISTRATION
09:00	CHAIR'S OPENING REMARKS Paul Markwick, Managing Director of Operations, The Manufacturing Technology Centre
	IMPACT ON INDUSTRY
09:10	HOW DID WE GET HERE? UNDERSTANDING THE CONTEXT OF REGULATION CHANGES Chris Brace, Professor of Automotive Propulsion, University of Bath
	EQUIPMENT AND STANDARDISATION
09:35	UNCERTAINTY ANALYSIS IN PORTABLE EMISSIONS MEASURING SYSTEM TESTING Phil Lawson, Advanced Emissions Manager, Jaguar Land Rover
10:00	QUESTION AND ANSWER SESSION
10:10 PANEL	STANDARDISATION OF EQUIPMENT AND PROCEDURE AND IMPACT ON VALIDATION FOR THE FUTURE Steve Whelan, Global Director - Power Systems CoE, Tata Technologies Ltd Marcus Davies, Emissions and Core Calibration Manager, Ford Motors
10:40	NETWORKING REFRESHMENT BREAK
	GUIDANCE ON REGULATION
11:10	REMAINING COMPLIANT: AN INSIGHT ON CHANGING REGULATION FROM THE DEPARTMENT FOR TRANSPORT Duncan Kay, Head of Vehicle Environment Team, International Vehicle Standards, Department for Transport
	VALIDATION, PROCEDURE AND DATA
11:35	THE LIKELY REAL-WORLD IMPACT OF REAL DRIVING EMISSIONS AND WORLDWIDE HARMONIZED LIGHT VEHICLES TEST CYCLES: HOW EFFECTIVE WILL THEY BE? Nick Molden, Founder and CEO, Emissions Analytics
12:00	ON BOARD FAST MEASUREMENT OF VEHICLE NOX EMISSIONS Mark Peckham, Director, Cambustion
12:25	QUESTION AND ANSWER SESSION
12:40	NETWORKING LUNCH
	BEST PRACTICE FOR COMPLIANCE
13:40	TRANSPORT FOR LONDON BUS RETROFIT TO EURO VI STANDARD WITH REAL-WORLD ASSESSMENT Finn Coyle, Principal Technical Specialist - Transport Emissions, Transport for London
14:05	CHALLENGES FOR MEETING REAL DRIVING EMISSIONS WITH HIGH SPECIFIC OUTPUT ENGINES Simon Williams, Senior Principal Calibration Engineer, MAHLE Powertrain
14:30	QUESTION AND ANSWER SESSION
14:40 PANEL	EMISSIONS DATA AND ANALYSIS: MAKING RDE DATA MAKE SENSE Nick Molden, Founder and CEO, Emissions Analytics Further panellists to be announced
15:10	NETWORKING REFRESHMENT BREAK
15:40 INTERACTIVE ROUNDTABLE SESSIONS	HOW CAN EMISSIONS RESULTS COMING FROM AN RDE TEST CYCLE BE SEPARATED FROM INFLUENCES SUCH AS THE ENVIRONMENT, DRIVER INFLUENCES AND TRACK ITSELF? <ul style="list-style-type: none"> • What are the main challenges facing manufacturers in ensuring emissions testing is compliant in time with incoming legislation, and how do we address them? • Which development engineers are directly influenced by incoming legislation and how can they be involved to produce efficient and compliant development processes? • How can fuel quality be accounted for during incoming test procedures and what is the impact on engines? • How can the change to RDE and WLTP be explained to the consumer and what is the impact on engines?
16:40	ROUNDTABLE FEEDBACK
17:00	CHAIR'S CLOSING REMARKS
17:10	END OF SEMINAR

For the most up-to-date and detailed programme for the event, please visit www.imeche.org/emissions

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

HOW TO BOOK YOUR PLACE

FEES AND CHARGES

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Real Driving Emissions: Adapting to changing regulation only (May 2017)	Early Bird Rate Until 28 April 2017	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£300 + VAT = £360	£360 + VAT = £432
Non-member	£410 + VAT = £492	£480 + VAT = £576
Student/Retired	£90 + VAT = £108	£100 + VAT = £120

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Real Driving Emissions: Adapting to changing regulation (May 2017) and Real Driving Emissions: The impact on engineers (November 2017)	Early Bird Rate Until 28 April 2017	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£500 + VAT = £600	£620 + VAT = £744
Non-member	£720 + VAT = £864	£860 + VAT = £1032
Student/Retired	£180 + VAT = £216	£200 + VAT = £240

To book onto both seminars, please call +44 (0)20 7973 1251 or email eventenquiries@imeche.org. Group booking discounts are also available. Contact us for more information.

THREE WAYS TO BOOK

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- 2 Email:
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Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

SPECIAL REQUIREMENTS

Please inform us of any special requirements, ie dietary or access, on the relevant section of this form.

CANCELLATION

For a refund (minus £25+VAT admin charge), cancellations must be received at least 30 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason

and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of the fee paid. The Institution is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

LIABILITY

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

CONFERENCE VENUE

Hilton Birmingham Metropole

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OTHER EVENTS TO LOOK FOR



DEVELOPMENTS IN TRANSMISSION AND DRIVELINE TECHNOLOGY

13 June 2017, Birmingham

Gain a full update on developments in transmission and driveline technology in passenger cars as well as across the automotive industry, including on and off-highway.

www.imeche.org/driveline

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PE

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Institution of MECHANICAL ENGINEERS

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