

OFF-HIGHWAY VEHICLES

Institution of
**MECHANICAL
ENGINEERS**

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10 MARCH 2017

Automobile Division
Seminar

25 April 2017
The Studio, Birmingham

SEMINAR SPEAKERS INCLUDE:

Douglas Hannah, Engineer, Environment
Branch - IVS
Department for Transport

Marcus Potter, Head of Mobility
BAE Systems Land (UK)

Phil Whiffin, Chief Engineer - Electrical
and Electronic Engineering, Group and
Advanced Research
JCB

Igor Strashny, Engineering Manager,
Innovation & Technology Development
Division
Caterpillar UK

Steve Hughes, Chief Operating Officer
Torotrak

Matt Norris, Applications Leader,
Commercial Vehicle Systems Integration
Delphi Diesel Systems

Save 10% before 10 March 2017 www.imeche.org/offhighway

SUPPORTING ORGANISATION:



EVENT PARTNERS:



OFF-HIGHWAY VEHICLES

25 April 2017

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KEY INSIGHTS FROM THE CONSTRUCTION, INDUSTRIAL AND MILITARY SECTORS WILL HELP MAKE YOUR VEHICLES MORE RESILIENT, EFFICIENT AND DURABLE.

Overcome the engineering roadblocks and unique challenges facing the off-highway sector with case studies from OEM and tier one manufacturers.

Ensure your new developments are compliant with the latest emissions regulation with guidance from the **Department for Transport** and insight from **Delphi Diesel Systems**. Hear case studies and updates on emerging technologies from **Caterpillar**, **BAE Systems Land**, **JCB** and many more.

KEY PROGRAMME HIGHLIGHTS:

- Clarification on regulation for non-road mobile machinery from the **Department for Transport**
- Case study on noise and vibration assessment and improvements in military vehicles from **BAE Systems Land**
- Guidance on overcoming engineering challenges for increased electrification from **JCB**
- Motion resistance optimisation to fit different speeds, loads, and surface types from **Caterpillar UK**
- Overview of the UK off-highway market and ongoing projects from the **Advanced Propulsion Centre**
- How to address challenges in meeting Stage V requirements for diesel engines from **Delphi Diesel Systems**
- Use of power, data and video architecture in military vehicles from **Ultra Electronics**

ORGANISING COMMITTEE:

Automobile Division
Institution of Mechanical Engineers

MEMBERS CREDITS:

David Simner, Course Director
for the Military Vehicle Technology MSc,
Cranfield Defence and Security
Cranfield University

ATTEND THIS SEMINAR TO:

- Engage directly with the Department for Transport on how to comply with incoming emissions regulation
- Hear from key industrial off-highway OEMs including Caterpillar and JCB about their latest developments
- Understand how the new generation of off-highway vehicles are addressing the needs of Stage V emissions from industry
- Learn about the latest approaches to improving efficiency and durability in off-highway vehicles
- Overcome the roadblocks to increasing electrification in the off-highway market
- Network with an array of specialist engineers and budget holders from the construction, industrial and military sectors

FEEDBACK FROM THE LAST EVENT:

“““

A very interesting and informative day with good discussions around the challenges and opportunities. I look forward to the next off-highway event

Ricardo UK

“““

Fantastic technology transfer and networking opportunity

Robert Bosch Ltd

BOOK EARLY AND SAVE UP TO 10%
OFFER ENDS 10 MARCH 2017

**TERMS AND
CONDITIONS
APPLY**

PROGRAMME

25 APRIL 2017	
08:30	REGISTRATION AND REFRESHMENTS
09:00	CHAIR'S OPENING REMARKS
	THE UK OFF-HIGHWAY VEHICLES MARKET
09:10	A CRITICAL OVERVIEW ON THE OFF-HIGHWAY VEHICLES MARKET AND ONGOING PROJECTS Jon Beasley, Director – Technology and Projects, Advanced Propulsion Centre
	MOVING TOWARDS ELECTRIFICATION
09:40	BARRIERS TO INCREASED ELECTRIFICATION IN OFF-HIGHWAY MACHINES Phil Whiffin, Chief Engineer – Electrical and Electronic Engineering, Group and Advanced Research, JCB Lee Harper, Principal Engineer, Research Electrical and Electronics - Advanced Projects, JCB
10:10	QUESTION AND ANSWER SESSION
10:20	NETWORKING REFRESHMENT BREAK
	EMISSIONS COMPLIANCE
10:50	NON-ROAD MOBILE MACHINERY EMISSIONS: THE NEW LEGISLATIVE CHANGES Douglas Hannah, Engineer, Environment Branch - IVS, Department for Transport
11:20	DIESEL FUEL SYSTEMS: ADDRESSING THE NEEDS OF STAGE V AND BEYOND Matt Norris, Applications Leader, Commercial Vehicle Systems Integration, Delphi Diesel Systems Ronán Joyce, Current Systems Team Leader, Medium Duty Common Rail, Delphi Diesel Systems
11:50	OFF-HIGHWAY ENGINE INTEGRATION AND COMPLIANCE Representative, Ricardo
12:20	QUESTION AND ANSWER SESSION
12:35	NETWORKING LUNCH
	NEW TECHNOLOGIES FOR MAXIMISING EFFICIENCY
13:35	MOTION RESISTANCE OPTIMISATION SYSTEM FOR HEAVY DUTY VEHICLES Igor Strashny, Engineering Manager, Innovation & Technology Development Division Caterpillar UK
14:05	FLYWHEEL-BASED HYBRID SYSTEMS FOR OFF-HIGHWAY AND INDUSTRIAL APPLICATIONS Steve Hughes, Chief Operating Officer, Torotrak
14:35	AN OPEN APPROACH TO VEHICLE ARCHITECTURES FROM A MILITARY PERSPECTIVE Tony White, Chief Technology Officer (Land), Ultra Electronics PALS
15:05	QUESTION AND ANSWER SESSION
15:20	NETWORKING REFRESHMENT BREAK
	RESILIENCE AND DURABILITY ACROSS APPLICATIONS
15:50	APPLICATION OF ENGINEERING FROM AGRICULTURE OFF-HIGHWAY VEHICLES Speaker to be announced
16:20	NOISE AND VIBRATION ASSESSMENT AND IMPROVEMENTS IN MILITARY VEHICLES Marcus Potter, Head of Mobility, BAE Systems Land (UK)
16:50	QUESTION AND ANSWER SESSION
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/offhighway

- 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.

Seminar and Workshop	Early Bird Rate Until 10 March 2017	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£270 + VAT = £324	£300 + VAT = £360
Non-member	£360 + VAT = £432	£400 + VAT = £480
Student/Retired	£100 + VAT = £120	£100 + VAT = £120

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THREE WAYS TO BOOK

- 1 Online:
www.imeche.org/offhighway
- 2 Email:
eventenquiries@imeche.org
- 3 Phone:
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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

The Studio, Birmingham

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OTHER EVENTS TO LOOK FOR



ESSENTIAL MANAGEMENT SKILLS

22-24 March 2017, Coventry

Essential Management Skills (EMS 2017) is your chance to take control of your career and develop the unique competencies needed for engineering management success.

www.imeche.org/ems



ADAS 2017: ADVANCED DRIVER ASSISTANCE SYSTEMS

28-29 March 2017, Birmingham

ADAS 2017 will address the latest developments and innovation taking place to reach level 5 autonomy and increase vehicle safety before autonomous vehicles.

www.imeche.org/adas

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