

AUTOMATED AND AUTONOMOUS VEHICLES: OVERCOMING ENGINEERING CHALLENGES FOR FUTURE MOBILITY

Institution of
**MECHANICAL
ENGINEERS**

20 June 2019
MIRA Technology Institute, Nuneaton

Seminar

More details available at:
www.imeche.org/autonomousvehicles

SEMINAR SPEAKERS INCLUDE:

Michael Steinberg, Head of Strategy, Programme and Communications

Centre for Connected and Autonomous Vehicles (CCAV)

Hayder Wokil, Driver Support Automated Driving Director
Volvo Trucks

Paul Newman, Co-founder, CTO
Oxbotica

Chris Reeves, Head of CAV
HORIBA MIRA



EXHIBITOR:



SUPPORTING ORGANISATIONS:



EVENT PARTNER:



Book your place at: www.imeche.org/autonomousvehicles

AUTOMATED AND AUTONOMOUS VEHICLES: OVERCOMING ENGINEERING CHALLENGES FOR FUTURE MOBILITY

20 June 2019, MIRA Technology Institute, Nuneaton

ACCORDING TO RECENT RESEARCH, THE AUTONOMOUS VEHICLES MARKET COULD BE WORTH \$10.40 BILLION BY 2031 AND PIONEERING PROJECTS HAVE BEEN FUNDED TO MANAGE THE REMAINING SIGNIFICANT BARRIERS TO A FULLY AUTONOMOUS FUTURE.

Join the Automated and Autonomous Vehicles 2019 seminar to learn how current and planned autonomous projects are addressing key challenges within this ever-growing industry.

Ranging from the legal, regulatory and technological developments through to testing and validation of autonomous systems, gain valuable insights into the end to end development of autonomous systems from those at the forefront of the industry. This is an opportunity to hear directly from the Centre for Connected and Autonomous Vehicles about the future roadmap to ensure you are ready for the next funding competitions.

Discuss the future of the industry with a variety of stakeholders, including OEMs, CCAV funded projects, autonomous system developers, autonomous software providers and more. Plus, see the technology in action and be inspired by a live demonstration of the Formula Student AI vehicle.

KEY PROGRAMME HIGHLIGHTS:

- The **Law Commission** provide an update on their review of the regulatory framework for the safe deployment of automated vehicles in the UK
- **Volvo Trucks** share their automation story so far including truck industry automation levels and other industries
- **Connected Places Catapult** discuss the creation of a scenario library and a smart verification framework
- **Oxbotica** highlight the key challenges and opportunities of the changing landscape of transport
- **HORIBA MIRA** share their work in cooperative driving in mixed environments

ATTEND THIS SEMINAR TO:

- Hear from key pioneers of autonomous vehicles projects including **Volvo Trucks, Bristol Robotics Laboratory, Connected Places Catapult** and **HORIBA MIRA**
- Gain insight into the latest progress in **validation and verification testing** to ensure successful implementation and integration onto our roads
- Learn about how the industry is focused on **human factor orientated design** both on the road and behind the wheel when developing autonomous systems
- **Experience** the next generation of engineering through a **live demonstration of a Formula Student AI car**
- Network with representatives from **OEMs, CCAV funded projects, autonomous system developers, autonomous software providers**

MEMBER CREDITS:

Aaron Mandalia, Autonomous Vehicle Engineer
Jaguar Land Rover

Lisa Bingley, Operations Director
MIRA Technology Institute

Madeline Cheah, Cyber Security Innovation Lead
HORIBA MIRA



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BOOK YOUR PLACE TODAY

TERMS AND
CONDITIONS
APPLY

PROGRAMME

THURSDAY 20 JUNE 2019	
08:30	REGISTRATION AND REFRESHMENTS
09:00	CHAIR'S OPENING REMARKS George Filip, Knowledge Transfer Manager Connected & Autonomous Vehicles, Knowledge Transfer Network
	CURRENT AUTONOMOUS PROGRESS
09:10 Morning Keynote	CONNECTED AND AUTONOMOUS VEHICLE POLICY LANDSCAPE, FUTURE FUNDING AND ROADMAP Michael Steinberg, Head of Strategy, Programme and Communications, Centre for Connected and Autonomous Vehicles (CCAV)
09:40	AUTOMATION INSIGHTS FROM VOLVO Hayder Wokil, Driver Support Automated Driving Director, Volvo Trucks
10:05	FINDING THE RIGHT BALANCE BETWEEN SIMULATION AND REAL-WORLD TESTING IN VERIFICATION AND VALIDATION (V&V) FOR THE CAV SECTOR Tony Pipe, Deputy Director, Bristol Robotics Laboratory
10:30	QUESTION AND ANSWER SESSION
10:45	NETWORKING REFRESHMENT BREAK
	VALIDATION AND VERIFICATION OF TECHNOLOGY
11:15	REVIEWING THE REGULATORY FRAMEWORK FOR THE SAFE DEPLOYMENT OF AUTOMATED VEHICLES IN THE UK Jessica Uguccioni, Lawyer, Law Commission Connor Champ, Research Associate, Law Commission
11:40	LATEST APPLICATIONS OF TESTING AND VALIDATION A Representative, Warwick Manufacturing Group
12:05	ENSURING CAVS ARE SAFE: CREATING A SCENARIO LIBRARY AND A SMART VERIFICATION FRAMEWORK Zeyn Saigol, Principal Technologist, Connected Places Catapult
12:30	QUESTION AND ANSWER SESSION
12:45	NETWORKING LUNCH
	DESIGNING WITH HUMAN FACTORS IN MIND
13:45	DRIVEN TO BE DRIVERLESS Paul Newman, Co-founder, CTO, Oxbotica
14:10	COOPERATIVE DRIVING IN MIXED ENVIRONMENTS Pawel Jaworski, Senior Research Engineer, HORIBA-MIRA
	DEVELOPMENTS IN IDENTIFICATION TECHNOLOGY
14:35	DEVELOPMENTS IN SENSOR INTEGRATION Representative, AVL
15:00 Panel Discussion	MOVING TOWARDS A MORE CONNECTED FUTURE Chris Reeves, Head of CAV, HORIBA MIRA Zeyn Saigol, Principal Technologist, Connected Places Catapult Tony Pipe, Deputy Director, Bristol Robotics Laboratory Natasha Merat, Chair in Human Factors of Transport Systems, Fellow of the TRL Academy, Leader, Human Factors and Safety Group, Institute for Transport Studies, University of Leeds
15:20	NETWORKING REFRESHMENT BREAK
15:50	FORMULA STUDENT AI CAR DEMONSTRATION Take the opportunity to see one of the autonomous vehicles in action through a live demonstration. The car will be competing in the Formula Student, the largest educational engineering competition in the UK inspiring the next generation of engineers.
17:00	END OF SEMINAR

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

- 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.

Delegate Type	STANDARD RATE
Member, Institution of Mechanical Engineers / Supporting Organisation	£300 + VAT = £360
Non-member	£390 + VAT = £468
Full-time Student/Retired	£110 + VAT = £132

THREE WAYS TO BOOK

1 online:
www.imeche.org/autonomousvehicles

2 email:
eventenquiries@imeche.org

3 phone:
+44 (0)20 7973 1251

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.

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Please inform us of any special requirements, ie dietary or access, on the relevant section of the booking form or email eventenquiries@imeche.org

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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

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CONFERENCE VENUE

MIRA Technology Institute
MIRA Technology Park
1 Eastern Avenue
Nuneaton
CV10 0UX

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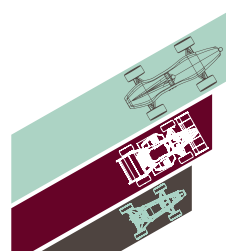
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OTHER EVENTS TO LOOK FOR



FORMULA STUDENT 2019

19-21 July 2019, Silverstone

Watch all the action as student teams from around the world build and race petrol, electric, hybrid and autonomous vehicles at the home of British Motorsport.

www.formulastudent.com



REDUCING DRIVING EMISSIONS: ENSURING COMPLIANCE WITH RDE AND WLTP

9 July 2019, One Birdcage Walk, London

Attend to hear about the latest testing techniques and technologies to ensure your processes are efficient and mitigate the risk of failure.

www.imeche.org/emissions

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