



**ENGINEERING  
INTEGRITY SOCIETY**

# **EFFECTIVE ROAD LOAD DATA ACQUISITION**

**13 November 2019  
MIRA Technology Institute**



This event is aimed at Engineers and Technicians who are interested in data collection on vehicles. The day will discuss the basic considerations required during a typical data collection; from initial specification, through installation, data collection and data handling as well as the many applications of the data. There will also be a demonstration of the installation of transducers including a wheel force transducer.

# PROVISIONAL PROGRAMME

- 0930 Registration & Refreshments**
- 0950 Introduction to the EIS - TBC**
- 1000 Fundamentals of Data Collection - Bill Dyer, HORIBA MIRA**  
Typical data collection from initial specification, through installation, data collection and data handling.
- 1030 Wheel Force Transducers – Tips and Tricks - PCB Piezotronics**  
Application examples and how to get the best results from a WFT. Best practice and tips on overcoming common issues.
- 1100 The Integration of Load Cells into a test vehicle - Jon Hewitt, HORIBA MIRA**  
Selecting the right force transducer with minimal effect on the vehicle system. This will discuss single axis, tri-axis and multi-axis (Wheel Force) transducers and their installation into the vehicle.
- 1130 Refreshments**
- 1200 Instrumented Vehicle Suspension Demonstration - Duncan Jones, HORIBA MIRA**  
A simple vehicle suspension rig to illustrate the difficulties of installing various transducers due to the complexity of suspension motion and harshness of the road environment.
- 1230 Lunch**
- 13.15 Using technology to deliver more data, faster, with greater confidence - TBC, Millbrook**
- 13.45 What to do with RLD - Craig Cochrane, HORIBA MIRA**  
In vehicle development, Road Load Data (RLD) is used as a core tool to create correlated test specifications; drive CAE and rig simulations; and verify the performance of systems and components. This presentation covers five mini case studies that use RLD to deliver a result.
- 14.15 Alternative ways of data collection from around the world: Examples of unconventional concepts of durability instrumentation and testing - Daniel Foerder, imc Test & Measurement GmbH**
- 14.45 Refreshments**
- 1500 Estimation of static and dynamic load distribution in vehicle bodies and estimation of dynamic responses - Richard Cornish, Birmingham City University**
- 1530 How to estimate your analysis results' accuracies based on uncertainties in the raw data - Daniel Foerder, imc Test & Measurement GmbH**
- 1600 Closing Comments**

# BOOKING FORM

	EIS Member	Non EIS Member
<b>Delegate</b>	£100+VAT	£125+VAT
<b>Student/Apprentice</b>	£25+VAT	
	UK	Rest of the World
<b>Personal Membership of the EIS</b>	£25 per year	£30 per year
I enclose a cheque for £_____ made payable to the Engineering Integrity Society. Payment can also be made by BACS.		
<b>Name:</b>		
<b>Company:</b>		
<b>Address:</b>		
<b>Telephone:</b>		
<b>Email:</b>		
<b>Any Special Dietary Requirements</b>		
Please tick this box if you are happy to have future contact with the EIS. We limit the emails we send and will never pass your details to any other organisation. You are able to unsubscribe at any time. Our privacy statement can be viewed on our website.		<input type="checkbox"/>
Please tick this box if do not want to receive any information from the EIS.		<input type="checkbox"/>
I would like to receive a certificate to confirm I have attended this seminar.		<input type="checkbox"/>

Please return completed forms to the following address:  
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Telephone: +44(0)1623 884225 Email: info@e-i-s.org.uk

The Engineering Integrity Society is an independent not-for-profit organisation which aims to inspire all engineers, both experienced and newly qualified, across a broad spectrum of technologies. The Society is committed to promoting events and publications, providing a forum for engineers to discuss present industrial needs, new technologies and to stimulate both company and personal development.

The annual subscription rates are £25 for UK residents and £30 for non-UK residents. Upon joining the Society you will also have the additional advantages of preferential attendance rates at EIS events, together with selected events held by some of the associated organisations. In addition you will have access to CDs containing archived copies of EIS presentations.

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