

MICROSCIENCE Technology Forum

Microscopy in the Aerospace and Automotive Industries

20 June 2007

Williams Formula 1 Centre, Wantage, Oxfordshire

Organisers: Alison Crossley, Steve Metcalfe, Debbie Stokes



Professor Patrick Grant, Cookson Chair of Materials at Oxford University and Director of the Transport Node of the UK's Materials Knowledge Transfer Network will be speaking at this meeting on 'Environmentally Friendly Transport – Development of Ultra-Lightweight Materials'.

Dr Matthias Werner, CEO NMTC, advisor to the EU, UK and other European Governments, will be speaking about 'Nanotechnology - Innovation in the Auto industry'.

Jane Woolrich from Rolls Royce plc, Failure Investigation team will describe 'The use of microscopy in the failure investigation of aeroengine components'.

Martin Jonsson from KIMAB (Corrosion and Metals Research Institute, Stockholm, Sweden) will give a talk entitled 'Confocal microscopy in corrosion science'. Sponsored by Olympus Life and Material Science Europa GmbH.

Brian O'Rourke, the Chief Composites Engineer from Williams Grand Prix Engineering Ltd will be talking about 'How to make a Winning F1 Racing Car'.

Microscopy is an integral part of the manufacturing process from acceptance of raw materials through machining and forming processes, assembly, quality control and monitoring of surface finish of the final products. All aspects of microscopy from enhanced vision systems to electron microscopy and non-destructive testing will be explored in areas such as advanced materials; coatings and surface finish; advanced vision for controlled engineering; quality control and failure analysis.

In addition to the microscopy community, this meeting is aimed at industrialists and academics with an interest in automotive and aerospace manufacturing; for example materials scientists who develop or specify materials, engineers assessing fabrication technologies such as joining techniques, quality control personnel who monitor processes and products and students hoping to gain employment in these areas. This forum will provide an opportunity for participants to learn from leading industrial practitioners, gain an increased understanding of the industry requirements, as well as insights into the latest developments in microscopic inspection methods.

SPONSORS:

- FEI UK Ltd
- Olympus Life and Material Science Europa GmbH
- Faraday Advance - the transport node of the Materials KTN
- IOP Materials and Characterisation Group
- FCO's Global Opportunities Fund on the science & innovation channel

There is more information on the website, where you can also book on-line

www.rms.org.uk/event_aeroauto.shtml

There will be space in the programme for contributed papers and posters.

The deadline is Monday 21st May 2007.

Please contact Allison Winton (allison@rms.org.uk) for further details and instructions.

Delegates will be able to take a tour of the Williams F1 Grand Prix Collection at the end of the day. A reception will then be held in the Trophy Room where there is also an F1 simulator (sponsored by FEI UK Ltd). Attendees are welcome to bring cameras but not video recorders. There will also be a Poster display, exhibition and RMS AGM at this unique meeting held in a unique venue.