



Applications of Thermal Analysis for the 21st Century

10 November 2016 – NPL, UK

- 9:00 **Registration & Coffee**
- 9:30 **Welcome and Arrangements** [Glynn Van-de-Velde](#) (Chair, RSC TMG)
Introduction to Thermal Metrology at NPL – [Sam Gnaniah](#) (NPL Materials Division)
- 9:50 **A novel thermal analysis instrument based on induction heating**
[Gareth Parkes](#) (Dr), [Huddersfield University](#)
- 10:20 **The use of TGA-FTIR at Ford Motor Company**
[Stephen Gould](#), [Ford Motor Company](#)
- 10:50 **Refreshment Break**
- 11:20 **Material Thermal Response of a Charring Ablator – Thermal Analysis Approach**
[Phil Duke](#), [DSTL](#)
- 11:50 **Development of an integrated thermomicroscopy- DART- MS system**
[Lindsay Harding](#) (Dr), [Huddersfield University](#)
- 12:20 **Applications of thermal data at Jaguar Land Rover**
[Jason Webb](#), [Jaguar Land Rover, UK](#)
- 12:50 **Lunch**
- 14:00 **Investigating changes of the hair cortex induced by alkylation of disulphide bonds using DSC**
[Elizabeth Burrows](#), [Manchester University](#)
- 14:15 **Assessment of the effects of milling on merino wool using DSC**
[Thomas Davies](#), [Manchester University](#)
- 14:30 **DSC- Synchronous XRD for analysis of enantiotropic polymorphism**
[Simon Gaisford](#) (Prof), [UCL](#)
- 14:50 **Diffusing Wave Spectroscopy (DWS) – Taking the strain out of rheology**
[Nick Hawkins](#), [Merrow Scientific](#)
- 15:10 **Refreshment Break**
- 15:30 **Rapid determination of T_g and T_m using a simultaneous DMA/DTA technique for biomedical material assessment**
[John Duncan](#) (Dr), [LacertaTechnology](#)
- 15:45 **Dynamic Mechanical Analysis (DMA) as a tool to support freeze drying**
[Paul Matejtschuk](#) (Dr), [NIBSC](#)
- 16:00 **Application of humidity controlled Dynamic Mechanical (DMA-RH) and Dielectric Analysis (DETA-RH) for evaluation of nano-particle and nanocellulose based conservation treatment of heritage materials**
[Marianne Odlyha](#) (Prof), [Birkbeck College](#)
- 16:15 **Polymer Composites - critical issues affecting DMA accuracy/measurement**
[Ana Yong](#), [NPL/Surrey University](#)
- 16:30 **Poster Prize / Close**