

Industrial Advisory Group Meeting

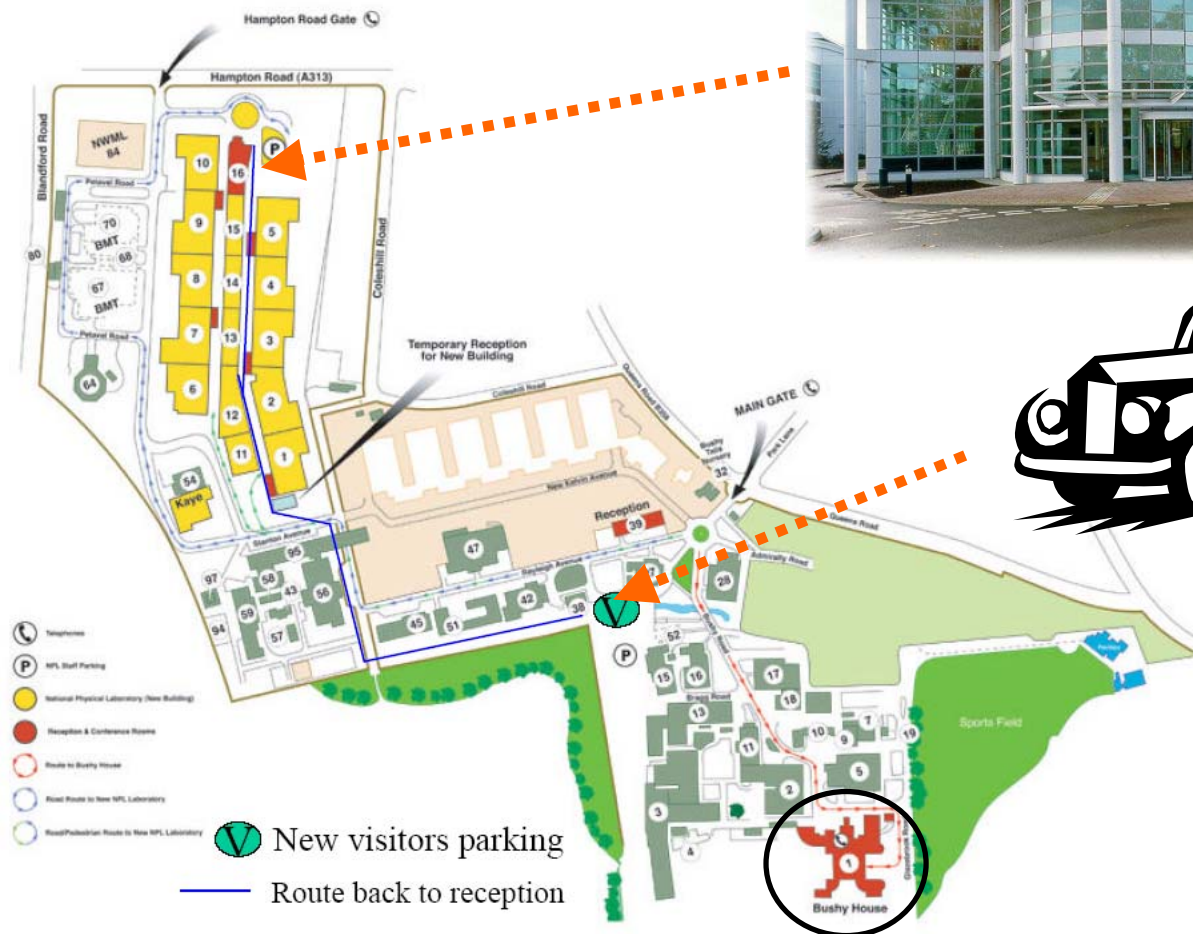
28 June 2007

Polymers: Multiscale Properties

Welcome

- **Please**
 - Switch off mobile phones
 - Feel free to ask questions
- **Emergency**
 - Evacuation - Muster outside on the sports field
 - Phone - 3333

Now where did I leave my car?



Agenda

10.00 Coffee/Tea

10.30 Welcome and Introduction

10.45 Materials 2008+

11.00 Use of Nanoindentation Measurements for Determining Time-Dependence Behaviour of Polymers

Dr Ben Beake (Micro Materials Limited)

11.30 SE02: Improved Design and Manufacture of Polymeric Coatings Through the Provision of Dynamic Nano-Indentation Measurement Methods

Dr Nigel Jennett (NPL)

Agenda

12.00 SM06: Knowledge Based Design of Plastics

Dr Greg Dean (NPL)

12.30 SM10: Characterising Micro- and Nano-scale Interfaces in Advanced Composites

Dr Bill Broughton (NPL)/Tim Young (Surrey University)

13.00 Lunch

14.00 Discussion – Future Direction

Any Other Business

14.30 Closure of Meeting

Measurements for Materials Characterisation (2006-2009)

Scope and Aims: “The Measurement of Materials Characterisation programme will develop measurement methodologies and models for the assessment, prediction and evaluation of intrinsic properties of materials to support the near-term needs of industry for innovation, and creating the measurement and testing platforms for emerging technologies, which the Technology Strategy Board see as critical to the future prosperity of UK industry”.

“Knowledge and best practice will be promoted to users through new facilities, standardised test methods and access to experts”

Other Related NMS Projects

Performance (2004 – 2007)

- ◆ Sensing the Onset of Damage at Polymer Surfaces Due to Environmental Exposure (F02)

Tony Maxwell (NPL)

- ◆ Permeation, Absorption and Desorption of Liquids and Gases in Polymer and Multilayer Systems (F07)

Bruce Duncan (NPL)

- ◆ Prediction of the Lifetime of Adhesive Joints Under Sustained Loading (F09)

Bill Broughton (NPL)

- ◆ Adhesive Design Toolkit (F10)

Bill Broughton (NPL) – Website:

www.adhesivestoolkit.com

Other Related NMS Projects

Processing (2005 – 2008)

- ◆ **Flow Properties of Filled Materials (H4)**

Martin Rides (NPL)

- ◆ **Dynamic Properties of Solid/Liquid Materials Systems at the Nano and Micro-Scale (U4)**

Martin Rides (NPL)

Other Related NMS Projects

Characterisation (2006 – 2009)

- ◆ **Efficient Production and Utilisation of Surface Engineering Through the Provision of a Measurement Toolkit (SE01)**

Mark Gee (NPL)

- ◆ **Effective Design, Manufacture and Use of Nanostructured Coatings through Measurement (SE03)**

Nigel Jennett (NPL)

- ◆ **Improving Quality in Composite Materials Through the Provision of Traceable Measurements (SM09)**

Tony Maxwell (NPL)

Other Related NMS Projects

Materials 2007+ (2007 – 2010)

- ◆ Metrology of Fluid Properties for Micro-Processing (AM10)

Martin Rides (NPL)

- ◆ Diagnostics for Measuring and Modelling Dispersion in Nanoparticulate Reinforced Polymers (AM11)

Bill Broughton (NPL)

Any Questions?

Website

<http://www.npl.co.uk/materials/programmes/characterisation>

User Name: multiscale

Password: iagmember