

# *Application of NMR to Materials Chemistry*

Thursday 30th April

**AstraZeneca (Charnwood site)  
Bakewell Road  
Loughborough  
Leicestershire  
LE11 5RH  
Loughborough**

The meeting will comprise 9 presentations focusing on NMR in materials chemistry. In addition there will be a talk describing the new National Solid-State NMR facility.

## **Programme**

- 10.00 – 10.25 Registration and refreshments
- 10.25 – 10.30 Introduction and welcome
- 10.30 – 11.00 **Jeremy J. Titman, *University of Nottingham***  
Solid-state NMR of disordered and heterogeneous nanomaterials
- 11.00 – 11.30 **Mike E. Ries, *University of Leeds***  
NMR of polymer melts: From Rouse chains to networks
- 11.30 – 12.00 **Kenneth D. M. Harris, *Cardiff University***  
*In situ* solid-state NMR strategies for probing adsorption processes, crystallization, and structural transformations
- 12.00 – 12.30 **Stephen C. Wimperis, *University of Glasgow***  
Structure and dynamics in "superdense" magnesium silicate phases from the Earth's mantle
- 12.30 – 13.45 Lunch
- 13.45 – 13.55 **Dinu Iuga, *UK 850 MHz Solid-State NMR Facility***  
Presentation of the UK 850 MHz National Solid-State NMR Facility
- 13.55 – 14.20 **John V. Hanna, *University of Warwick***  
Development of solid-state  $^{93}\text{Nb}$  and  $^{25}\text{Mg}$  NMR in conjunction with density functional theory calculation

- 14.20 – 14.45 **Robin S. Stein, *European Centre for High-Field NMR, Lyon***  
NMR crystallography of flutamide
- 14.45 – 15.10 **Adrian J. Wright, *University of Birmingham***  
Amorphous bioceramics; probing structure when diffraction lets you down
- 15.10 – 15.40 Refreshment break
- 15.40 – 16.00 **David C. Apperley, *Durham Solid-State NMR Research Service***  
Characterising morphology in a polymer membrane by solid-state NMR
- 16.00 – 16.30 **Steven P. Brown, *University of Warwick***  
Measuring  $J$  coupling distributions by  $^{31}\text{P}$  solid-state MAS NMR: New insight into disorder in phosphate glasses
- 16.30 – 16.35 Closing remarks