

RSC Solid State Chemistry Group

30th Anniversary Christmas Meeting

Monday 20th December 2010

1:30 Welcome

1:40 C. Serre (Institut Lavoisier, Versailles) – Invited Talk

2:20 M. Roberts - 3D microbatteries: Conformal deposition of battery materials on porous 3D substrates

2:40 H.Y. Playford - Structural investigations of disordered metal oxides

3:00 H.J. Kitchen - New directions in the microwave synthesis of inorganic materials; complex carbides and time-resolved reaction probes

3:20 Tea break

3:50 C. Grey (University of Cambridge) – Invited Talk

4:30 C.A. Hancock - Novel electrode materials for fuel cells

4:50 P.M. Panchmatia - Modelling and NMR studies of defect sites and conduction pathways in apatite-type electrolytes for solid oxide fuel cells

5:10 S.N. Cook - Interfacial strain effects in oxide ion conducting multilayer heterostructures: undoped Ceria/ionic conductor systems

5:30 A.V. Chadwick (University of Kent) – Invited Talk

6:10 AGM

6:30 Posters

7:30 Conference Meal

Tuesday 21st December 2010

9:00 D. Willock (University of Cardiff) – Invited Talk

9:40 S. Irrera - Molecular modelling of the adsorption of uracil molecules on gold surfaces

10:00 A.J. Devey - An ab initio description of the bulk and surface structures of UO₂ using GGA+U and occupation matrix control

10:20 D.O. Scanlon - The interesting chemistry of some thallium containing oxides: an explanation and a prediction

10:40 Coffee

11:10 C. Hirjibehedin (London Centre for Nanotechnology) – Invited Talk

11:50 E.E. Rodriguez - The role of interstitial Fe in the magnetism and superconductivity of iron chalcogenides

12:10 C. Drathen - Structure – property relationships in quaternary manganese pnictides AMnPnF (A = Ba, Sr, Pn = P, As, Sb)

12:30 C.M. Kavanagh - Rare earth substituted multiferroic BiFeO₃

12:50 S.A. Corr – Real-space investigation of the insulator-metal transition in vanadium dioxide

13:10 Wrap-up

