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Publications

Souza GP, Messer PF and Lee WE, "Effect of Varying Quartz Particle Size and Firing Atmosphere on Stoneware Densification," J. Am. Ceram. Soc. 89 [6] 1993-2002 (2006).

Reaney IM, Iddles D, "Microwave dielectric ceramics for resonators and filters in mobile phone networks" J. Amer. Ceram. Soc. 89 [7] 2063-2072 JUL 2006

WE Lee, "The Waste Problem?" Materials Today 9 [3] 64 (2006).

WE Lee and RW Grimes, "Nuclear Waste: A UK Perspective" Energy Materials 1 1 22-25 (2006)

Bill Lee, "Under Lock and Key," pp. 28-29 The Chemical Engineer April 2006.

Bingham PA, Hand RJ, Forder SD, "Doping of iron phosphate glasses with Al₂O₃, SiO₂ or B₂O₃ for improved thermal stability", Materials Research Bulletin 41 (2006) 1622-1630.

Maso N, Beltran H, Cordocillo E, AArenas Flores A, Escribano P, Sinclair DC, West AR, "Synthesis and electrical properties of Nb-doped BaTiO₃" J. Mater. Chem. 16, 2006, 3114-3119

Out and about

Bill Lee has given invited talks at the following events:

*At Royal Society of Chemistry Meeting on Materials for Nuclear Waste Management, Geological Society London "Problem Wastes, Wasteforms and Knowledge Gaps".

*At 11th International Ceramics Congress, CIMTEC 2006, "Processing Ceramics for Radioactive Waste Immobilisation".

*Mullite Festschrift for Prof. Hartmut Schneider, Vienna, Austria, "Mullite Formation and Characterisation in Vitreous Ceramics".

*At 1st International Congress on Ceramics, Toronto, Canada, "Current and Potential Contribution of Ceramic Technology to Environmental Clean Up".

Bill Lee has been invited to participate in US Dept. of Energy Basic Research Needs for Advanced Nuclear Energy Systems Workshop July/August 2006.

Paul Bingham attended the 1st International Congress on Ceramics, hosted by the American Ceramic Society in Toronto from 25th-29th June. His presentation was

entitled "Recycling of incinerator ashes: potential energy-saving raw materials for the manufacture of glasses and ceramics or simply low-grade aggregate materials?".

Ming Li attended the Faraday Discussion 134 on Atomic Transport & Defect Phenomena. The conference was held in The University of Surrey from 10-12 July, 2006. Ming Li presented a poster at the conference entitled "Effect of processing atmosphere on the dielectric properties of BaCo_{1/3}Nb_{2/3}O₃ ceramics"

Funding success

Congratulations to Clair Calvert who has been awarded a 4 year Royal Society Dorothy Hodgkin Fellowship. The title of her fellowship is "Grain boundary valence characterisation and quantification using EELS." Clair says that the principal aim of her project is to develop an Electron Energy-loss Spectroscopy (EELS) quantification method applicable to mixed valence 3d and 4f transition metals in functional oxide ceramics in order to correlate microstructural heterogeneities with electrical properties.

Well done to Denis Pasero who has been granted 900€ from FAME to spend a week in Technische Universität Darmstadt to continue his investigations into lithium batteries.

Industrial forum

The arrangements for the industrial forum are progressing well. Thank you to everyone who has agreed to give talks. We so far have around 25 people registered to attend and these are mainly from industry.

We plan to have a selection of themed posters on display at the event; more information will be circulated about this shortly.

Beam time success

Tony West, Nik Reeves, Denis Pasero, Yun Wu, have been awarded one day on POLARIS at RAL to study novel lithium cobalt oxide materials. The same group have an additional day at Super-D2B at the ILL in France to continue their work on the materials.

PhD success

Congratulations to Shabnam Behzadi who successfully passed her PhD viva last month. Shabnam's PhD was on predicting the durability of matrix properties. Shabnam is now working for Frank Jones as a PDRA.

Glass research grants

The International Materials Institute (IMI) for New Functionality in Glass has some funding opportunities available. The IMI grants are aimed at promoting new functionality in glass through international collaborations among glass researchers. The funding will be organised around 6 main themes: Ionic functionality, Optical functionality, Functional coatings, Engineered strengthening, Biofunctional glasses and Metamaterials and nanocomposites.

Grants for International Research Exchanges - these are open to faculty, PDRA's, graduate students and industry researchers. Further information is available from the IMI website <http://www.lehigh.edu/imi> or from contacting one of the IMI officers:

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Best Wishes
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Diary dates:

Seminar by Michael Silverstein on 4th September.
CCL Industrial Forum Meeting on 7th September.