MSDG Christmas Meeting 2013 Final Programme

08:30 Registration and poster-set-up

08:55 Welcome and Introduction from Professor Andrew Abbott

09:00 Invited Lecture

The Simple Molten Salt Reactor – Safe, cheap nuclear energy at last?
Ian Scott
Somerset House, Strand, London, WC2R 1LA
Contact E-mail: ian.scott@the-weinberg-foundation.org

09:40 Technical Sessions 1 Chair Professor Geir Martin Harberg

09:40 Recent Developments in Metalysis Metal Powder Production and its Associated Processing
Lucy Grainger, Ian Mellor, Kartik Rao, Greg Doughty
Metalysis Ltd.

10:05 Can Ionic Liquids Provide an Alternative Pathway to Processing Lignocellulosic Materials to Biofuels?
R. J. Gammons1,2, J. M. Slattery1, S. Shimuzu1, N. C. Bruce2 & S. J. McQueen-Mason2
1Department of Chemistry, University of York, Heslington, York, YO10 5DD, UK
2CNAP, Department of Biology, University of York, Heslington, York, YO10 5DD, UK
Contact E-mail: rjg501@york.ac.uk.

10:30 Morning coffee and Poster Session No. 1

11:00 Technical Sessions 2 Chair Professor George Chen

11:00 Thermoelectric cells with molten carbonate electrolytes
Geir Martin Harberg1, Signe Kjelstrup2, Marit Takla2 and Xue Kang2
1Department of Materials Science and Engineering, Norwegian University of Science and Technology, NO-7491Trondheim, Norway
2Department of Chemistry, Norwegian University of Science and Technology, NO-7491Trondheim, Norway
Contact E-mail: geir.martin.haarberg@ntnu.no

11:25 A Fluidised Cathode Process for the Direct Electrochemical Reduction of Tungsten Oxide in a Molten LiCl-KCl Eutectic
Rema Abdulaziz, L.D.Brown, D.Inman, S.Simons, P.R.Shearing & D.J.L.Brett
1Electrochemical Innovation Lab, Department of Chemical Engineering, University College London, Torrington Place, London, WC1E 7JE, United Kingdom. Contact E-mail: d.brett@ucl.ac.uk

11:50 Uranium electroplating in molten lithium chloride-potassium chloride eutectic
Leon D.Brown, R.Abdulaziz, S.Simons D.Inman, D.J.L.Bret, P.R.Shearing
Electrochemical Innovation Laboratory, Dept. Chemical Engineering, UCL, London, WC1E 7JE.
Contact E-mail: d.brett@ucl.ac.uk

12:15 Chromium electrodeposition using a novel type IV deep-eutectic solvent
Azeez A. Al-Barzinjy1,2, Andrew. P. Abbott1 & Karl S. Ryder1
1Department of Chemistry, University of Leicester, Leicester, LE1 7RH, UK
2Department of Physics, College of Education, University of Salahaddin, Hawler, Iraq
Contact E-mail: aa643@le.ac.uk
What is at the outer ionic liquid/gas surface? A LEIS study
Ignacio J. Villar-García¹, Sarah Fearn¹, Gilbert De Gregorio², Nur Liyana Ismail², Alastair J. S. McIntosh², Kevin R. J. Lovelock²
¹ Department of Materials, Imperial College London. ² Department of Chemistry, Imperial College London. kevin.lovelock@imperial.ac.uk

Funding a feasibility study for a pilot scale MSR
Jasper Tomlinson and Trevor Griffiths

Extraction of CO₂ from diluted flue gases – a new application for molten salts
Espen Olsen¹, V. Tomkute¹ and A. Solheim²
¹Dep. Mathematical Sciences and Technology, Norwegian University of Life Sciences, Drøbakveien 31, N-1432 Ås, Norway, ²SINTEF Materials and Chemistry, Sem Sælands vei 2a, N-7439 Trondheim, Norway
espen.olsen@umb.no

Probing the Complex Structure of Ionic Liquids using MD Simulations
K. Shimizu¹,², C. E. S. Bernardes¹, José N. Canongia Lopes¹,²
¹ Centro de Química Estrutural, Instituto Superior Técnico, 1049 001 Lisboa, Portugal
² Instituto de Tecnologia Química e Biológica, Universidade Nova de Lisboa, 2780 901 Oeiras, Portugal
Contact E-mail: jnlopes@ist.utl.pt

Flue Gas Cleaning by Ionic Liquids
Peter Thomassen, Andreas J. Kunov-Kruse, Susanne, L. Mossin, Helene Kolding, Søren Kegnæs, Anders Riisager, Rolf W. Berg and Rasmus Fehrmann
Centre for Catalysis and Sustainable Chemistry, Department of Chemistry, Technical University of Denmark Building 207, Kemitorvet, DK-2800 Kgs. Lyngby, Denmark

50 Years ago in America: my time in Oak Ridge
Trevor R. Griffiths

Close of Meeting.