

**SRCR '09**  
**Provisional Timetable- subject to change**  
**Updated 26th March 2009**



**Friday 3<sup>rd</sup> April**

16.30-18.00 Pre-registration  
Informal cheese and wine reception

**Saturday 4<sup>th</sup> April**

- 07.30 Registration desk opens
- 08.40 Opening Remarks  
B.A. Wills (MEI, UK) and M.A. Reuter (Ausmelt Ltd, Australia)
- 09.00 *Technical Session 1- Measuring Sustainability*  
Chairmen: J. Gediga (PE International GmbH, Germany) and M.A. Reuter (Ausmelt Ltd, Australia)
- 09.00 **Future demand-supply interaction for the global platinum industry**  
S. Mohr and G. Evans (University of Newcastle, Australia)
- 09.20 **Mineral carbonation as the core of an industrial ecology for energy intensive minerals conversion**  
G. Brent (Orica Mining Services, Australia) and J. Petrie (University of Sydney, Australia)
- 09.40 **A design feasibility analysis of mineral carbonation and its process challenges**  
J. Petrie (University of Sydney, Australia) and G. Brent (Orica Mining Services, Australia)
- 10.00 **Incorporating sustainable development principles into minerals processing design and operation: SUSOP®**  
G.D. Corder, B.C. McLelland (University of Queensland, Australia), and S. Green (Co-operative Research Centre for Sustainable Resource Processing, Australia)
- 10.20 Coffee
- 11.00 **Cost efficient implementation of a greenhouse gas reduction roadmap in the mining industry**  
J. Gediga (PE International GmbH, Germany)
- 11.20 **Ranking and scoring potential environmental risks from solid mineral wastes**  
J.L. Broadhurst (University of Cape Town, South Africa) and J.G. Petrie (University of Sydney, Australia)
- 11.40 **Measuring 'sustainability' in the web of water**  
A. van Schaik (MARAS, The Netherlands), M.A. Reuter (Ausmelt Ltd, Australia), H. van Stokkom, J. Jonk and V. Witter (Waterschap Brabantse Delta, The Netherlands)
- 12.00 **An examination of the practical implementation of WEEE obligations in the UK**  
C. Ponting and H. Nash (Cardiff University, UK)
- 12.20 **The true cost of jewellery. Or: is gold really that precious?**  
J. Hope (Plymouth College of Art & Design, UK)
- 12.40 Lunch
- 14.00 *Technical Session 2- Sustainable Minerals and Materials Processing 1*  
Chairmen: G. Evans (University of Newcastle, Australia) and F.J. Doucet (Council for Geoscience, South Africa)
- 14.00 **The use of high power ultrasonics to reduce bauxite waste**  
A.F. Collings, P.B. Gwan and A.P. Sosa Pintos (CMSE, Australia)

- 14.20 **Mitigating the generation of acid mine drainage from copper sulphide tailings impoundments in perpetuity: An integrated management strategy**  
A.H. Hesketh, J.L. Broadhurst and S.T.L. Harrison (University of Cape Town, South Africa)
- 14.40 **Removal of sulphate from circumneutral mine water using fly ash**  
G. Madzivire et al (University of the Western Cape, South Africa) and T.V. Ojumu (University of Cape Town, South Africa)
- 15.00 Coffee
- 15.30 **Development of an integrated early removal process for the beneficiation of arsenic-bearing copper ores**  
W. Bruckard et al (CSIRO Minerals, Australia)
- 15.50 **The effect of free lime content on high pH and scaling of ash transport water**  
L.J. Moitsheki and R.H. Matjie (Sasol Technology (Pty) Ltd, South Africa)
- 16.10 **Biotreatment of acid mine drainage by biofilm reactors in Sarcheshmeh Copper Mine**  
R. Marandi and S.A. Jozi (Islamic Azad University, Iran)

### Sunday 5<sup>th</sup> April

- 09.00 *Technical Session 3- Sustainable Minerals and Materials Processing 2*  
Chairman: A. van Schaik (MARAS, The Netherlands)
- 09.00 **Sustainability and the mineral engineering curriculum**  
J.J. Cilliers (Imperial College, UK) and S.T. L. Harrison (University of Cape Town, South Africa)
- 09.20 **Incorporation of arsenic during the formation of Mg-bearing minerals at alkaline condition**  
E. Opiso et al (Hokkaido University, Japan) and C. Numako (Tokushima University, Japan)
- 09.40 **Bromination of ZnO during thermal treatment of TBBPA – effect of temperature and time**  
M. Grabda, S. Oleszek-Kudlak (Polish Academy of Sciences, Poland), M. Rzyman, E. Shibata, T. Nakamura and Etsuro Shibata (Tohoku University, Japan)
- 10.00 **Removal of hexavalent chromium from water by adsorption onto surfactant modified montmorillonite**  
M.C. Brum, J.F. Oliveira (COPPE/UFRJ, Brazil) and J.L. Capitaneo (IMA/UFRJ, Brazil)
- 10.20 Coffee
- 11.00 *Technical Session 4- Recycling and Waste Processing*  
Chairmen: W. Bruckard (CSIRO Minerals, Australia) and C. Ponting (Cardiff University, UK)
- 11.00 **Predicting the recycling performance of E-waste**  
A. van Schaik (MARAS, The Netherlands) and M.A. Reuter (Ausmelt Ltd, Australia)
- 11.20 **End of life recycling in life cycle assessment**  
J. Pflieger (PE International, Germany)
- 11.40 **Progress in industrial CO<sub>2</sub> sequestration technologies by mineral carbonation of industrial wastes with particular reference to climate change**  
F.J. Doucet (Council for Geoscience, South Africa)
- 12.00 **An investigation on corrosion resistance and microstructure of magnesia refractories produced from recycled refractory aggregates**  
F. Golestani Fard et al (Iran University of Science & Technology, Iran) and M. Rasti (Khuzestan Steel Complex, Iran)
- 12.20 **Fates and flows of cadmium in the city of Cape Town**  
K. Mason-Jones and H. von Blottnitz (University of Cape Town, South Africa)

- 12.40 Lunch
- 14.00 **Treatment of mine waste waters using zeolite synthesized from fly ash**  
G. Balfour et al (University of the Western Cape, South Africa), T. Sonqishe (University of Venda, South Africa), and N. Misheer (Eskom Research & Innovation Centre, South Africa)
- 14.20 **Study of the recovery of rare earth elements from electronics scraps - leaching experiments**  
L.V. Resende and C.A. Morais (Centro de Desenvolvimento da Tecnologia Nuclear, Brazil)
- 14.40 **Oil shale mining influence on environment and protection mechanism in Longkou Mining Areas of China**  
ZhiLiang Fu (Anhui University of Science & Technology, China)
- 15.00 **Mass balance compilation for WEEE scrap**  
M. Wierink, K. Heiskanen (Helsinki University of Technology, Finland) and M. Jansen (RWTH, Germany)
- 15.20 Coffee

## Posters

### **Implementation of health, safety and environment system in procurement**

S.A. Jozi and R. Marandi (Islamic Azad University, Iran)

### **Survey of health and safety risk in reduction and production unit of Bandarabbas Al-Mahdi aluminum factory using process failure mode & effect analysis method (PFMEA)**

S.A. Jozi et al (Islamic Azad University, Iran)

### **Environmental impacts analysis related to Bandar Abbas Zinc Factory in activities phase**

S. Rezaian et al (Islamic Azad University, Iran)

### **Novel green techniques for mining in high methane deep mines**

ZhiLiang Fu (Anhui University of Science & Technology, China)

### **Factors affecting arsenic mobility from hydrothermally altered rock in an impoundment-type in-situ experiment**

C.B. Tabelin, T. Igarashi (Hokkaido University, Japan) and S. Tamoto (Public Works Research Institute, Japan)

### **Process, profits and problems of recycling of chemical waste**

K.O. Oloruntegbe and E.O Ayeni (Adekunle Ajasin University, Nigeria)

### **Sustainable recycling systems provided by the not-for-profit sector: a case study of Free Geek**

C. Ponting (Cardiff University, UK)

### **Bromination of heavy metal oxides during thermal decomposition of tetrabromobisphenol A**

S. Oleszek-Kudlak, M. Grabda (Polish Academy of Sciences, Poland), M. Rzyman et al (Tohoku University, Japan)

### **Biological treatment of wastewater from the recycling process for lithium primary battery**

Kyoungkeun Yoo et al (Korea Institute of Geoscience and Mineral Resources, Korea)

### **Kaolin waste in RN and PB States (Brazil) – environmental problems and technological solution**

J.Y.P. Leite et al (Universidade Federal do Rio Grande do Norte, Brazil) J.B.A. Paulo and R.F.S. Lima (Instituto Federal do Rio Grande do Norte, Brazil)

### **Preparation and characterization of poly(amidoxime) fibre for removal of calcium, magnesium and sodium ions from brine wastewater**

B. Yalala et al (University of the Western Cape, South Africa) and B.A. Hendry (Cape Peninsula University of Technology, South Africa)

### **Performance of metakaolin-based geopolymer with varied additives**

M.S.Jang et al (Gyeongsang National University, Korea), J.K.Lee (Chosun University, Korea) and H. Kim (Seoul National University, Korea)

**Challenges faced by SME's in developing countries in implementing cleaner production**

S. Fore and J.F.Agwa (University of Johannesburg, South Africa)

**Production of a ferric sulphate chemical coagulant by selective precipitation of iron from a coal mining acid drainage**

J.C.S.S. Menezes et al (Universidade Federal do Rio Grande do Sul, Brazil)

**The effect of recycled waste porcelain on sinterability of ceramic ware**

Dong Seok Seo et al (Chosun University, Korea)

**Preparation of environmental geopolymer brick with  $\text{CaCO}_3$**

Hyun Geun Han et al (Chosun University, Korea)

**Effect of glass water on the compressive strength of fly ash-based geopolymer**

Jin Tae Kim et al (Chosun University, Korea)

**Bioactivity of nanostructured hydroxyapatite film prepared by room temperature spray**

Sang Woo Kim et al (Chosun University, Korea)