

Nickel Processing '15



Provisional Timetable

Subject to change- changes will be highlighted and alerted at <http://tinyurl.com/n25e3xb>
(Twitter #NickelProcessing15).

Tuesday May 12th

16.30-18.00 Registration, wine and cheese reception. Accompanying partners welcome

Wednesday May 13th

- 08.00 Registration opens. Coffee/tea and light breakfast
- 09.00 **Welcome to Cornwall**
J. Wills (MEI, UK)
- 09.15 *Technical Session 1*
Chairmen: N. Snyders (University of Stellenbosch, South Africa) and A. Oxley (Brazilian Nickel Ltd, UK)
- 09.15 **Keynote Lecture: The future of nickel production – the outlook for nickel sulphide and laterite resource development**
A. Mitchell, Wood Mackenzie, UK
- 10.00 **Cu-Ni processing improvements at First Quantum's Kevitsa Nickel Mine**
B. Musuku, I. Muzinda, A. Mukutuma (First Quantum, Finland) and B. Lumsden (Ausmetec Pty Ltd, Australia)
- 10.30 Coffee
- 11.15 **The effects of mixtures of potassium amyl xanthate and Senkol 700 collectors on grade and recovery in the froth flotation of an Nkomati nickel mineral ore**
W. Maree, L. Kloppers, O. Oyekola and G. Hangone (Cape Peninsula University of Technology, South Africa)
- 11.45 **Sulphidisation to improve the nickel oxide recovery by flotation**
A. Otsuki (Université de Lorraine, France), D. Fornasiero (Ian Wark Research Institute, Australia) and D.J. Robinson (CSIRO, Australia)
- 12.15 **A hydrochloric acid process route for nickeliferous laterites**
N.M. Rice (Retired, Formerly University of Leeds, UK)
- 12.45 Lunch
- 14.00 *Technical Session 2*
Chairman: B. Lumsden (Ausmetec Pty Ltd, Australia)
- 14.00 **Continuous processing of a nickel/copper concentrate in bioreactors at high temperature**
P.R. Norris, T.D. Sambrook and C.G. Bryan (Camborne School of Mines, UK)
- 14.30 **2,2'-Pyridylimidazole functionalized polyvinylbenzyl chloride nanofibers for the separation of nickel(II) from base metals**
P. Moleko, A.S. Ogunlaja, Z.R. Tshentu (Nelson Mandela Metropolitan University, South Africa) and A.I. Okewole (Rhodes University, South Africa)

- 15.00 **Taganito HPAL plant project**
K. Shibayama, M. Enomoto and Y. Hattori (Taganito HPAL Nickel Corporation, Philippines)
- 15.30 Coffee
- 16.30 Optional Guided Coast Path Walk, ending with a beer at the Chain Locker Pub, Old Falmouth.
 Accompanying partners welcome

Thursday May 14th

- 08.30 Coffee/tea and light breakfast
- 09.00 *Technical Session 3*
 Chairmen: N.M. Rice (Retired, Formerly University of Leeds, UK) and C.G. Bryan (Camborne School of Mines, UK)
- 09.00 **Direct Nickel – breakthrough technology**
 F. McCarthy and G. Brock (Direct Nickel Projects Pty Ltd., Australia)
- 09.30 **Why heap leach nickel laterites?**
A. Oxley (Brazilian Nickel Ltd, UK, Alyssum Ventures Ltd, Isle of Man and Natural History Museum, UK), M.E Smith (Brazilian Nickel Ltd, UK and Alyssum Ventures Ltd, Isle of Man) and O. Caceres (Brazilian Nickel Ltd, UK)
- 10.00 **Development of characterisation method for partially saturated agglomerate bed in relation to nickel heap leaching operations**
 A. Otsuki (Université de Lorraine, France), George Franks (University of Melbourne, Australia) and D.J. Robinson (CSIRO Minerals Down Under National Research Flagship, Australia)
- 10.30 Coffee
- 11.15 **The Piauí Nickel Project – implementing heap leaching for the nickel laterite industry**
A. Oxley (Brazilian Nickel Ltd, UK, Alyssum Ventures Ltd, Isle of Man and Natural History Museum, UK), M.E Smith (Brazilian Nickel Ltd, UK and Alyssum Ventures Ltd, Isle of Man) and O. Caceres (Brazilian Nickel Ltd, UK)
- 11.45 **Extraction mechanism and kinetics of nickel from low grade laterite ore through electrochemical leaching**
P.M. Radingoana, R.K.K Mbaya and P.A. Olubambi (Tshwane University of Technology, South Africa)
- 12.15 **Life cycle assessment of FeNi production in Greece: A case study**
G. Bartzas (National Technical University of Athens, Greece) and K. Komnitsas (Technical University Crete, Greece)
- 12.45 Lunch
- 14.00 *Technical Session 4*
 Chairman: A. Otsuki (Université de Lorraine, France),
- 14.00 **Properties of TP272, a commercial solvent impregnated cation exchange resin for cobalt-nickel separations**
J. Vaughan, C. Dieters and W. Fu (University of Queensland, Australia)
- 14.30 **The pyrometallurgical upgrading of nickeliferous laterites: a review of thermodynamic and reduction roasting studies**
 C.A. Pickles, R. Elliott and J. Forster (Queen’s University, Canada)

- 15.00 **Investigation of the microwave carbothermic reduction processing of a nickeliferous silicate laterite ore**
J. Forster and C.A. Pickles (Queen's University, Canada)
- 15.30 **An experimental study of reduction of nickel oxide by hydrogen under microwave irradiation**
S. Suresh and N.N. Viswanathan (IIT Bombay, India)
- 16.00 Closing remarks and invitation to Nickel Processing '17
A.J. Wills (MEI, UK)
- 16.15 Cornish cream tea