

Processing of Nickel Ores & Concentrates '10
Falmouth Beach Hotel, Falmouth, UK, June 17-18, 2010

Sponsored by:



Wednesday 16th June

16.30-18.00 Registration

Thursday 17th June

08.00 Registration desk opens

09.15 *Opening Remarks*

J. Wills (MEI, UK) and N.O. Lotter (Xstrata Process Support, Canada)

09.30 *Technical Session 1*

Chairmen: T. Norgate (CSIRO, Australia) and İ. Girgin (Hacettepe University, Turkey)

09.30 **Reductive dissolution of ferric iron minerals: a new approach for bioprocessing nickel laterites**

K.B. Hallberg, B.M. Grail, D.B. Johnson (Bangor University, UK) and C. du Plessis (BHP Billiton, Australia)

10.00 **Selective reduction and sulphidation of nickeliferous laterites**

C. Harris, J. Peacey and C.A. Pickles (Queen's University, Canada)

10.30 Coffee

11.15 **Assessing the sustainability of nickel laterite processing**

T. Norgate and S. Jahanshahi (Minerals Down Under National Research Flagship, CSIRO, Australia)

11.45 **Reductive leaching of nickel laterite**

G. Senanayake, J. Childs and A. Winn (Parker Centre, Murdoch University, Australia)

12.15 **Rheological behaviour of nickel laterite smectite ore slurries**

G.K. Das, N. Kelly and D.M. Muir (CSIRO Process Science and Engineering (Minerals), Australia)

12.45 Lunch

14.00 *Technical Session 2*

Chairmen: C. Harris (Queen's University, Canada)

14.00 **Dissolution behaviour of a Turkish lateritic nickel ore**

İ. Girgin, A. Obut and A. Üçyıldız (Hacettepe University, Turkey)

14.30 **An update on the application of MRT to separations of interest in the nickel and cobalt industry**

S.R. Izatt, N.E. Izatt, R.L. Bruening and J.B. Dale (IBC Advanced Technologies, Inc., USA)

15.00 **Isasmelt™ TSL – applications for nickel**

M.L. Bakker, S. Nikolic, A.S. Burrows (Xstrata Technology, Australia), and P.J. Mackey (PJ Mackey Technology Inc., Canada)

15.30 Coffee

17.00 Optional Guided Coastal Path Walk

Friday 18th June

- 09.15 *Technical Session 3*
Chairmen: A. Barnes (Xstrata Process Support, Canada) and B. Lumsden (Ausmetec, Australia)
- 09.15 **The effect of changes in iron endpoint during Peirce-Smith converting on matte mineralization**
E.L. Thyse, G. Akdogan (University of Stellenbosch, South Africa) and J.J. Eksteen (Lonmin, South Africa)
- 09.45 **Endpoint control in PGM-containing nickel matte converting using flame emission spectroscopy**
G.A. Bezuidenhout, J.J. Eksteen (Lonmin, South Africa) and W. Wendt (SemTech Metallurgy AB, Sweden)
- 10.15 **Modelling matte droplet formation in Ni-Cu matte smelting furnaces from chromite rich concentrates and slag-matte heat transfer**
J.J. Eksteen (Lonmin, South Africa)
- 10.45 Coffee
- 11.30 **CFD modelling of the role of electrode immersion and hearth power density on the flow and thermal profiles and particle suspension in a round AC 3-electrode furnaces for Ni-Cu matte smelting in the PGM industry**
S. Ritchie, J. Nell (Hatch Africa, South Africa) and J.J. Eksteen (Lonmin, South Africa)
- 12.00 **Nickeliferous pyrrhotite – “waste or resource?”**
E. Peek, A. Barnes (Xstrata Process Support, Canada) and A. Tuzun (Xstrata Nickel, Canada)
- 12.30 Lunch
- 14.00 *Technical Session 4*
Chairman: N.O. Lotter (Xstrata Process Support, Canada)
- 14.00 **Process diagnosis using quantitative mineralogy**
L. Kormos, J. Oliveira, N.O. Lotter, D. Fragomeni and E. Whiteman (Xstrata Process Support, Canada)
- 14.30 **Magnetic conditioning of pentlandite flotation**
D. Zoetbrood (Xstrata Nickel, Australia), P Vass and B. Lumsden (Ausmetec, Australia)
- 15.00 **Treatment of nickel-containing wastewater by sulfate-reducing bacteria with rice chaff as immobilized carrier**
H.R. Li et al (State Key Laboratory of Biochemical Engineering, Institute of Process Engineering, China)
- 15.30 Closing Remarks
N.O. Lotter (Xstrata Process Support, Canada) and A.J. Wills (MEI, UK)
- 15.45 Coffee