

## Hi-Tech Metals '18



#HiTechMetals18

Provisional Timetable- subject to change  
Changes will be highlighted and published at [#HiTechMetals18](#)

### Wednesday November 21st

- 15.30- Welcoming wine function and pre-registration in Vineyard Gardens
- 17.00 Accompanying guests welcome

### Thursday November 22nd

- 08.15 Registration desk opens  
Light breakfast of filled croissants, tea, coffee and fruit juice
- 09.00 Opening Remarks  
B.A. Wills (MEI, UK)
- 09.15 *Technical Session 1*  
Chairmen: TBA
- 09.15 **Keynote Lecture: High technology metals: facts, fiction and recycling**  
J. Gutzmer, M. Frenzel and M. Reuter (Helmholtz Institute Freiberg for Resource Technology, Germany)
- 10.00 **Recycling of high tech metals for reuse in new technology materials**  
N.J. Boxall, K.Y. Cheng (CSIRO Land and Water, Australia), S. King (CSIRO Manufacturing, Australia), A. Bhatt (CSIRO Energy, Australia), W. Bruckard (CSIRO Mineral Resources, Australia) and A.H. Kaksonen (CSIRO Land and Water, and University of Western Australia, Australia)
- 10.30 **Critical raw materials – advanced recycling technologies and processes**  
R. Stauber (Fraunhofer ISC, Germany)
- 11.00 Coffee
- 11.45 **e-waste characterization for metal recycling – new application area for automated quantitative mineralogy**  
N. Reinders, H. Bouzazhah, E. Pirard, P. Giaro (Université de Liège, Belgium) and S.D. Graham (Carl Zeiss Microscopy, UK)
- 12.15 **A comparison of centrifugal gravity separators for the beneficiation of the Nechalacho REE deposit**  
C. Marion, R. Li, R. Langlois, I. Rell, K.E. Waters (McGill University, Canada), T. Grammatikopoulos (SGS Inc, Canada), R. Fitzpatrick (Camborne School of Mines, UK) and T. Mildren (Gravity Mining Ltd, UK)
- 12.45 Lunch
- 14.00 *Technical Session 2*  
Chairmen: TBA
- 14.00 **Experimental study on the beneficiation of a lateritic rare earth ore by magnetising roasting and magnetic separation**  
N. Faris, J. Tardio, S. Bhargava (RMIT University, Australia), R. Ram (Monash University, Australia) and M.I. Pownceby (CSIRO Mineral Resources, Australia)
- 14.30 **A physico-chemical investigation into the flotation of rare-earth minerals**  
C. Marion, R. Li, R. Langlois, E. Houlding, S. Johnston and K.E. Waters (McGill University, Canada)
- 15.00 **A new approach in the flotation of monazite using a lanthanum salt as a catalyzer of the carboxylate collector adsorption/activity**  
A. Geneyton, L. Filippov, N. Menad (Université de Lorraine, France)
- 15.30 **An exploratory investigation into column flotation for the processing of a rare-earth ore**  
E.R.L. Espiritu, C. Marion, O. Kökkılıç, R. Langlois, C. Gomez and K.E. Waters (McGill University, Canada)
- 16.00 **Leaching rare earth elements from phosphors recovered from end-of-life fluorescent lamps**  
L. Bumhira, C. Dorfling and G. Akdogan (University of Stellenbosch, South Africa)
- 16.30- Sundowner in Vineyard Gardens
- 17.30 Accompanying Guests Welcome

Commented [b1]: Accepted 27th September

## Friday November 23rd

- 08.15 Registration desk opens  
Light breakfast of filled croissants, tea, coffee and fruit juice
- 09.00 *Technical Session 3*  
Chairmen: TBA
- 09.00 **High-purity lithium carbonate from a montebrasite pre-concentrate: applied mineralogy, pyro- and hydrometallurgy**  
P.F.A. Braga, S.C.A. França (CETEM, Brazil) and R. Neumann (CETEM and Universidade Federal do Rio de Janeiro, Brazil)
- 09.30 **Processing of Li pegmatite using combined electrostatic and flotation methods: role of the mineral composition and liberation degree**  
L. Filippov, I. Filippova, G. Crumiere (Université de Lorraine, France), R. Sousa, M.M. Leite and A.B. de Sousa (National Laboratory of Energy and Geology, Portugal)
- 10.00 **An investigation into the role of surface chemistry in spodumene flotation**  
C. Marion, R. Li, R. Langlois, N. van Noord, O. Kökkiliç and K. Waters (McGill University, Canada)
- 10.30 Coffee
- 11.15 **Production of lithium carbonate from hard rock spodumene ore**  
P. Tanskanen, P. Lamberg, P. Grönholm, O. Siren and M. Myllymäki (Keliber Ltd., Finland)
- 11.45 **Characterization and beneficiation of pyrolyzed black mass: Increasing the recycling rate of spent lithium ion battery**  
A. Vanderbruggen and M. Rudolph (Helmholtz Institute Freiberg for Resource Technology, Germany)
- 12.15 **Evaluating organic acids as alternative leaching reagents for metal recovery from lithium ion batteries**  
B. Musarini, G. Akdogan, C. Dorfling, S. Bradshaw, N. Snyders (University of Stellenbosch, South Africa), M. Lundström and P. Taskinen (Aalto University, Finland)
- 12.45 Lunch
- 14.00 *Technical Session 4*  
Chairmen: TBA
- 14.00 **A new discovery deserves a new approach - multi-technique geometallurgical characterization of the recently discovered Palokas Prospect cobalt (gold) mineralization, Northern Finland**  
A.R Butcher (Geological Survey of Finland, Finland), G. Rollinson (Camborne School of Mines, UK), P.W.S.K. Botha (Hippo Geoscience, Australia) and N. Cook (Mawson Resources, Canada)
- 14.30 **Hydrometallurgical processing of a complex sulfidic flue dust with focus on the separation of rhenium and molybdenum by solvent extraction**  
T. Helbig and C. Scharf (Helmholtz Institute Freiberg for Resource Technology, Germany)
- 15.00 **Ion exchange recovery of rhenium from copper leach solutions using weakly basic anion exchange resins**  
J.B. Hiskey (University of Arizona, USA)
- 15.30 **A surface chemistry study of niobium-bearing minerals**  
V. Freire, C. Marion, R. Li, R. Langlois, M. Olivier, E. Houlding and K.E. Waters (McGill University, Canada)
- 16.00 Summary and invitation to Hi-Tech Metals '20  
A.J. Wills (MEI, UK)
- 16.10 Farewell coffee and wine function, Vineyard Gardens  
Accompanying Guests Welcome