Physical Separation '17

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Provisional Timetable- subject to major changes
Changes will be highlighted and updated at #PhysicalSeparation17

Wednesday June 14th
16.30-18.00 Registration, wine and cheese reception. Accompanying partners welcome

Thursday June 15th

08.00 Registration opens. Coffee and light breakfast

08.50 **Opening Remarks and Presentation of MEI Young Person's Award 2016**
B.A. Wills (MEI, UK)

09.10 *Technical Session 1*
Chairmen: TBA

09.10 **Keynote Lecture: Physical separation techniques continue to grow in importance – the key to optimum separation is preparation**
S. Lewis-Gray, Gekko Systems, Australia

09.40 **Comminution devices for more sustainable processing**
R.D. Morrison, B.A. Adair, S. Walters (CRC Ore, Australia) and S. Gray (Gekko Pty Ltd (Australia)

10.00 **Four years of innovative VeRo Liberator® comminution – from invention to industrial-scale pilot phase testing**
G. Borg (PMS GmbH & Martin Luther University Halle-Wittenberg, Germany) and F. Scharfe (PMS GmbH, Germany)

10.20 Coffee

10.50 **Upgrading of low grade silver-lead-zinc ore stockpiles at Volcan Compaňia Minera SAA's basemetals operations in Peru, using sensor-based ore sorting**
K Bartram (Steinert, Germany) and A. Parry (Steinert Australia Pty Ltd, Australia)

11.10 **Lightsaber mineral processing- TOMRA's latest laser-based scanning technology enables mining companies to create highest purity concentrate on quartz or pre-concentrate gold-ore**
J.-M. Bergmann (TOMRA Sorting GmbH, Germany)

11.30 **A pilot study demonstrating physical separation benefits of ROM material through the application of screening**
L. Keeney, J. Rutter, M. Scott, S. Walters, P. Walters and C. Carrasco (CRC ORE, Australia)

11.50 **Integration of coarse separation levers to drive value in mining operations**
S. Walters, L. Keeney, C. Espejel, and B. Adair (CRC ORE, Australia)

12.10 **Preconcentration alternatives for the reduction of the carbonatic gangue of a Brazilian silicate zinc ore**
D.J. Neto, M.G. Bergerman (University of São Paulo, Brazil), A.S. Young and C.O. Petter (Federal University of Rio Grande do Sul, Brazil)

12.30 **Evaluation of ore sorting technology for iron ore coarse particles**
N.P. Lima, L. Gois and R. Fina (VALE SA, Brazil)

12.50 **Application of X-ray sorting in pre-concentration of the Zn-Pb ore**
J. Kolacz (COMEX AS, Norway) and A. Wieniewski (Institute of Non-Ferrous Metals, Poland)

13.10 Lunch

14.00 *Technical Session 2*
Chairmen: TBA

14.00 **Automation for efficient separation of the Outotec SLon VPHGMS**
R. Jain, I. Sherrell and P. Jansson (Outotec Inc., USA)

14.20 **Enhanced separation for ilmentite with centrifugal HGMS technique**
Luzheng Chen and Jianwu Zeng (Kunming University of Science and Technology, China)

14.40 **New results in magnetic separation of a Ta ore**
F. Zolotarev, T. Hühnerfürst and H. Lieberwirth (Institute of Mineral Processing Machines, Germany)

15.00 **Magnetic properties of chromite spinels, originating from various reefs**
G. Marape, S. Mathebula, C. Bergmann and H. Thiele (Mintek, South Africa)

15.20 **Beneficiation of monazite from mixed minerals using electrostatic separation**
G.B. Abaka-Wood, J. Addai-Mensah and W. Skinner (University of South Australia, Australia)

15.40 **Advantages of dry triboelectric separation of minerals**
L. Baker, K.P. Flynn and F.J. Hrach (ST Equipment & Technology LLC, USA)

Commented [b1]: Accepted 24th April

16.00 Coffee

17.00 Optional Guided Coast Path Walk, ending with a beer at the Chain Locker Pub, Old Falmouth. Accompanying partners welcome

Friday June 16th

08.15 Coffee and light breakfast

09.00 *Technical Session 3*
Chairmen: TBA

Commented [b2]: Timetable changes 25th April

09.00 **Keynote Lecture: The Dense Medium Cyclone – past, present and future**
T. Napier-Munn (JKMRC, Australia)

09.30 **Application of density tracers in a dense medium circuit: a case study**
D. Izerdem, O. Ozcan and E. C. Orhan (Hacettepe University, Turkey)

09.50 **Performance of mini-axial hydrocyclones**
J.-L. Liow (University of New South Wales, Australia)

10.10 **Optimising small hydrocyclones for fine particle classification**
D. Vega-Garcia, J.J. Cilliers and P.R. Brito-Parada (Imperial College, UK)

10.30 Coffee

11.10 **Performance comparison of different types of classifiers and their effects on circuit**
O. Ozcan (Hacettepe University, Turkey)

11.30 **Impact of particle density on the classification efficiency of the static air classifier in Vertical Spindle Mill**
Hong Li, Yaqun He, Jinshan Yang, Zhen Peng and Weining Xie (China University of Mining & Technology, China)

11.50 **A test work approach aimed at maximising data generation for fine screening circuit design and simulation**
E. Ford and V. Sithole (Mintek, South Africa)

12.10 **Implementation of established physical separation technology in man-made materials**
R.A. Verburg and T. de Boer (IHC Mining, The Netherlands)

12.30 **Magnet rod filter analysis for the treatment of radioactive waste from the abrasive water jet cutting**
M. Brandauer, S. Gentes (Karlsruhe Institute of Technology, Germany), J. Starflinger (Institute of Nuclear Technology and Energy Systems, Germany), R. Langlois and K. Waters (McGill University, Canada)

12.50 Lunch

14.00 *Technical Session 4*
Chairmen: TBA

Commented [b3]: Timetable changes 25th April

14.00 **The pre-concentration of HREE-bearing zircon in the Nechalacho Deposit by selective comminution and gravity separation**
C. Marion, R. Langlois, K.E. Waters (McGill University, Canada), T. Grammatikopoulos (SGS Canada Inc., Canada) and N.A. Rowson (University of Birmingham, UK)

14.20 **Separation of monazite from mixed minerals using multi-gravity separation**
G.B. Abaka-Wood, J. Addai-Mensah and W. Skinner (University of South Australia, Australia)

14.40 **Recovery of fine tungsten-bearing minerals from waste streams using modified Multi-Gravity Separator**
R.S. Fitzpatrick, Y. Ghorbani, P. Hegarty, G. Rollinson (Camborne School of Mines, UK), T. Mildren (Gravity Mining ltd.) and K. Fergusson (SGS Mineral Services Ltd, UK)

15.00 **A design of experiments investigation into fine low-density ore processing using a 3-in. Knelson Concentrator**
C. Marion, R. Langlois, O. Kökkılıç, M. Zhou, K.E. Waters (McGill University, Canada) and N.A. Rowson (University of Birmingham, UK)

15.20 **Mineral separation inspired by microfluidics**
A. Zuber, C. Tiddy, B. van der Hoek and H. Ebendorff- Heidepriem (University of Adelaide, Australia)

15.40 Closing remarks and invitation to Physical Separation ‘19
A.J. Wills (MEI, UK)

15.50 Cornish cream tea, and introduction to mine visit. Coaches leave for Camborne-Redruth area at 17.00
Accompanying guests welcome