Sunday 15th November

17.30-19.00 **Registration and drinks reception, with hot and cold canapés**

Accompanying guests welcome

Monday 16th November

08.00 Registration desk opens

Light breakfast, tea, coffee and fruit juice

09.00 Welcome to Process Mineralogy '26
J. Wills (MEI, UK)

09.10 *Technical Session 1*
Chairpersons: A. Menzies (Bruker Nano Analytics GmbH, Germany) and A. Butcher (Bruker, UK)

09.10 **Keynote Lecture: Process mineralogy for critical metals in mineral processing and extractive metallurgy**
Tassos Grammatikopoulos (SGS Natural Resources, Canada)

09.40 **Mineralogical constraints on critical elements recovery from Moroccan carbonatites and implications for processing strategies**
Laila Sellami, Y.A. Khouia, M. Benzaazoua, Y. Taha (Mohammed VI Polytechnic University, Morocco) and L. Filippov (Université de Lorraine , France)

10.00 **Multidisciplinary characterization of critical European lithium ores**
Jussi Liipo, S. Malmi (Metso Research Center, Finland), S. Delchini, K. Bru, H. Pillière, N. Maubec and F. Bodenan (BRGM, France)

10.20 Coffee and exhibition

11.20 **Hyperspectral mapping of lithium-bearing micas in Variscan Li bearing granite systems using Al-OH spectral shifts and multivariate analysis**
Lebogang Babedi, R. Fitzpatrick, R. Shail (Camborne School of Mines, UK) and J. Strongman (Petrolab Ltd, UK)

11.40 **Flowsheet development and selective flotation of lithium minerals from the Moose II pegmatite, Canada**
Espoir M. Murhula, L. Mwenee, C. Gibson (Queen's University, Canada), G.L. Dzemua (NWT Geological Survey, Canada), W. Wang (University of Texas, USA) and T. Grammatikopoulos (SGS Natural Resources, Canada)

12.00 **Lithium (Li) mineral characterization of drill cores from the Alijo Project, Portugal**
Andrew Menzies (Bruker Nano Analytics GmbH, Germany), C. de Siqueira Assumpção (AMG Brasil, Brazil), F.S. Gonçalves (AMG Portugal, Portugal) and M. Venter (AMG Lithium GmbH, Germany)

12.20 **In- situ time-gated Raman monitoring of lithium mineral calcination in a rotary furnace**
Jari Havisto, A. Pasanen, H. Lindström, N. Spegazzini, A. Mäyrä, H. Vasama, J. Tenhunen, M. Paavola and K. Rahkamaa-Tolonen (VTT Technical Research Centre of Finland Ltd, Finland)

12.40 Lunch

14.00 *Technical Session 2*
Chairpersons: L. Sellami (Mohammed VI Polytechnic University, Morocco) and N. Shackleton (AECI Mining Chemicals, South Africa)

14.00 **Maintaining the gold standard in platinum jewellery**
Simona Poelinca and K. Youlton (SGS, South Africa)

14.20 **Mineralogical analysis and metallurgical testwork on gold ores from the Frotet Project**
Naoki Igarashi (Sumitomo Metal Mining Co. Ltd, Japan)

14.40 **From the smallest (Rum) to the largest (Bushveld) layered intrusions and their PGM´s: implications for exploration and geometallurgy**
Alan R. Butcher (ButcherGeologica, UK) and A.H. Menzies (Bruker Nano Analytics GmbH, Germany)

15.00 Coffee and exhibition

15.40 **Mine-plan-informed CMC depressant blend selection using XRD and microflotation of Western Bushveld PGM lithological domains**
Natalie J. Shackleton, V. Malysiak, O. Muswadzi and R. Madiba (AECI Mining Chemicals, South Africa)

16.00 **Petrogenesis and mineralogical variability within the UG1 chromitite horizons at Bokoni Platinum Mines: beneficiation and implications**
Boitshepo Masetlha, B. Von der Heyden and M. Tadie (Stellenbosch University, South Africa)

16.20 **Process mineralogical characterisation of historical tin mine wastes for recovery of In, Sn, Sb, W, and Bi**
Steve J. Chingwaru, O. Mejías, R. Blannin, N. Fox and A. Parbhakar-Fox (The University of Queensland, Australia)

16.40 Sundowner in hotel gardens
Accompanying guests welcome

Tuesday 17th November

09.00 Registration desk opens
Light breakfast, tea, coffee and fruit juice

09.30 *Technical Session 3*
Chairpersons: E. Murhula (Queen's University, Canada) and S. Burness (University of Cape Town, South Africa)

09.30 **Keynote Lecture: Advancing process understanding through particle-based separation modelling**
Lucas Pereira (Helmholtz Institute Freiberg for Resource Technology, Germany)

10.00 **Coal fly ash as a secondary source of rare earth elements: mineralogical characterisation, speciation, and alkali roasting pretreatment**
Nomsa Baloyi and Z. Baloyi (University of Johannesburg, South Africa)

10.20 **Apatite as the primary REE host in the Hecla-Kilmer IOCG Deposit: implications for simplified processing in western rare earth development**
Tassos Grammatikopoulos (SGS Canada Inc., Canada), R. Glazier and J. Galenzoski (NeoTech Metals Corp, Canada)

10.40 Coffee

11.30 **OreCraft: a geometallurgical strategy game for teaching process mineralogy under uncertainty**
Mehdi Parian (Luleå University of Technology, Sweden) and P. Lamberg (AA Sakatti Mining Oy (Anglo American), Finland

11.50 **Normalization of recovery and yield of geometallurgical concentration tests**
Claudio Schneider (CETEM, Brazil), F. Gontijo, Á. Leães and J.F.C.L. Costa (Federal University of Rio Grande do Sul, Brazil)

12.10 **Development of a geometallurgical framework for predicting ore hardness from geochemistry and mineralogy in a mineral sands deposit**
Sibulele Mgoduka, A. van der Westhuizen, M. Becker (University of Cape Town, South Africa) and C. Philander (Tronox Mineral Sands, South Africa)

12.30 Lunch

14.00 *Technical Session 4*
Chairperson: J. Liipo (Metso Research Centre, Finland)

14.00 **From rough surfaces to reliable data: advancing SEM mineralogy workflows for complex samples**
Matt Hiscock and H. Jiang (Oxford Instruments Materials Analysis, UK)

14.20 **Vanadium deportment in the Middle Ore Layer (MOL) of the Mustavaara Fe–Ti– V deposit, Northern Finland: implications for beneficiation**
Minna Markkanen (University of Turku and Geological Survey of Finland, Finland), T. Chernet, T. Karinen, E.M. Jolis (Geological Survey of Finland), R.M. Michallik (Geological Survey of Finland and Univesity of Western Australia) and E. Heilimo (University of Turku, Finland)

14.40 **A multi-scale and multi-instrument approach to understanding the deportment of Co, Bi and Ag in the Swartberg polymetallic sulphide ore**
A. Mulelu, M. Becker (University of Cape Town, South Africa), Sara Burness, T. Molaolwe-Dipitso (Black Mountain Mine, South Africa), W. Price (Vedanta Zinc International, South Africa) and A. Menzies (Bruker Nano Analytics GmbH, Germany)

15.00 **Mineralogical and textural controls on the magnetic separation of Fe–Ti oxides from apatite-rich rocks in the upper zone of the Bushveld Complex**
Themba Mothupi, H. Mandende and M. Raleaka (Council for Geoscience, South Africa)

15.20 Coffee

17.45 Coaches leave for conference dinner at Kirstenbosch Botanical Gardens

Wednesday 18th November

09.00 Registration desk opens
Light breakfast, tea, coffee and fruit juice

09.40 *Technical Session 5*
Chairpersons: M. Parian (Luleå University of Technology, Sweden) and M. Hiscock (Oxford Instruments Materials Analysis, UK)

09.40 **Pore-scale investigation of uranium leaching in low-grade rocks via Spectral X-ray Tomography: evidence for the role of analcimes in uranium mobilization**
Maud Herbelin, S. Hocquet (Orano Mining, France), O. Mangane, S. Faucher. J. Diaz, P. Moonen and P. Creux (NRS/TOTAL/UNIV PAU & PAYS ADOUR/ E2S UPPA, France)

10.00 **Toward library-free mineral identification from EDS spectra**
Bilal H. Aslan, G. Nitschke (University of Cape Town, South Africa), J. Knapp (Hitachi High-Tech America Inc., USA) and C.Ly (Bruker Nano Analytics, USA)

10.20 **Development of μXRF in process mineralogy**
C.V. Ly (Bruker BNA, USA) , K. Halse (Portable Spectral Services, Australia), Reece Van Der Bank and G. Nitschke (University of Cape Town, South Africa)

10.40 Coffee

11.30 **Coarse Particle Liberation Analysis by μXRF**
Rory Colville (Petrolab, Ltd, UK)

11.50 **Development of a textural characterization index for mineral liberation studies based on grain morphology and particle-scale relationships**
Percy Escalante, J. Oliva, H. Anticoi and C.H. Sampaio (Universitat Politècnica de Catalunya, Spain)

12.10 **Machine learning for automated texture classification of Ni-Cu-PGE ores: a comparative study from Västerbotten, Sweden**
Aghata Z. Viana, N.K.S. Aragon C. Lund and M. Parian (Luleå University of Technology, Sweden)

12.30 Lunch

14.00 *Technical Session 6*
Chairperson: M. Becker (University of Cape Town, South Africa)

14.00 **Towards a quantified predictive texture classification framework for chromitite breakage behaviour**
D. Chetty, Ansa Nke, D. Mashaba, J. Ngwane and S. Nkwanyana (Mintek, South Africa)

14.20 **Online mineralogy inference and impact on flotation performance: an industrial case study**
Attie L. Haasbroek, W. Morgan, L. Auret (Stone Three, South Africa), P. Ndlovu and T. Nkogatse (Valterra Platinum, South Africa)

14.40 **Flowsheet optimization using mineral characterization and FLS coarseAIR™ flotation**
Thomas Bujnowski, K. Davis and J. Bowden (FLS, USA)

15.00 **A preliminary process mineralogical study for revalorisation of the Storgangen tailings, SW Norway**
Bendik S. Frantzen, B.E. Sørensen and K. Aasly (Norwegian University of Science and Technology, Norway)

15.20 Closing remarks and invitation to Process Mineralogy ‘28
M. Becker (University of Cape Town, South Africa) & A.J. Wills (MEI, UK)

15.40 Farewell drinks in hotel gardens