Wednesday 18th November

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

Thursday 19th November

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

08.30 **Welcome to Critical Minerals '26**
J. Wills (MEI, UK)

08.40 *Technical Session 1*
Chairpersons: TBA

08.40 **Keynote Lecture: Circular hydrometallurgy approaches towards more sustainable processing of critical minerals**
J. Eksteen (Curtin University, Australia)

09.10 **Advances in beneficiation of critical European lithium ores**
J. Liipo, A. Aaltonen, D. Bilal (Metso Research Center, Finland), K. Bru (BRGM, France), K. Komnitsas, E. Petrakis, O. Pantelaki and V. Karmali (Technical University of Crete, Greece)

09.30 **Understanding the role of metal cations in spodumene flotation: from solution chemistry to surface chemistry**
E.M. Murhula, C.E. Gibson (Queen's University, Canada) and L. Babedi (Queen's University, Canada and Camborne School of Mines, UK)

09.50 **Ultrasonic-assisted leaching of carbonate–clay hosted lithium minerals: effect of acid type and process parameters**
C.S. Araya (Universidad Católica del Norte, Chile and University of Lincoln, UK), H. Ghaedi, H. Reeves and Y. Ghorbani (University of Lincoln, UK)

10.10 Coffee

11.00 **Selective lithium recovery from carbonate–clay hosted minerals using urea–methanesulfonic acid deep eutectic solvents**
H. Ghaedi, M.H. Khasdar, Y. Ghorbani (Univeristy of Lincoln, UK) and C.S. Araya (University of Lincoln, UK and Universidad Católica del Norte, Chile)

11.20 **Thermodynamic modeling of selective Li_2CO_3 precipitation from post-DLE oilfield-brine eluates in North America**
L. Couderc-Avignon (Lithium for America, USA)

11.40 **An integrated processing scheme involving roasting-hot water leaching with subsequent IX/SX steps to produce lithium carbonate from Li-bearing boron processing wastes**
F. Boylu, B. Yüce, D. Uçar, M.S. Çelik (Istanbul Technical University, Türkiye), M.F. Can (Afyon Kocatepe University, Türkiye), G.E. Angur and C. Ünal (Munzur University, Türkiye)

12.00 **Evaluation of the potential for REE preconcentration and gangue rejection from monazite ore via physical separation methods**
N. Maistry, A. Singh (Mintek, South Africa) and I. Sixhuta (Rigifoam Pty Ltd, South Africa)

12.20 **Lanthanides no more hiding in plain sight: resource estimation and beneficiation prospects of yttrium and neodymium in an urban deposit**
I.O. Otunniyi (Vaal University of Technology, South Africa)

12.40 **Evaluation of reagent schemes for the flotation of rare earth elements**
F.K.A. Frutuoso, M.C. Vila, M.L. Dinis (University of Porto, Portugal), E. Levei, I. Török, L. Ferrando-Climent (National Institute of Research and Development for Optoelectronics, Romania) and N. Gajendra (Kjeller, Institute for Energy Technology, Norway)

13.00 Lunch

14.00 *Technical Session 2*
Chairpersons: TBA

14.00 Optimisation of flotation parameters using a Design Expert® screening experimental design for rare earths recovery by flotation from phosphogypsum
T. Kadiramwando, W.A. Ngobeni, M. Dzivahni (BME Metallurgy, South Africa) and B. Raswiswi (Rainbow Rare Earths, South Africa)

14.20 **Flotation of rare earth elements from phosphogypsum using sulphide collectors with different chemistries**
W.A. Ngobeni, T. Kadiramwando, M. Dzivahni (BME Metallurgy, South Africa) and B. Raswiswi (Rainbow Rare Earths, South Africa)

14.40 **Mineralogical insights into alkaline-cracked South African coal fly ash towards enhanced rare earth element extraction**
S. Singh, L.C. Makola, N. Sehlotho, D. Chetty and M. Manuel (Mintek, South Africa)

15.00 **Rare earth element recovery from coal and coal-derived ashes: occurrence, leachability, and beneficiation potential**
Msizi Mkhize, S. Bada (University of the Witwatersrand, South Africa) and N. Wagner (University of Johannesburg, South Africa)

15.20 Coffee

16.00 **Influence of coupled pH-Redox conditions on rare earth element and iron extraction from discard coal-derived leach solutions using Cyanex 572**
A.M. Modiga (Mintek and University of the Witwatersrand, South Africa), O. Bazhko (Mintek, South Africa), S. Bada (University of the Witwatersrand, South Africa) and M. Bambo (Vaal University of Technology, South Africa)

16.20 **Replacing copper with aluminium is the most effective way to deal with the looming global copper shortages**
M. Lynch (University of Queensland, Australia)

16.40 **Flotation separation of copper and nickel sulfides by polysaccharide depressants**
N.P. Manjili, D. Wang, H. Zeng and Q. Liu (University of Alberta, Canada)

18.30 Coaches leave Vineyard Hotel for conference dinner at Wild Fig Restaurant

Friday 20th November

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

08.30 *Technical Session 3*
Chairpersons TBA

08.30 **Keynote Lecture: Sustainable biotechnology platform for mineral recovery**
G. Yang, Y. Li, S.R. Devkota, R. Zhao and C.X. Zhao (Adelaide University, Australia)

09.00 **Low-impact recovery of copper and platinum group metals via closed-loop electrochemical leaching**
M. Doostmohammadi (Ph7 Technologies, Canada)

09.20 **Hydrometallurgical upgrading of copper anode slimes for enhanced critical mineral recovery**
C. Ndhlovu, R. Lamya (The Copperbelt University, Zambia) and S. Chisempi (Mopani Copper Mines, Zambia)

09.40 **Pyrite-to-pyrrhotite transformation: an unconventional approach to critical metal recovery**
L. Kng, O. Mejías, X. Ma, A. Parbhakar-Fox (University of Queensland, Australia), H. Degeling (Mining3, Australia), A. Tong, A. Randall and H. Porteous (Cobalt Blue Holdings, Australia)

10.00 **Selective comminution of Fe–Ti–V bearing ores for more efficient critical mineral processing**
C. Oyinloye, S. Luukkanen, S. Hartikainen, N. Paasovaara, A. Wicaksono (University of Oulu, Finland), D. Krawczykowsk, D. Saramak, D. Foszcz, A. Krawczykowska, W. Zygo (University of Kraków, Poland), M. Markkanen and T. Chernet (Geological Survey of Finland, Finland)

10.20 Coffee

11.00 **Geometallurgical workflow for assessment of economic impact of ore sorting. Case study: South Crofty tin mine, Cornwall**
J. Strongman (Petrolab Ltd, UK), M. Hallewell (MPH Consultancy Ltd, UK) and S. Holley (Cornish Metals Inc, UK)

11.20 **Development of high-purity caustic calcined magnesia for critical minerals hydrometallurgical processing**
M. Alves, M. Naves, T. Ribeiro (RHI Magnesita, Brazil) and C. Poelzl (RHI Magnesita, Austria)

11.40 **Solvent extraction of refractory metals for purification of critical metals recycling solutions**
R. Aref, N. Jantunen and S. Virolainen (LUT University, Finland)

12.00 **Can we apply a geometallurgy approach to recycling for critical minerals and metals?**
A. Menzies (Bruker Nano Analytics GmbH, Germany), L. Donnelly (Alfred H. Knight International Ltd, UK), D. Pirrie (Helford Geoscience LLP, UK) and M. Power (Vidence Inc., Canada)

12.20 **Siderophore-assisted recovery of critical metals from end-of-life LCDs and LEDs: a sustainable approach to indium and gallium recycling**
E.D. van Hullebusch (Université Paris Cité, France)

12.40 **The bankability gap: process-intensified, first-of-a-kind circular battery flowsheets—technology readiness level to final investment decision**
M. Stevens (Worley Europe Ltd., UK)

13.00 Lunch

14.00 *Technical Session 4*
Chairpersons: TBA

14.00 **Innovative recycling pathways for lithium-ion batteries: advances in hydrometallurgy and separation technologies**
A. Chagnes (Université de Lorraine, France)

14.20 **Recycling of spent Li-ion batteries for recovery of valuable metals**
H.H. Ali and H. Abourehab (Central Metallurgical Research & Development Institute (CMRDI), Egypt)

14.40 **Gold recovery from mobile phones printed circuit boards (PCBs) using two stage leaching and direct water loading precipitation from the leachate**
A. Mukuya and Q. Kanhukamwe (Harare Institute of Technology, Zimbabwe)

15.00 **Critical mineral recycling from end-of-life fuel cells for circular energy systems**
Q. Huang and F. Razazan (West Virginia University, USA)

15.20 Coffee

16.00 **Precipitation of rare earth elements in materials recycling**
K. Forsberg (KTH Royal Institute of Technology, Sweden)

16.20 **Recovery of rare earth elements from spent computer hard disks using phosphoric acid leaching and deep eutectic solvent leaching of the REEs rich solid residue**
S. Fashu (Harare Institute of Technology, Zimbabwe and University of KwaZulu-Natal, South Africa)

16.40 **Life cycle assessment of mixed rare earth oxide recovery from end-of-life NdFeB magnets: a Vietnamese case study**
C.-Y. Yin (Vin University, Vietnam)

17.00 **Towards technology metals from electronic waste: a contribution to the relationship between liberation and size reduction**
F. Rau, K. Syguschand and M. Rudolph (Helmholtz Institute Freiberg for Resource Technology, Germany)

17.20 **Towards technology metals from electronic waste: current state of a WEEE recycling facility for scientific investigations of process flexibility**
F. Rau, K. Sygusch, T. Seifert, T. Jordan, A. Storch, F. Ballani, F. Töpfer, T. Storch, R. T. Delgado, M. Rudolph and G. van den Boogaart (Helmholtz Institute Freiberg for Resource Technology, Germany)

17.40 Closing remarks and invitation to Critical Minerals ‘28
A.J. Wills (MEI, UK)

17.50 Farewell function in hotel gardens
Accompanying persons welcome