

SAIMM Limpopo Branch Technical Event

Theme:
Managing Technology for Inclusive and Sustainable Growth in the Mining Industry

Date: 31 July 2026
Venue: Zebula Golf Estate & Spa, Farm 534 KQ,
Bela-Bela, Limpopo



SAIMM LIMPOPO BRANCH TECHNICAL PRESENTATION

Managing Technology for Inclusive and Sustainable Growth in the Mining Industry

- 07:00–07:45 Registration and Early Morning Refreshments
- 07:45–07:50 Safety Brief
- 07:50–08:15 Opening and Welcome
S. Zulu SAIMM Limpopo Branch Chairperson
- 08:15–08:30 SAIMM Presidential Address
T. Mmola
- 08:30–08:35 Introduction of the Keynote Speaker
T. Kgarabjang– Deputy Chair
- 08:35–09:05 Keynote Speaker: Innovation in Hydrometallurgy: Recovering Valuable Metals from Spent Lithium-Ion Batteries
K.C. Sole, Sole Consulting, South Africa
- Session 1: Sustainability, Research and Responsible Growth**
Session Chair: J. Modipe – SIMA / SCI
- 09:05–09:20 Microbes at Work: Turning Acid Mine Drainage into Clean Water
S. Mbedla and P.M. Pale, University of Johannesburg, South Africa
- 09:20–09:35 The Importance of Sustainable Herd Management for Mining Communities After Mine Closure
C. Hudson, J. Browne and D. Viljoen, MineCare Evolution, South Africa
- 09:35–09:50 Mining Sector Research and Development Projects Resulting in Sustainable and Inclusive Growth
K. Magagane, G. Baloi, E. Mualusi and R. B. Khumalo, Palabora Mining Company, South Africa
- 09:50–10:05 Unlocking a Competitive Pyrometallurgy Industry in South Africa: Challenges, Opportunities and the Role of Mintek as a National Research and Technology Organisation
E. Matinde, Mintek, South Africa
- 10:05–10:20 Alternative Energy Sources for Smelting: A Hybrid Biomass-Derived Syngas Route for Decarbonising Ferrochrome Production
M. J. Mvita, N.P. Baloyi and W. Nheta
- 10:20–10:35 Mid-Morning Refreshments
- 10:35–10:40 Introduction of the Keynote Speaker
E. Mualusi, Palabora Mining Company, South Africa
- 10:40–11:10 Keynote: The Growing Elephant in the Room: Why Water Quality Must Be Central to Reagent Optimisation and Grade-Recovery Performance
M.S. Manono, University of Cape Town, South Africa

- Session 2: Processing, Metallurgy and Operational Excellence**
Session Chair: T. Motsitsi – Siyanda Bakgatla Platinum
- 11:10–11:25 Responsible Artificial Intelligence Adoption in Flotation at Palabora Mining Company
K. Machaba, T. Ramakobya, M. Moumakwe and K. Mashilo, Palabora Mining Company, South Africa
- 11:25–11:40 Design of Experiments-Based Optimization of Baseline Rougher Flotation Conditions for Palabora Copper Lift II Ore
F.M. Facela, L.E. Mualusi and K. Machaba, Palabora Mining Company, South Africa
- 11:40–11:55 Recovery of Rare Earth Elements from Coal Fly Ash by Sodium Carbonate Roasting, Wet Magnetic Separation and Acid Leaching
M. J. Mvita, N.P. Baloyi, W. Nheta, 1University of Johannesburg, 2Mineral Processing and Technology Research Centre, South Africa
- 11:55–12:10 Evaluation of the Metallurgical Performance of a Pilot-Scale Jameson Flotation Cell on the Final Flotation Concentrate Streams at the Modikwa Concentrator
C. Maleka, H. Mphahlele and P. Makuwa, Modikwa Platinum Mine, South Africa
- 12:10–12:25 Investigation of equipment and structural failures as an opportunity for growth
P.G.H Pistorius, University of Pretoria, South Africa
- 12:25–12:40 Sponsor Presentation
- 12:40–13:40 Lunch
- Session 3: Technology, Digital Transformation and Mine Infrastructure**
Session Chair: Ntumi Baloyi- Magatteaux
- 13:40–13:55 Managing Technology for Inclusive and Sustainable Growth in the Mining Industry: A Mine Surveying Perspective at Palabora Mining Company, South Africa
D.R. Khumela, G. Mtileni, D. Ntuli, R.B. Khumalo, T. Chauke and F.K. Mulenga, Palabora Mining Company, South Africa
- 13:55–14:10 Managing Critical Ventilation Infrastructure for Operational Resilience: Lessons from Fan Relocation and Flood Recovery in an Underground Block Cave Mine
N. Mkhondo and M. Ramaano, Palabora Mining Company, South Africa
- 14:10–14:25 The Shift of the South African Deep-Level Mining Methods to Autonomous AI-Driven Machinery
W. Khorommbi
- 14:25–14:40 Tokenised Fractional Ownership as a Capital Access Mechanism for Junior and Small-Scale Mining Operations in South Africa
Z. Masibigiri, Kovhani (Pty) Ltd, South Africa
- 14:40–15:00 Afternoon Refreshments
- Closing Session**
- 15:00–15:10 Sponsor Presentation
- 15:10–15:25 Tokens of Appreciation
- Announcements – S. Molla, SAIMM
- 15:25–15:35 Closing Remarks
- 15:50 Networking Cocktail Function
- Technical Evaluation Committee**
- 1.Tshepo Mabe – Chair
- 2.Lebo Tau
- 3.Liberty Chipase
- 4.Neo Tsajoa