

Preliminary programme – 4th Young Professionals Conference

18–19 September 2018, Focus Rooms, The Core, Sunninghill, Sandton

Day 1–18 September 2018

- 07:00–08:30 **Registration**
- 08:30–08:35 **Opening Address**
S. Nhleko, *Chairperson (Young Professionals Conference)*
- 08:35–08:40 **Emergency procedures**
- 08:40–08:50 **Welcome**
A.S. Macfarlane, *President SAIMM*
- Session 1: Reutech Representative**
- 08:50–09:20 **Keynote: Personal financial sustainability in changing economic cycles**
S. Mhlongo, *TNC Wealth Partners, South Africa*
- 09:20–09:40 **Factors driving a discipline change of generations Y metallurgical engineering technicians and technologists in South Africa**
D.N. Maluwa, A. Marnewick and H. Nel, *University of Johannesburg, South Africa*
- 09:40–10:00 **Fundamental criteria often used by investors in the consideration of mining and minerals projects**
U.A.Q. Ahmed and M. Munshi, *Consulting Metallurgical and Mining Investments Analyst, Strategy Consultant, South Africa*
- 10:00–10:20 **The vertical integration of the evaluation and geology departments and its impact on employees' development**
T. Mpuru, *Lonmin, South Africa*
- 10:20–10:30 **Sponsor Presentation**
- 10:30–11:00 **Tea break**
- Session 2: T. Lumbwe**
- 11:00–11:20 **Investigating the effect of physico-chemical factors affecting the leaching of calcium from ironmaking slag**
I.C. Kohitsetse, C.K. Thubakgale, P.M. Mendonidis, M.S. Manono, *Vaal University of Technology and University of Cape Town, South Africa*
- 11:20–11:40 **Large-scale instability pre-empted through pro-active hazard identification and monitoring in a UG2 panel on Lonmin's Rowland shaft**
E. Munsamy, *Lonmin, South Africa*
- 11:40–12:00 **Sulphation roasting process for the extraction of rare earth elements (REEs)**
K.C. Maluleke, X. Goso, S. Ndlovu, E. Matinde, and S. McCullough, *University of the Witwatersrand, DST/NRF SARChI, Mintek, South Africa, and Techemet, USA*
- 12:00–12:20 **Gold recovery: Effect of ozonation of refractory gold ores prior to cyanidation**
T.P. Mashifana and P.L. Phoko, *University of Johannesburg, South Africa*
- 12:20–13:20 **Lunch**
- 13:20–14:00 **Keynote: Innovation and entrepreneurship**
G Lane, *VUUMA*
- Session 3: K. Letsoalo**
- 14:00–14:20 **Stabilization of gold mine tailings: The effect of hydrated lime on the unconfined compressive strength**
T.P. Mashifana and N.E. Mkhonto, *University of Johannesburg, South Africa*
- 14:20–14:40 **Investigating the impact of support behaviour on large scale UG2 hangingwall instability**
S Liebenberg, *Lonmin Platinum, South Africa*
- 14:40–15:00 **Geotechnical study on mine backfill requirements in steep dip areas: A case study of Konkola Copper Mines (Zambia)**
N. Dzimunya and R. Krishna, *University of Zimbabwe, Zimbabwe and University of Zambia, Zambia*
- 15:00–15:20 **Using a strong base anion resin to remove sulphuric acid from ammonium sulphate solution through acid retardation**
B. Silwana, T. Mashifana, E.K. Hardwick, and J.G. Hardwick, *Cwenga, South Africa*
- 15:20–15:40 **Corrosion behaviour of sintred Mg-Si-AL ternary alloys in simulated NaCl environment**
L.N. Moroamohube, M.E. Masonyaneng, M. Magondo, M.I. Makena, and M. L. Lethabane, *Tshwane University of Technology, South Africa*
- 15:40–18:00 **Networking Function**

Day 2–19 September 2018

- 07:00–08:30 **Registration**
- 08:30–08:35 **Welcome**
S. Nhleko, *Chairperson (Young Professionals Conference)*
- 08:35–08:40 **Emergency procedures**
- 08:40–08:50 **Introduction to YPC**
President YPC
- Session 5: Z. Mthabela**
- 08:50–09:10 **Entranced electrochemical analysis on sintered Ni–50%Fe alloys in simulated H₂SO₄ acid bath**
M E Masonyaneng, M B Shongwe, M M Ramakokovhu, M I Makena, *Tshwane University of Technology and University of Johannesburg, South Africa*
- 09:10–09:30 **A study of silicate minerals behaviour in an igneous ultramafic rock during centrifugal gravity separation**
N.E. Jeli, C.K. Thubakgale and P. Mendonidisi, *Vaal University of Technology, South Africa*
- 09:30–09:50 **A trade-off between the bord collapse and the bord-and-pillar collapse blasting techniques for opencast pillar mining operations**
P.L. Ngwenyama and W.W. de Graaf, *University of Pretoria, South Africa*
- 09:50–10:10 **Tea break**
- Session 6: M. Matlhwana**
- 10:10–10:30 **Generic approach to developing an algorithm for mining related problems**
J. Githiria and A.S. Nhleko, *University of the Witwatersrand, South Africa*
- 10:30–10:50 **The 'foresight' of mineral surveying**
T. Matlala and J. Maruma, *University of Johannesburg, South Africa*
- 10:50–11:10 **A review of panel design for panel span optimisation in poor rock mass: A case study of a Zimbabwean room and pillar mine along the Great Dyke**
V.T. Mandabva, *Midlands State University Manicaland College of Applied Sciences, Zimbabwe*
- 11:10–11:30 **The assessment of the factors contributing to the Mine Managers Certificate of Competency Part C failure rate**
N. Ndiweni and M. Mpanza, *University of Johannesburg, South Africa*
- 11:30–11:50 **The importance of mineralogical characterization in gold ore extraction and processing**
R.S. Moeletsi, J. Mogoru, S.G. Yaka, N.M. Sosibo, and N. Singh, *Mintek, South Africa*
- 11:50–12:30 **Panel Discussion**
- 12:30–13:30 **Lunch**
- 13:30–14:00 **Keynote:**
B. Mawasha, *Richards Bay Minerals, South Africa*
- Session 7: L. Bucibo**
- 14:00–14:20 **Education, training and professional development in the South African mining sector as it pertains to the sustainable future of mining**
M.I. Mabala, *University of the Witwatersrand, South Africa*
- 14:20–14:40 **Beneficiation of Barteton gold mine tailings: The effect of fly ash on the mineralogy and micrograph**
T.P. Mashifana, *University of Johannesburg, South Africa*
- 14:40–15:00 **An assessment of the key factors of pollution from two uranium-bearing mine waste dumps**
S. Mxinwa, L. Landu, O. Bazhko, G. Freeman, and S.W. Robertson, *Mintek, South Africa*
- 15:00–15:20 **Evaluation of PGE tailings dumps, converting liabilities into assets**
S. Nieman, *Lonmin, South Africa*
- 15:20–15:40 **Evaluating the recovery of poly-alumino-ferric sulphate coagulants from acid mine drainage by lime precipitation**
B. Mwewa, S. Ndlovu, and G. Simate, *University of the Witwatersrand*
- 15:40–15:50 **Close of conference**
- 15:50–16:20 **Tea break**