Young Professionals 2017—Preliminary Programme

Day 1—9 March 2017

07:00–08:30 Registration
08:30–08:35 Opening Address
S. Nhleko, Chairman YPC
08:35–08:40 Emergency procedures
08:40–08:50 Welcome
Prof. C. Musingswini, President SAIMM

Session 1—Sponsored by

08:50–09:20 Keynote 1—How to gain, maintain, and sustain industry confidence in your field of experience
N. Siwisa-Damasane, Richards Bay Coal Terminal
09:20–09:40 Multi-stakeholder collaboration to unlock the potential of deep level mining in South Africa
K.M. Letsoco, Chamber of Mines, South Africa
09:40–10:00 Exploration of the South West Precursor, Finsch diamond mine
M. Matabane and T. Khati, Petra Diamonds, South Africa
10:00–10:20 The throughput of mining engineering students in the University of Johannesburg (2009 to 2013 Cohorts)
M. Mpanza, University of Johannesburg, South Africa
10:20–10:50 Tea break

Session 2

10:50–11:20 Keynote 2—Leaders of the Future – how social and technological innovation will demand fundamentally different leadership over time
D. Cook, RIIS, South Africa
11:20–11:30 Sponsorship presentation
Redpath Mining, South Africa
11:30–11:50 Challenging the status quo in the mining industry to alleviate unemployment, slow economic growth, and poverty in sub-Saharan Africa
H.S. Nepembea and P. Phelo, University of Johannesburg, South Africa
11:50–12:10 The impact of South Africa’s ‘use it or lose it’ principles on the platinum sector
J. Scholtz and P. Bredell, University of Pretoria, South Africa
12:10–12:30 Purification of effluent from a rare earth elements process by chemical precipitation
C. Sehlola, Mintek, South Africa
12:30–12:50 Legislation and management practices in mining directed toward protecting water resources
C. Zermatten, SRK Consulting, South Africa
12:50–13:50 Lunch

Session 3

13:50–14:10 The impacts of Section 54 stoppages on staff morale
M. Mpanza, P. Nelwamondo, and N. Ndiweni, University of Johannesburg, South Africa
14:10–14:30 Identification of cost factors relating to mining incidents
E.P. Preis and R.C.W. Webber-Youngman, University of Pretoria, South Africa
14:30–14:50 Graduate unemployment in the South African mining sector
T. Mmoloa, M. Mpanza, and P. Nelwamondo, University of Johannesburg, South Africa
14:50–15:10 The application of process mineralogy on a tailings sample from a beach placer deposit containing rare earth elements (REE)
A. Moliaa*, D. Chettya*, and S. Ndlovu†, Mintek, South Africa*, University of the Witwatersrand, South Africa
15:10–15:40 Tea break

Session 4

15:40–16:00 Time to invest towards mineral beneficiation in South Africa
G. Mathebula, University of Pretoria, South Africa
16:00–16:20 Effect of various parameters on uranium leach kinetics
B. Sililo and D. Groot, Namibia University of Science and Technology, Namibia
16:20–16:40 The effect of magnesia and alumina crucible wear on the melting characteristics of titaniferous magnetite
M.P. Maphutha, M. Ramaili, M.B. Sitefane, and X.C. Goso, Mintek, South Africa
16:40–17:00 Accurate measurement of polarization potentials during electrodeposition of nickel metal from sulphate electrolytes
L. Schoeman and K.C. Sole, University of Pretoria, South Africa
17:00–19:00 Networking Function
Keynote 3—Engineers of the future
G. Lane, South Africa
Day 2—10 March 2017

07:00–08:30 Registration

08:30–08:35 Welcome
S. Nhleko, Chairman YPC

08:35–08:40 Emergency procedures

08:40–08:50 Introduction to YPC
T. Mmola, President YPC

Session 5

08:50–09:20 Keynote 4—Personal development: Importance of career planning and personal skills development
T. Makgala, Goldfields, South Africa

09:20–09:40 Review of Mintek’s experience on sorting Witwatersrand ore samples using the Rados XR F sorter
N. Makhalemele*, S. Mathebula*, N. Odiar†, and D. Grimbeek†, Mintek, South Africa*, Rados, South Africa†

09:40–10:00 Removal of nitrates from plant process solution
F.D.L. Uahengo, S. Amunyela, and D. Groot, Namibia University of Science and Technology, Namibia

10:00–10:20 Product development of a high chrome white cast iron to yield consistent physical and mechanical properties
K.C. Mashele and S.T. Mavhungu, University of Johannesburg, South Africa

10:20–10:50 Tea break

Session 6

10:50–11:00 SAMCODES—professional reporting practices for the future
T. Marshall, Explorations Limited, South Africa

11:00–11:20 A comparative study of vanadium recovery from titaniferous magnetite using salt, sulphate, and soda ash roast-leach processes
S. Nkosi, P. Dire, N. Nyambeni, and X.C. Goso, Mintek, South Africa

11:20–11:40 A critical evaluation of innovative initiatives for improving energy efficiency of truck and shovel systems
P.E. Ramashaua and S. Uludag, University of Pretoria, South Africa

11:40–12:00 Increasing mine life and making uneconomical projects viable with Aachen™ technology
E.R.M. Mariba, Maelgwyn Mineral Services Africa (Pty) Ltd, South Africa

12:00–12:20 Design considerations for critical coal measurement points: towards accurate reconciliation for integrated mine planning
M. Tetteh and F. Cawood, University of the Witwatersrand, South Africa

12:20–12:40 Digital technology in South African mining
M.P. Mathwana, University of the Witwatersrand, South Africa

12:40–13:00 Void filling and water sealing in the Kalahari manganese field
I. Serepa* and N.C. Steenkamp†, Advisian, South Africa,* Worley Parsons Group, South Africa†

13:00–14:00 Lunch

Session 7

14:00–14:20 Face-bursting imminent in deeper South African platinum mines?
B.C. Okhuis* and J.W.L. Hanekom†, University of Pretoria, South Africa*, Middindi Consulting, South Africa†

14:20–14:40 A project management approach for a mining stope
P. Nelwamondo and D. Kruger, University of Johannesburg, South Africa

14:40–15:00 The application of opencast pillar mining for the secondary extraction of pillars from previously mined bord-and-pillar operations
P.L. Ngwenyama and W.W. de Graaf, University of Pretoria, South Africa

15:00–15:20 Development of an algorithm for stope boundary optimization for underground mines
A.S. Nhleko and C. Musingwini, University of the Witwatersrand, South Africa

15:20–15:40 A technology map to facilitate the process of mine modernization throughout the mining cycle
J. Jacobs and R.C.W. Webber-Youngman, University of Pretoria, South Africa

15:40–15:50 Tea break

15:50–16:00 Close of Conference