Day 1 · 15 March 2016

07:00–08:00 Registration
08:00–08:05 Emergency Procedure
08:05–08:15 Welcome Chair - H. Marsden
08:15–08:40 Welcome
R.T. Jones, President, SAIMM
08:40–09:05 Keynote Address
Honourable Minister Kito Koomake Mokaila
09:05–09:30 Design and development of a decline shaft through poorly consolidated Kalahari deposits at Ghausgo Diamond Mine
A. Naismith*, G. Howell*, and H. Marsden†, *SRK and †Petra Diamonds Ltd, South Africa
09:30–09:55 Pioneering large diamond recovery at Karowe Diamond Mine
L.M. van Niekerk†, A. Olivier†, J. Armstrong†, and N.A. Sliska†, *DRA Mineral Projects, †Tomra Sorting Solutions, ‡Lucara Diamond Corp, †Karowe Diamond Mine
09:55–10:25 Resource evaluation of the KX36 kimberlite, central Botswana
M.T. Mokgotsane†, T. Hought†, A. Rogers†, and J. Davidson†, *Petra Diamonds Botswana (Pty) Ltd and †Petra Diamonds SA (Pty) Ltd
10:25–10:40 Mid-Morning Refreshments

SESSION CHAIR: D. van Deventer
10:40–10:50 Sponsor Presentation: Debswana
10:50–11:15 Step change in blasting methodology to achieve plant requirements, the concept of mine-to-mill operationalization
W. Chitala, Letseng Diamond Mine, South Africa
11:15–11:40 Using the proportion of barren samples as aProxy for minimum grade in a diamondiferous linear beach deposit—An application of the Nahman model
J. Jacob, Namdeb Diamond Corporation, Namibia
11:40–12:05 The CCUT block cave design for Cullinan Diamond Mine
H. Tukker‡, A. Holder†, B. Swarts†, T. van Strijp†, and E. Grobler†, *Ukwazi Mining Solutions and †Petra Diamonds Ltd, South Africa
12:05–12:30 The evolution of DMS efficiency monitoring
S. Ndlovu, DeTech, De Beers Group Services, South Africa
12:30–13:15 Lunch

SESSION CHAIR: M. Wertz
13:25–13:50 Application of gamma ray logging for kimberlite contact delineation at Finsch Diamond Mine
M. Matabane and T. Khati, Karoo Group Services, South Africa
13:50–14:15 Reducing the risk of mud flow events in block cave drawpoints through water abstraction
B. Mzimela†, L. Kolthoaf†, and A. van Bart‡, *Finsch Diamond Mine, South Africa, †Petra Diamonds Ltd, South Africa, and ‡Reon Groundwater Consulting
14:15–14:40 The selection of high-pressure grinding rolls for a diamond flow sheet
T. Bookless, Tees Minerals, UK
14:40–14:50 Koffiefontein Diamond Mine sublevel cave design
H. Tukker*, H. Marsden†, A. Holder†, B. Swarts†, T. van Strijp†, E. Grobler†, and F. Engelbrecht†, *Ukwazi Mining Solutions and †Petra Diamonds Ltd, South Africa
14:50–15:15 Mid-Afternoon Refreshments

SESSION CHAIR: H. Tukker
15:15–15:40 Block-ave mine operations—ventilation challenges and opportunities
W. Marx and M Hooman, BBE Consulting
15:40–16:05 Technological advances of Longi-Multotec high intensity rare earth magnetic separators improving DMS media circuits
A. Fouche and W. Slabbert, Multotec Process Equipment (Pty) Ltd, South Africa
16:05–16:30 Lethhakane legacy—concept becomes reality
W. Krugel† and K. Motsumi†, *Fluor and †Debswana
16:30–16:55 Evolution of shaft sinking
A. Widiakle, Murray & Roberts Cementation
16:55–17:00 Day 1 Closing Remarks - H. Marsden
17:00–18:15 Network Cocktail

Day 2 · 16 March 2016

07:00–08:00 Registration
08:00–08:05 Emergency Procedure
08:05–08:15 Welcome Chair - H. Marsden

SESSION CHAIR: J. Clark
08:15–08:40 The modelling of scrubbers and AG mills in the diamond industry and when to use them
M.J. Daniel†, P. Bellinger†, and M. Rauscher†, *CMD Consulting Pty Ltd, Brisbane, Australia, †Mechprotech, South Africa, and ‡Citic HIC, South Africa
08:40–09:05 Survey systems adopted to improve safety and efficiency at Finsch Diamond Mine
D. Du Toit†, T. Meso†, E. Tetema†, P. Boshoff†, and A. Holder†, *Finsch Diamond Mine, South Africa, and †Petra Diamonds Ltd, South Africa
09:05–09:30 Waste rock dump management and stability evaluation
D. Olivier, SRK
09:30–09:55 Design and implementation of steeper slope angles on a kimberlite open pit diamond operation—a practical approach
A. Madowe, Gem Diamond Technical Services, South Africa
09:55–10:10 Mid-Morning Refreshments

SESSION CHAIR: D. Burger
10:10–10:20 Sponsor Presentations: Sandvik
10:20–10:45 Investigation of the optimal vortex finder length in DMS cyclones
F. Bornman and K. Maloep, Multotec Process Equipment (Pty) Ltd, South Africa
10:45–11:10 Progress update on Petra Diamonds’ MTS 3D Spatial/DB Integration and Reporting Project
L. Mokgatlala†, J. Langenhoven†, and R. du Toit†, *Petra Diamonds Ltd, South Africa, †Finsch Diamond Mine, South Africa, and ‡MineRP, South Africa
11:10–11:35 How the mining design evolved through stress and deformation modelling at Finsch Diamond mine
T. van Strijp†, P. Boshoff†, and J. Langenhoven†, *Petra Diamonds Group and †Finsch Diamond Mine, South Africa
11:35–12:00 Estimation model for extraction and grade at Finsch Diamond Mine
D. Venter, Finsch Diamond Mine, South Africa
12:00–12:45 Lunch

SESSION CHAIR: D. Munro
12:45–12:55 Sponsor Presentation: Imexsar Ferrosilicon
12:55–13:35 Keynote Address
C. Elphick, Gem Diamonds
13:35–14:00 DMC Basics—a Holistic View
E. Bekker, Multotec Process Equipment (Pty) Ltd, South Africa
14:00–14:25 Microdiamond Analysis—a method for estimating the size frequency distribution of the macrodiamonds
J. Danoczi and S. Creighton, Saskatchewan Research Council, Canada
14:25–14:50 Extension of the Cullinan Diamond Mine No. 1 Shaft underneath the existing operating shaft
G. Judeel†, T. Swanepeol†, A. Holder†, B. Swarts†, T. Van Strijp†, and A. Cloe‡, *GeoSindile (Pty) Ltd and †Petra Diamonds Ltd, South Africa
14:50–15:10 Mid-Afternoon Refreshments

SESSION CHAIR: A. Holder
15:10–15:35 Longhole drilling and blasting at Finsch Diamond Mine
M. Luther‡ and P. Boshoff‡, †Kingdom Connexions Pty Ltd and ‡Finsch Diamond Mine, South Africa
15:35–16:00 PetraDiamond Group Projects: Horizontal Tunnel Boring at Cullinan—717 undercut level tunnel 54 north
L. Mokgatlala, Petra Diamonds Ltd, South Africa
16:00 Conference closure remarks