

Diamonds 2016 Final Programme

Day 1 • 15 March 2016

07:00–08:00	Registration
08:00–08:05	Emergency Procedure
08:05–08:15	Welcome Conference Chair - H. Marsden
08:15–08:40	Welcome R.T. Jones, <i>President, SAIMM</i>
08:40–09:05	Keynote Address Honourable Minister Kitso Onkokame Mokaila
09:05–09:30	Design and development of a decline shaft through poorly consolidated Kalahari deposits at Ghaghoo Diamond Mine A. Naismith*, G. Howell*, and H. Marsden†, *SRK and †Petra Diamonds Ltd, <i>South Africa</i>
09:30–09:55	Pioneering large diamond recovery at Karowe Diamond Mine L.M. van Niekerk*, A. Olivier†, J. Armstrong†, and N.A. Sikwa#, *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. Mokgaotsane*, T. Hough*, 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 operationalized W. Chitate, <i>Letseng Diamond Mine, South Africa</i>
11:15–11:40	Using the proportion of barren samples as a proxy for minimum grade in a diamondiferous linear beach deposit—An application of the Nachman model J. Jacob, <i>Namdeb Diamond Corporation, Namibia</i>
11:40–12:05	The CCUT block cave design for Cullinan Diamond Mine H. Tukker*, A. Holdert, B. Swarts†, T. van Strijp†, and E. Grobler†, *Ukwazi Mining Solutions and †Petra Diamonds Ltd, <i>South Africa</i>
12:05–12:30	The evolution of DMS efficiency monitoring S. Ndlovu, <i>De Beers Group Services, South Africa</i>
12:30–13:15	Lunch
	SESSION CHAIR: M. Wertz
13:15–13:25	Sponsor Presentation: Vibramech
13:25–13:50	Application of gamma ray logging for kimberlite contact delineation at Finsch Diamond Mine M. Matabane and T. Khati, <i>Petra Diamonds Ltd, South Africa</i>
13:50–14:15	Reducing the risk of mud flow events in block cave drawpoints through water abstraction B. Mzimela*, L. Kotlaad†, and A. van Bart‡, *Finsch Diamond Mine, <i>South Africa</i> , †Petra Diamonds Ltd, <i>South Africa</i> , and ‡Rison Groundwater Consulting
14:15–14:40	The selection of high-pressure grinding rolls for a diamond flow sheet T. Bookless, <i>Tees Minerals, UK</i>
14:40–14:50	Koffiefontein Diamond Mine sublevel cave design H. Tukker*, H. Marsden†, A. Holdert, B. Swarts†, T. van Strijp†, E. Grobler†, and F. Engelbrecht*, *Ukwazi Mining Solutions and †Petra Diamonds Ltd, <i>South Africa</i>
14:50–15:15	Mid-Afternoon Refreshments
	SESSION CHAIR: H. Tukker
15:15–15:40	Block-ave mining operations—ventilation challenges and opportunities W. Marx and M. Hooman, <i>BBE Consulting</i>
15:40–16:05	Technological advances of Longi-Multotec high intensity rare earth magnetic separators improving DMS media circuits A. Fouchee and W. Slabbert, <i>Multotec Process Equipment (Pty) Ltd, South Africa</i>
16:05–16:30	Letlhakane legacy—concept becomes reality W. Krugel* and K. Motsumi†, *Fluor and †Debswana
16:30–16:55	Evolution of shaft sinking A. Widlake, <i>Murray & Roberts Cementation</i>

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 Conference 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. Bellingan†, and M. Rauscher‡, *CMD Consulting Pty Ltd, <i>Brisbane, Australia</i> , †Mechprotech, <i>South Africa</i> , and ‡Citic HIC, <i>South Africa</i>
08:40–09:05	Survey systems adopted to improve safety and efficiency at Finsch Diamond Mine D. Du Toit*, T. Meno*, E. Tetema*, P. Boshoff*, and A. Holder†, *Finsch Diamond Mine, <i>South Africa</i> , and †Petra Diamonds Ltd, <i>South Africa</i>
09:05–09:30	Waste rock dump management and stability evaluation D. Olivier, <i>SRK</i>
09:30–09:55	Design and implementation of steeper slope angles on a kimberlite open pit diamond operation—a practical approach A. Madowe, <i>Gem Diamond Technical Services, South Africa</i>
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. Malope, <i>Multotec Process Equipment (Pty) Ltd, South Africa</i>
10:45–11:10	Progress update on Petra Diamonds' MTS 3D SpatialDB Integration and Reporting Project L. Mokgalaka*, J. Langenhoven†, and R. du Toit‡, *Petra Diamonds Ltd, <i>South Africa</i> , †Finsch Diamond Mine, <i>South Africa</i> , and ‡MineRP, <i>South Africa</i>
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, <i>South Africa</i>
11:35–12:00	Estimation model for extraction and grade at Finsch Diamond Mine D. Venter, <i>Finsch Diamond Mine, South Africa</i>
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, <i>Gem Diamonds</i>
13:35–14:00	DMC Basics—a Holistic View E. Bekker, <i>Multotec Process Equipment (Pty) Ltd, South Africa</i>
14:00–14:25	Microdiamond Analysis—a method for estimating the size frequency distribution of the macrodiamonds J. Danoczi and S. Creighton, <i>Saskatchewan Research Council, Canada</i>
14:25–14:50	Extension of the Cullinan Diamond Mine No. 1 Shaft underneath the existing operating shaft G. Judeel*, T. Swanepoel†, A. Holdert, B. Swarts†, T. Van Strijp†, and A. Cloete†, *GeoSindile (Pty) Ltd and †Petra Diamonds Ltd, <i>South Africa</i>
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, <i>South Africa</i>
15:35–16:00	PetraDiamond Group Projects: Horizontal Tunnel Boring at Cullinan—717 undercut level tunnel 54 north L. Mokgalaka, <i>Petra Diamonds Ltd, South Africa</i>
16:00	Conference closure remarks