

Final Programme: Diamonds — Source to Use 2018 Conference

Monday, 11 June 2018

Workshop: SAMREC/SAMVAL Reporting–Diamond Projects

16:00–18:00 **Welcome Network Cocktail and Pre Conference Registration**

Day 1–Tuesday, 12 June 2017

07:30–08:30 **Early Morning Refreshments and Registration**

08:30–08:35 **Chairperson's Welcoming Address**
T. Marshall

08:35–08:40 **Emergency procedures presentation**

08:40–08:55 **Opening Address**
S. Ndlovu, *President, SAIMM*

Session 1 – Session Chair: T. Marshall

08:55–09:35 **Keynote Address: The state of the diamond market**
E. Blom, *Blom Diamonds, South Africa*

09:35–10:00 **The role of *Hodotermes mossambicus* termites and background kimberlite indicators in the Kgalagadi**
T. Dira and L. Daniels, *Geocontracts Botswana, Botswana*

10:00–10:25 **Kimberlite-Country rock contact delineation at Finsch Diamond Mine**
T. Khati and M. Matabane, *Petra Diamond Project, South Africa*

10:25–10:45 **Mid-Morning Refreshments**

Session 2 – Sessions Chair: J. Stiefenhofer

10:45–11:10 **Valuating rough diamonds from African countries**
K.B. Lappeman, *Independent Diamond Consultant, South Africa*

11:10–11:35 **Performance of laminar spiral inlet cyclone in a diamond DMS application**
B. Zimba, *Weir Minerals Africa (Pty) Ltd, South Africa*

11:35–12:00 **De Beers consumer confidence technical research and diamond verification instruments**
P.M. Martineau and C.D. McGuinness
De Beers Technologies UK, UK

12:00–12:25 **The new Cullinan AG milling circuit - a narrative of progress**
L. Musenwa¹, T. Khumalo¹, M. Kgaphola¹, S. Masemola¹, and G. van Wyk², ¹*Petra Cullinan Diamond Mine* and ²*Thyssenkrupp, South Africa*

12:25–13:10 **Lunch**

Session 3 – Session Chair: J. Campbell

13:10–13:35 **Practically road mapping the technology and digital transformation in mining**
C. Holtzhausen and T. Moodley, *Hatch Africa (Pty) Ltd, South Africa*

13:35–14:00 **Geophysical alluvial exploration using the Aquares resistivity method**
P.M. Brabers, *Demco NV, Belgium*

14:00–14:25 **Diamond exploration and mining in southern Africa: some thoughts on past, current, and possible future trends**
W.F. McKechnie, *Snowden Mining Industry Consultants (Pty), South Africa*

14:25–14:40 **Afternoon Tea**

Session 4 – Session Chair: G. Dellas

14:40–15:05 **Regional diamond exploration under cover**
N. Pendock, *DIRT Exploration, South Africa*

15:05–15:30 **Monitoring the performance of DMS circuits using RhoVol technology**
M. Fofana and T. Steyn, *De Beers Technologies SA, South Africa*

15:30–15:55 **The future of diamond liberation and recovery?**
J.E. Clarke, *Paradigm Project Management (Pty) Ltd, South Africa*

15:55–16:00 **Day 1 Conference Close**
G. Dellas

16:30–18:00 **Network Cocktail**

Day 2–Wednesday, 13 June 2017

08:00–08:30 **Early Morning Refreshments and Registration**

08:30–08:35 **Chairperson's Welcome**
M. Wertz

08:35–08:40 **Emergency procedures presentation**

Session 5 – Session Chair: M Wertz

08:40–09:10 **Keynote Address: Financing diamond projects**
J.A.H. Campbell, *Botswana Diamonds plc, Botswana*

09:10–09:45 **The art and science of diamond analysis, and what the results can tell us**
I.L. Chinn and S.H. Perritt, *De Beers Exploration, South Africa*

09:45–10:10 **The importance of grease technology in diamond recovery**
J.E. Danoczi, *Saskatchewan Research Council, Canada*

10:10–10:30 **Mid-Morning Refreshments**

Session 6 – Session Chair: B. McKechnie

10:30–10:55 **The application of XRT in the De Beers Group of Companies**

A. Voigt, G. Morrison, G. Hill, G. Dellas, and R. Mangera, *De Beers Technologies (SA), South Africa*

10:55–11:20 **Jwaneng – The untold story of the discovery of the world's richest diamond mine**
N. Lock¹ and S. Vercoe², *Private Consulting Geologist, and De Beers Group, UK*

11:20–11:45 **Operational changes enable Namdeb's Southern Coastal mining team to reduce risk and increase productivity as we advance deeper into the Atlantic Ocean**

S. Kirkpatrick and J. Mukendwa, *Namdeb, Namibia*

11:45–12:10 **Microdiamond grade as a regionalized variable – some basic requirements for successful local microdiamond resource estimation of kimberlites**
J. Stiefenhofer^{1,2}, M.L. Thurston¹, and D.E. Bush³, ¹*De Beers Group Services (Pty) Ltd*, ²*Anglo American Operations Ltd*, and ³*Z Star Mineral Resource Consultants (Pty) Ltd, South Africa*

12:10–12:55 **Lunch**

Session 7 – Session Chair: J. Clarke

12:55–13:20 **Coagulation of kimberlitic ore by gypsum**
I.F. Kuit, *De Beers, South Africa*

13:20–13:45 **Application of microdiamond technique in assisting diamond mining juniors to make rapid technical and economic decisions**
H. Cronwright¹ and J.A.H. Campbell², ¹*The MSA Group (Pty) Ltd, South Africa* and ²*Botswana Diamonds plc, Botswana*

13:45–14:10 **A strategy for improving water recovery in kimberlitic diamond mines**
A.J. Vietti, *Vietti Slurrytec (Pty) Ltd, South Africa*

14:10–14:35 **Afternoon Refreshments**

14:35–15:00 **Application of dynamic simulation for the Gahcho Kué Project**
A. Lebedev and A. Rodel, *Lebedev Consulting, South Africa, Gahcho Kue, Canada*

15:00–15:25 **Field trip guide to Cullinan Diamond Mine**
A. Wolmarans¹, T. Phahla², and A. Rogers¹, ¹*Petra Diamonds Southern Africa (Pty) Limited* and ²*Cullinan Diamond Mine, South Africa*

15:25–15:30 **Conference Close**
J. Clarke

Thursday, 14 June 2018

Technical Visits

1. DebTech (De Beers Technologies SA)
2. Cullinan Mine
3. Ruzow/Marcov Diamond Cutting Works