Geometallurgy Conference • 6–8 August 2018—Preliminary Programme
Lagoon Beach Conference Venue, Cape Town South Africa

Monday, 6 August 2018
Workshop

08:30–17:00 **Practical Geometallurgy Workshop: An interactive workshop on ore to metals optimization that demonstrates the application of Geometallurgy**

Day 1 – Tuesday, 7 August 2018
07:30–08:30 **Early Morning Refreshments and Registration**
08:30–08:35 **Chairperson's Welcome Address**
M. Becker, *University of Cape Town, South Africa*
08:35–08:40 **Emergency procedures presentation**
08:40–08:55 **SAIMM Presidential Opening Address**
S. Ndlovu, *President, SAIMM*

Session 1–Session Chair:
08:55–09:35 **Keynote Address: Geometallurgy: Back to the Future – pushing the time space boundary**
A. Clark, U*niversity of Queensland, Australia*
09:35–09:55 **Geometallurgy and Automated Mineralogy – A tool for ore deposit evaluations, for the prediction of processing problems and process improvements ahead and during mining**
T. Wallmach and M. Rousseau, *ERAMET Ideas, Trappes, France*
09:55–10:15 **A particle–based approach to flotation modelling incorporating autoSEM characterization**
C.P. Bergmann[1] and N. Naudé[2], [1]*Mintek*, [2]*University of Pretoria, South Africa*
10:15–10:45 **Mid–Morning Refreshments**

Session 2–Sessions Chair:
10:45–11:25 **Keynote Address: Discovery of the deep Flatreef PGE–Ni–Cu–Au deposit on Turfspruit Farm, Northern Limb, Bushveld Complex, South Africa**
S. Kekana, *Ivanplats, South Africa*
11:25–11:45 **Sequential co–simulation for resources modelling: How good is the reproduction of the joint spatial correlation structure?**
N. Madani[1] and X. Emery[2], [1]*School of Mining and Geosciences, Kazakhstan*, [2]*University of Chile, Chile*
11:45–12:05 **Embracing step–changes in geoscientific information for effective implementation of Geometallurgy**
R. Lechuti–Tlhalerwa[1], S. Coward[2], and M. Field[3], [1]*Debswana, Botswana*, [2]*Wood Group, Australia*, [3]*Interlaced, United Kingdom*
12:05–12.25 **Prediction of copper recovery from Geometallurgical data using D–vine copulas**
E. Addo Jnr[1], A.V. Metcalfe[1], E.K. Chanda[1], E. Sepulveda[4], W. Assibey–Bonsu[2], and A. Adeli[3], [1]*University of Adelaide, Australia*, [2]*Gold Fields Limited, South Africa*, [3]*University of Chile*, [4]*University of Talca, Chile*
12:25–13:30 **Lunch**

Session 3–Session Chair:
13:30–14:10 **Keynote Address: TBC**
14:10–14:30 **Role of real time elemental analysis using PGNAA in operational Geometallurgy**
H. Kurth, *Scantech International Pty Ltd, Australia*
14:30–14:50 **Developing a 3D mineral texture quantification method of drill core for Geometallurgy**
M.J. Voigt[1,2], J. Miller[3], L. Bbosa[1], R.A. Govender[1], D. Bradshaw[1], A. Mainza[1], and M. Becker[1], [1]*University of Cape Town*, [2]*Council for Geoscience*, [3]*Stellenbosch University, South Africa*
14:50–15:10 **Hyperspectral data applied to Geometallurgy**
P. Linton, D. Browning, N. Pendock, P. Harris, M. Donze, T. Mxinwa, and K. Mushiana, *TerraCore, South Africa*
15:10–15:45 **Afternoon Refreshments**

Session 4–Session Chair:
15:45–16:05 **Using mineralogy for early stage Geometallurgical domain definition: a case study of the Swartberg polymetallic sulphide deposit**
H.J.J. Gordon[1], J.A. Miller[2], and M. Becker[3], [1]*Black Mountain Mining (Pty) Ltd*, [2]*Stellenbosch University*, [3]*University of Cape Town, South Africa*
16:05–16:25 **Current Geometallurgical initiatives at the Siguiri Gold Mine, Guinea**
L.M. Cloete[1] and [2]W. Slabbert, [1]*AnglogoldAshanti COO International South Africa*, [2]*AnglogoldAshanti Siguiri, Guinea*
16:25–16:45 **Continuous improvement of Geometallurgy Namakwa Sands mine**
K.D. Tshivhase and C. Philander , *Namakwa Sands, South Africa*
16:45–17:00 **Day 1 Conference Close**
19:00–22:00 **Conference Network Function**

Day 2 – Wednesday, 8 August 2018
08:00–08:30 **Early Morning Refreshments and Registration**
08:30–08:45 **Chairperson's Welcome Address**
M. Becker, *University of Cape Town, South Africa*
08:45–08:55 **Emergency procedures presentation**

Session 1–Session Chair:
08:55–09:35 **Keynote Address: The Geometallurgy of Namakwa Sands – A decade of contributions and learnings**
C. Philander, *Namakwa Sands, South Africa*
09:35–09:55 **Mineralization processes – the primary control on gold recovery**
K.L. Youlton[1], J.A. Kinnaird[1], and B.J. Youlton[1,2], [1]*University of the Witwatersrand*, [2]*SGS MetMin, South Africa*
09:55–10:15 **Mineral chemistry as a critical parameter in Geometallurgical models: a case study using trace elements substituted sphalerite**
L. Babedi, B.P. von der Heyden, P.H. Neethling, and M. Tadie, *Stellenbosch University, South Africa*
10:15–10:45 **Mid–Morning Refreshments**

Session 2–Sessions Chair:
10:45–11:25 **Keynote Address: Geomet and the Mining Value Chain: where is the value to the miner?**
A.S. Macfarlane, *Minerals Council South Africa*
11:25–11:45 **Investigating Geometallurgical relationships with principal component analysis of compositional and non–compositional data**
M. Bhuiyani and K. Esmaeli, *University of Toronto, Canada*
11:45–12:05 **Uncertainty quantification of rock quality designation at the Gazestan Ore Deposit**
N. Madani, S. Yagiz, A.C. Adoko, and N. Battalgazy, *Nazarbayev University, Kazakhstan*
12.05–12:25 **Key aspects of bench flotation as Geometallurgical characterization tool**
V. Ross, *Mintek, South Africa*
12:25–13:30 **Lunch**

Session 3–Session Chair:
13:30–13:50 **Geometallurgical sample and test work protocol implementation at Kumba Iron Ore,**
M. Govender, *Kumba Iron Ore, South Africa*
13:50–14:10 **Geometallurgical characterization of complex copper–gold ores**
J. Liipo, M. Hicks, V–P. Takalo, A. Remes, and M. Talikka, *Outotec, Finland*
14:10–14:30 **Modelling Geometallurgical variability of communition parameters in Orapa kimberlite ore**
R. Lechuti–Tlhalerwa[1], O. Gilika[2], and M. Field[3], [1]*Debswana Corporate Centre*, [2]*Debswana Orapa Mine, Botswana*, [3]*Wood plc, United Kingdom*
14:30–15:25 **Panel discussion: Geometallurgy–What Next!**
15:25–16:00 **Closing Network Function**