

Smart Mining, Smart Environment, Smart Society Conference

4-5 July 2019

Accolades Boutique Venue, Midrand

Preliminary Programme

Day 1 — Thursday 4 July 2019

07:30–08:30 **Registration & Morning Refreshments**

08:30–08:35 **Emergency Procedures Presentation**

08:35–08:50 **Welcome Address**
D. Limpitlaw, *Conference Chairperson*

08:50–09:05 **SAIMM Presidential Address**
A.S. Macfarlane, *Mandela Mining Precinct*

Session 1 — Industry 4.0 and the creativity imperative – driving environmental Performance

Chairperson

09:05–09:30 **@ The Verge**
J. Courtnege, *Deliberate Futures, South Africa*

09:30–09:55 **Current requirements for the future- and smart-connected mine**
J.-J. Verhaeghe, *Mandela Mining Precinct, South Africa*

09:55–10:20 **Middelburg: How not to be the next Welkom? Embrace the 4th Industrial Revolution**
J. Limpitlaw and C. Mallinson, *University of the Witwatersrand, South Africa*

10:20–10:45 **Mining-impacted water as a valuable resource: technologies for values recovery**
J. Burgess, *Isle Utilities, South Africa*

10:45–11:15 **Mid-morning Refreshments**

Session 2 — Modernizing the minerals sector to embrace values, people and the environment (WEF Theme) without sacrificing efficiency and production

Chairperson

11:15–11:40 **Economic Complexity and Succession Planning in the SA Mining industry**
M. Solomon, *University of Cape Town, South Africa*

11:40–12:05 **The fit and misfit between Mining 4.0 and Sustainable Development**
M. Hermanus, *University of the Witwatersrand, South Africa*

12:05–12:30 **Mining at the crossroads: Sectoral diversification to safeguard sustainable mining?**
W. de Lange¹, B. de Wet¹, L. Haywood¹, W. Stafford¹, C. Musvoto¹, and I. Watson², ¹CSIR, ²University of the Witwatersrand, South Africa

12:30–13:30 **Lunch**

Session 3 — Chairperson

13:30–15:30 **Panel Discussions 1 — Social Challenges Facilitator**
P. Kapelus, *South Africa*

15:30–15:35 **Closing Remarks**

15:35–16:30 **Network Refreshments**

Day 2 — Friday 5 July 2019

07:30–08:30 **Registration & Morning Refreshments**

08:30–08:35 **Emergency Procedures Presentation**

08:35–08:50 **Welcome Address**
D. Limpitlaw, *Conference Chairperson*

Session 4 — Mining and poverty – increasing importance of offsets

Chairperson

08:50–09:15 **Mining and processing of ornamental stones in context of job creation in rural South Africa**
E.Y. Fontama and A.F. Mulaba, *University of Johannesburg, South Africa*

09:15–09:40 **Is successful resettlement possible with such divergent lender, private sector and community demands and expectations?**
A. Hart, *Sustainable Futures (Pty) Ltd, South Africa*

09:40–10:10 **The role of innovation in the conversion of Invasive Alien Plant biomass into products for rehabilitating mining land while restoring livelihoods**
G. Barnes, *Department of Environmental Affairs, South Africa*

10:10–10:40 **Mid-morning Refreshments**

Session 5 — Social and environmental performance as a value driver, not a cost centre

10:40–11:05 **Community development agreement and its applicability to Finnish Mining Context**
J.M. Kotilainen, *University of Eastern Finland, Finland*

11:05–11:30 **Importance of competent assessment of and reporting on socio- environmental liability**
T. Steele-Schober, *Uvuna Sustainability, South Africa*

11:30–11:55 **Development of the Socio-Economic Technology Initiative (SETI) platform to create a commonly recognised evidence base that can be used as a basis for better development planning**
T. Cooper, *Mining Dialogues 360, South Africa*

11:55–12:20 **Investigate the leadership capabilities that will drive modernization of the coal mining sector through the fourth industrial revolution**
J. Venter, *Exxaro, South Africa*

12:20–13:20 **Lunch**

Session 6 — Chairperson

13:20–13:45 **Mining without biodiversity loss The Biodiversity Protocol**
J. Houdet, *Biodiversity Disclosure Project, South Africa*

Afternoon Refreshments

13:45–14:15 **Panel Discussion 2 — Environmental Challenges Moderator**
J. Courtnege

14:15–16:00 **Conference Closure**