



SAIMM
THE SOUTHERN AFRICAN INSTITUTE
OF MINING AND METALLURGY



In collaboration with the **MMMA**



TAILING STORAGE CONFERENCE 2020

Investing in a Sustainable Future

12–13 February 2020

Birchwood Hotel & OR Tambo Conference Centre, Johannesburg, South Africa

Preliminary Programme

Day 1 – Wednesday 12 February 2020

- 07:00–08:30 **Early Morning Refreshments and Registration**
- 08:30–08:40 **Welcome and Opening Address**
J. Baker, *Conference Chairperson*
- 08:40–08:45 **Safety Briefing**
Venue Official
- 08:45–09:00 **SAIMM Presidential Opening Address**
M.I. Mthenjane, *SAIMM President and Exxaro Resources Ltd, South Africa*

Session: 1

Session Chairperson:

- 09:00–09:40 **Keynote Address: Risk management for tailings storage facilities**
J. Wates, *Fraser Alexander, South Africa*
- 09:40–10:00 **A talk on the legal environment**
K. Cameron, *South Africa*
- 10:00–10:20 **GIS enabled, web-based TSF surveillance solution**
A. Louw, N. Mincione, and R. van der Colf, *SRK Consulting, South Africa*
- 10:20–10:40 **Monitoring the stability of tailings dam walls with ambient seismic noise**
O. Goldbach, *Institute of Mine Seismology, South Africa*
- 10:40–11:00 **Mid-Morning Refreshments**

Session: 2

Session Chairperson:

- 11:00–11:20 **Updating current strategies for estimating a source term for a tailings storage facility**
N. van Zweel
- 11:20–11:40 **The management of legacy tailings storage facilities - a strategic approach through history, acquisition, transformation and closure**
K. Kariko, D. Johannes, T. Morake, and L. Tjatindi, *Dundee Precious Metals, Namibia*
- 11:40–12:00 **3D seepage modelling in Tailings Storage Facility analysis and design for low permeability lined basins**
W. Rouncivell, S. Imrie, G. Howell, and A. Meintjies, *SRK Consulting, South Africa*
- 12:00–12:20 **Satellite based full life cycle monitoring of tailing storage facilities**
N.C. Steenkamp, S.L. Goosen, and P.J. Bouwer, *Pinkmatter Solutions, South Africa*
- 12:20–13:20 **Lunch**

Session: 3

Session Chairperson:

- 13:20–13:40 **Keynote Address: Current legal dispensation regarding retreatment of Tailings**
C. Stevens, *Werkmans Attorneys, South Africa*
- 13:40–14:00 **Tailings dam risk reduction using accurate pore pressure monitoring**
K.L. Morton, *KLM Consulting Services Pty Ltd, South Africa*

- 14:00–14:20 **An assessment of basic oxygen furnace slag dissolution for application in AMD Dam Remediation using waste products from the steel manufacturing and sugar industries**
T.S. Naidu, D. Chauhan, F. Xiong, C.M. Sheridan, and L.D. van Dyk, *University of the Witwatersrand South Africa*
- 14:20–14:40 **Mid Afternoon Refreshments**
- 14:40–15:00 **A comparison of conventional vs innovative methodologies for water recovery from a tailings storage facility in a dry environment**
J.J. van Rooyen, *SLR Consulting, South Africa*
- 15:00–15:20 **Cut-off systems for Dikes and Tailing Dams in Mining**
S. Schwank, *BAUER Maschinen GmbH, Germany*
- 15:20–15:40 **Preferred tailings retreatment approach to unlock value and create environmental sustainability of the Louis Moore tailings dump near Giyani, South Africa**
N.K. Singo and J.D. Kramers, *University of Johannesburg, South Africa*
- 15:40–16:00 **Close Day 1**

Day 2 – Thursday 13 February 2020

- 07:00–08:30 **Early Morning Refreshments and Registration**
- 08:30–08:35 **Welcome and Opening Address**
J. Baker, *Conference Chairperson*
- 08:35–08:40 **Safety Briefing**
Venue Official
- Session: 4**
- Session Chairperson:**
- 08:40–09:20 **Keynote Address: Thinking differently about tailings**
G. Stuart, *Sibanye Stillwater, South Africa*
- 09:20–09:40 **Rare earth recovery from acid mine drainage tailings dam**
N. Moyo, *University of the Witwatersrand, South Africa*
- 09:40–10:00 **Displacement monitoring with InSAR; an operational approach for tailings dams safety assessments**
A. Jonson, *Optron, South Africa*
- 10:00–10:20 **WIN WIN - A women driven self-help scheme to remove mine dump residue**
K.L. Morton, *KLM Consulting Services Pty Ltd, South Africa*
- 10:20–10:40 **Design of an HDPE-lined platinum tailings facility in South Africa**
L. Spies, *SRK Consulting, South Africa*
- 10:40–11:00 **Mid-morning refreshments**
- 11:00–12:30 **Panel Discussion: Upstreaming or not upstreaming**
- 12:30–13:30 **Lunch**
- 13:30 **Conference Close**