



SAIMM
THE SOUTHERN AFRICAN INSTITUTE
OF MINING AND METALLURGY

SAIMM HYBRID

CONFERENCE

CONFERENCE

MINTEK, RANDBURG, SOUTH AFRICA

28-29 JUNE 2021 — CONFERENCE

30 JUNE 2021 — TECHNICAL VISIT

RENEWABLE SOLUTIONS FOR AN ENERGY INTENSIVE INDUSTRY

PREMA



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Preliminary Programme

Day 1 – Monday 28 June 2021

- 09:00–09:30 **Registration and Early Morning Refreshments**
09:30–09:40 **Welcome and Opening Address**
L. Hockaday, *Conference Chairperson*
- 09:40–09:45 **Safety Briefing**
- 09:45–10:00 **Welcome Address - SAIMM President**
V.G. Duke, *Sound Mining Solutions Pty Ltd*

Session 1: Session Chairperson:

- 10:00–10:45 **Keynote Address: Climate-Smart Mining**
D. La Porta, *World Bank Group, USA*
- 10:45–11:15 **De-coupling the link between energy-intensive and CO₂ intensive – how to capture and track emissions and implement change**
E. Zollner, *EDS Systems, South Africa*
- 11:15–11:30 **Mid-Morning Refreshments**
- 11:30–12:00 **A pragmatic approach to renewables in the metallurgical industry**
J. Malan, *Vuselela, South Africa*
- 12:00–12:30 **Climate finance facility**
M. Sayed, *DBSA, South Africa*
- 12:30–13:30 **Lunch**

Session 2: Session Chairperson:

- 13:30–14:00 **A review of life cycle analysis studies for solar thermal process heat technologies**
L. Hockaday, *Mintek, South Africa*
- 14:00–14:30 **Macro considerations for the implementation of solar solutions in energy-intensive industries**
M. Swart, *Mintek, South Africa*
- 14:30–15:00 **A second life for a white elephant**
D. Bezuidenhout, *Mintek, South Africa*
- 15:00–15:30 **Decarbonizing industry with sunlight and advancements in concentrated solar**
P. Gauche, *Heliogen, USA (remote presentation)*
- 15:30 **Day 1 Conference Close**

Day 2 – Tuesday 29 June 2021

- 08:00–08:30 **Registration and Early Morning Refreshments**
08:30–08:40 **Welcome and Opening Address**
L. Hockaday, *Conference Chairperson*
- 08:40–08:45 **Safety Briefing**

Session 3: Session Chairperson:

- 08:45–9:45 **What's happening in energy and emissions? And what do these changes mean for industries and organizations?**
M. Evans, *Partners in Performance, South Africa*
- 09:45–10:15 **An expanded techno-economic model for the integration of solar energy into zinc production with reference to energy storage technologies**
A. Sithole and L. Hockaday, *Mintek, South Africa*
- 10:15–10:45 **Preliminary investigations on flux requirements of zinc melting in support of solar heated galvanization**
L. Hockaday, R. Hollhumer, K. Ramdhaney, and W.G. le Roux, *Mintek, University of Pretoria, South Africa*
- 10:45 – 11:00 **Mid-Morning Refreshments**

Session 4: Session Chairperson:

- 11:00–11:30 **PREMA**
- 11:30–12:00 **TBC**
M.M. Bantsijang, *DMRE, South Africa*
- 12:00–12:30 **Opportunities for sector coupling of electricity, heat demand and transport in underground mining operations**
P. Klein, *CSIR, South Africa*
- 12:30–13:30 **Lunch**

Workshop: Building partnerships for Renewable Solutions, sponsored by PREMA

- 13:30–14:00 **Building partnerships for Renewable Research in South Africa**
J.D. Steenkamp, *Mintek, South Africa*
- 14:00–14:30 **Building partnerships for Renewable Research in Australia**
- 14:30–15:00 **Building partnerships for Commercial projects**
- 15:00–15:30 **Building partnerships for Commercial projects**