

Final Programme

Monday, 13 March 2023

Pre-Conference Workshop

Sulfuric Acid Catalysis - Key Parameters to Increase Efficiency and Lower Costs

- 09:00–09:30 Registration Opens and Early Morning Refreshments
- 09:30–09:40 Introduction BASF
- 09:40–11:00 **Technical presentation**
 H_2SO_4 market general
 Basic chemistry H_2SO_4 plant
 Typical layout H_2SO_4 plant
 What is a catalyst and how does it work
 How catalyst shape geometry influences converter performance
 Cesium promoted catalyst for low emission processes
 Loading/startup/shutdown/sieving
- 11:00–11:15 **Mid-Morning Refreshments**
- 11:15–12:15 **Technical Services: BOSS100 and spent catalyst analyses**
 Do's and don't's
- 12:15–13:15 **Lunch**
- 13:15–14:45 **BASF latest leading technologies: BASF QUATTRO & X3D™ CATALYST**
 Maximizing performance with BASF catalysts
 Q&A
 Closure

**Workshop is separately bookable*

WORKSHOP SPONSOR



SAIMM
THE SOUTHERN AFRICAN INSTITUTE
OF MINING AND METALLURGY




8TH SULPHUR AND SULPHURIC ACID

13 MARCH 2023 - WORKSHOP
14-15 MARCH 2023 - CONFERENCE
16 MARCH 2023 - TECHNICAL VISIT

THE VINEYARD HOTEL, NEWLANDS,
CAPE TOWN, SOUTH AFRICA

Final Programme

Monday, 13 March 2023

17:00–20:00 **Welcome Networking Cocktail and Early Registrations**
Venue: Exhibition Hall - Summerhouse
The Vineyard Hotel
Dress Code: Smart Casual
Sponsored by 

Conference Day 1 Tuesday, 14 March 2023

08:00–09:00 **Registration Opens & Early Morning Refreshments**
09:00–09:10 **Welcome and Opening Address**
T. Claassens, *Conference Chairperson*
09:10–09:15 **Safety Briefing**
09:15–09:30 **SAIMM Presidential Address**
Z. Botha

Opening Session: T. Claassens, *Metso Outotec*

09:30–10:10 **Keynote Address: Sulphur and sulphuric acid market outlook**
F. Gordon, *Acuity Commodities, UK*
10:10–10:40 **The great Southern African migrations**
S. Sackett, *Southern African Perspectives, South Africa*
10:40–10:50 **Sponsor Presentation**
Begg Cousland Envirotec Limited



10:50–11:10 **Mid-Morning Refreshments**

Session 1: H. Lee, *Chemetics Inc, Canada*

11:10–11:40 **SO₂ abatement at the Polokwane Smelter – The project and the process**
M. Ndlovu¹, G. Marsden¹,
J. Bezuidenhout², R. Hundermark¹,
and G. Erasmus², ¹*Anglo American* and

²*Hatch, South Africa*

11:40–12:10 **Case study: Upgrading sulfuric acid production plants**
V. Igin, E. Grabun, and D. Dolgov,
JSC "NIUIF", Russia

12:10–13:10 **Lunch**

Session 2: T. vd Walt, *Ellessent, South Africa*

13:10–13:40 **Catalytic removal of SO₂ from coal-fired flue gas**
T. Ngwenya¹ and S. Dube², ¹*Mintek* and
³*UNISA, South Africa*

13:40–14:10 **"Do it once and do it right" – Acid plant reliability issues and their cost**
H. Lee, M. King, and U. Shah,
Chemetics Inc, Canada

14:10–14:40 **Selecting the correct protective clothing for hazardous chemical environments**
L. Pearson, *DuPont, South Africa*

14:40–15:00 **Afternoon Refreshments**

Session 3: S. Sackett, *Southern African Perspectives, South Africa*

15:00–15:30 **Large equipment replacement**
T. vd Walt, *Ellessent, South Africa*

15:30–16:00 **An overview of sulphuric acid logistics from a transporter's viewpoint**
Zimbulk Tankers, South Africa

16:00 **End of conference day one**

16:00–18:00 **Time at Leisure**

18:00 **Conference Dinner**

Delegates to meet at the Vineyard Hotel main reception @18:00 for departure to the dinner venue



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Conference Day 2 Wednesday, 15 March 2023

08:00–09:00 **Registration Opens & Early Morning Refreshments**

09:00–09:10 **Welcome and Opening Address**
T. Claassens, *Conference Chairperson*

09:10–09:15 **Safety Briefing**

Opening Session: T. Claassens, Metso Outotec

09:15–09:55 **Keynote Presentation: Road to sustainability – preparing for energy transformation in the sulphuric acid industry**
H. Storch and C. Bartlett, *Outotec, Germany*

09:55–10:25 **Sulphuric acid cooler design, operation and maintenance**
T. vd Walt, *Elessent, South Africa*

10:25–10:35 **Sponsor Presentation** 
Clark Solutions

10:35–10:55 **Mid-Morning Refreshments**

Session 4: S. Coley, BASF, South Africa

10:55–11:25 **Operational readiness and commissioning of the Polokwane SO₂ abatement plant**
M. Ndlovu¹, D. Dippenaar², B. Mrara², R. Pinto¹, R. Sverdrup³, M. Granroth³, and R. Kukiela⁴, ¹Anglo American, South Africa, ²Anglo American Platinum, South Africa, ³Topsoe, Denmark and ⁴GEA Bischoff GmbH, Germany

11:25–11:55 **Achieving the mist eliminator efficiency that you need to protect your plant and the environment**
C. Cassells, *Begg Cousland, UK*

11:55–12:25 **Facing the new challenges of the world with a new catalyst solution**
C. Frandsen, *Topsoe A/S, Denmark*

12:25–13:25 **Lunch**

Session 5: C. Frandsen, Topsoe A/S, Denmark

13:25–13:55 **Emission control for SO₂ offgas and**

digital optimizer for wet ESP

B. Kerstiens, *Metso Outotec, Germany*

13:55–14:25 **DrySeal™: A novel sealing device**
P.C. Bautista, E.H. Almeida, and A.H. Rossi, *Clark Solutions, Brazil*

14:25–14:55 **Non-intrusive, concentration and mass flow measurement of sulphuric acid**
M. Gehl, *Fleximn, France*

14:55–15:25 **Elemental sulphur by reducing SO₂ with CH₄**
Y.K. Rao, *University of Washington, USA*

15:25 **End of technical programme and Afternoon Refreshments**

Thursday - 16 March 2023

Post Conference Visit

This will be a social visit to the V&A Waterfront where delegates will have the opportunity explore and enjoy a variety of attractions and activities, then followed by a hearty lunch at Bistro Sixteen82.

About The V&A Waterfront

There are a wide variety of attractions and activities to enjoy on the property. From cultural landmarks such as the Zeitz Museum of Contemporary Art Africa (MOCAA) to more leisurely pursuits such as a sunset cruise on one of the chartered boats berthed here.

About Bistro Sixteen82

Bistro Sixteen82 is an innovative and interactive wine and food destination. The restaurant sits adjacent to Steenberg's Winery and Wine Tasting Room, and spills into its surrounding indigenous gardens with a terraced dining area leading to reflective water feature, unfurling into views of the magnificent stone mountain and expansive winelands.

SCHEDULE:

09:00 **Depart the Vineyard Hotel, Newlands to the V&A Waterfront**

09:30 **Arrival at the V&A Waterfront (time at leisure for delegates)**

11:30 **Depart V&A Waterfront to Bistro Sixteen82 @ Steenberg Wine Farm**

12:00 **Arrival at Bistro Sixteen82 @ Steenberg Wine Farm**

14:00 **Depart Steenberg Wine Farm and back to The Vineyard Hotel, Newlands**

**Post Conference Social Visit is Separately Bookable*