

UNLOCKING THE FUTURE OF THE AFRICAN MINERALS INDUSTRY: VISION 2040

KEYNOTE SPEAKERS AND TOPICS

Leadership

Davis Cook, CEO,
Research Institute for
Innovation and Sustainability

Innovation

Gary Lane, Co-founder
and Group CEO, NXGN

Professional Development

Nosipho Siwisa-Damasane, CEO
- Richards Bay Coal Terminal
Thabile Makgala, Vice President -
Gold Fields

BACKGROUND

It is recognised that we live in an era characterised by accelerated change, overwhelming complexities and tremendous competition, all of which result in considerable uncertainty about the future. The challenge for young professionals in this time is to create a vision for mining in Africa that will inspire confidence for the future. Young professionals must create a roadmap that describes the steps necessary to realise the vision. In setting the strategic direction to achieve the vision, these are a few of the questions that must be answered:

- What are the policies that should be developed and implemented to transform the status quo to the envisioned mining environment?
- What are the technical solutions that need to be pursued?
- What are the human capital needs that must be satisfied?
- What are the economic conditions required?

This conference will provide a platform for young professionals to interact with peers and industry thought leaders to drive the dialogue towards unlocking the future of the African minerals industry.

HOW TO REGISTER

Complete the registration form and return to anna@saimm.co.za or camielah@saimm.co.za

Take advantage of the Early Bird registration discount.
Book before 2 February 2017 to qualify.

EXHIBITION/SPONSORSHIP

Sponsorship opportunities are available. Companies wishing to sponsor or exhibit should contact the Conference Co-ordinator.

WHO SHOULD ATTEND

This conference should be of value to all professionals across the entire minerals industry value chain, including:

- Exploration
- Geology
- Mining
- Mineralogy
- Geotechnical engineering
- All metallurgical fields
- SHE practitioners
- Industrial relations and community involvement

3rd YOUNG PROFESSIONALS CONFERENCE

9-10 MARCH 2017 | INNOVATION HUB, PRETORIA



Please complete and return to:
SAIMM, P.O. Box 61127, Marshalltown, 2107
Tel: +27 11 834 1273/7 · Fax: +27 11 838 5923 or 833 8156
E-mail: camielah@saimm.co.za (Conference Organiser) or
anna@saimm.co.za (Registration)

PERSONAL DETAILS

Title First Name Other Initials Surname/Family Name

Preferred Name (for use on name badge)

Company Designation

Company VAT Registration (**Compulsory—SA companies**) Order No

Invoice Address

..... Code Country

Tel/Cell: Fax: E-mail:

SAIMM Membership No. Are you a presenting author? Do you require an invitation for visa purposes?

Please note: Non-members who have not previously been members of the SAIMM are entitled to free membership up to 30 June 2018, for attending this Conference.

Would you like to become a member of SAIMM?
Please indicate by (✓ tick)

REGISTRATION FEES — All prices are inclusive of VAT.

Please indicate your choice by (✓ tick).

	Early registration fees Before 2 February 2017	Registration fees After 2 February 2017
Author	R6 999 <input type="checkbox"/>	R6 999 <input type="checkbox"/>
SAIMM Members	R6 999 <input type="checkbox"/>	R8 999 <input type="checkbox"/>
Non Members	R7 999 <input type="checkbox"/>	R9 999 <input type="checkbox"/>
Students/Retired Members	R1 000 <input type="checkbox"/>	R1 000 <input type="checkbox"/>

REGISTRATION ONE DAY: R5 999.00

Delegates may also attend the conference for **ONE** day only
Please indicate (✓ tick) which day you will be attending.
Thursday—9 March 2017 **OR** Friday—10 March 2017

Registration fees include attendance at technical sessions, cocktail parties, all refreshments and lunches, abstract booklet with CD of all papers presented at the conference, and delegate material.

Cancellation and transfer policy:

Delegates unable to attend the event may send a substitute delegate in their place. Please send written details of substitution. Written cancellations must be received more than 10 working days prior to the date of the event and will be liable for 50% of the event fee. Failure to cancel, or cancellation received 10 working days or less prior to the event date, will result in liability for the full event fee.

SOCIAL FUNCTIONS

■ Welcome cocktail party (Thursday 9 March 2017)

Please indicate (✓ tick) for catering purposes if you will be attending this function (included in the registration fee for all fully registered delegates and students).

Payment required for additional guests only R250 each

YES I will be attending (registered delegates) N/C

■ Special requirements — Please advise of any special requirements for diet, health or physical disabilities.

PAYMENT

Please include payment itemised as follows:

Conference registration fee R

Social functions:

Cocktail function R250 (guests) R

TOTAL R

Cheques—Please find enclosed a cheque/money order (in SA rands) payable to SAIMM or

Credit Cards—Please debit (✓ tick) my:

Visa Mastercard American Express Diners Club

Card No.

CVC authorisation (last 3 digits on the back of the card)

Expiry date:

Signature:

Please print name of cardholder:

Payment:

Full payment is due on application for registration. Registration will be confirmed **ONLY** after payment is received. **PROOF OF PAYMENT** with your invoice number reflected must be sent via fax or e-mail to the Conference Co-ordinator.
Delegates who have not paid will not be permitted to attend the conference.

Our banking details are:

Bank: Standard Bank
Branch Code: 000205
Account Type: Cheque Account

Branch: Johannesburg
Account No: 000402974
Swift No. SBZAZAJJ

2 ECSA CPD points will be allocated to all attending delegates

FOR FURTHER INFORMATION CONTACT:

Conference Co-ordinator: Camielah Jardine

E-mail: camielah@saimm.co.za

Tel: +27 11 834 1273/7

www.saimm.co.za

Young Professionals 2017—Abstracts Submitted

The impacts of issuing Section 54 on the Staff Morale Impala Platinum

University of Johannesburg

Design considerations for critical coal measurement points: Towards accurate reconciliation for integrated mine planning

University of the Witwatersrand and University of Johannesburg

Establishment of a mathematical law to correlate fleet size vs equipment availability in open pit mine, using curve fitting techniques. (Case study of Mashamba copper deposit in the Democratic Republic of the Congo)

University of Lubumbashi

Rock fall and bench failure hazards at Mamatwan Mine

University of Johannesburg

Comparison of the effectiveness of the roof bolter and drill rig in the installation of long anchors in hard rock mines

Deep Level Gold Mine

The study of the effectiveness of flexi-bolts as a reinforcement system in a deep level gold mine in South Africa, Deep level gold mine

University of Venda

Application of 'project management approach' on a mining stopping section

University of Johannesburg

Accurate measurement of polarization potentials during electrodeposition of nickel metal from sulfate electrolytes

University of Pretoria

Modelling, design and optimisation of the NIMCIX adsorption column (AC)

Mintek

Strategic Mine Planning approach in the process of operational pushbacks determination using Datamine NPVS Scheduler. Case study of the Mashamba- East open pit mine in the Democratic Republic of the Congo

University of Lubumbashi

Fundamental analysis of the aluminium industry

The University of the Witwatersrand

Designing and building a low cost wireless mobile micro sensor for air quality monitoring

The Copperbelt University

The 'Law of the vital few' as Applied to the Status quo of the Mining Industry towards Sustainability

The throughput of Mining Engineering students in the University of Johannesburg (2013 Cohort)

University of Johannesburg

Removal of Nitrates from Plant Process Solution

Namibia University of Science and Technology

Heat Integration of Multipurpose Batch Plants Through the Use of Multiple Heat Storage Vessels

University of the Witwatersrand

Assessing Environmental Impacts Associated with Dimension Stone Industry in South Africa using Remote Sensing and GIS

Mintek

Graduate Unemployment in the Mining Sector - a South African perspective

University of Johannesburg

The application of process mineralogy on tailings samples from a beach placer deposit containing rare earth elements (REE)

Mintek and University of Witwatersrand

Human capital development and talent retention through workplace placement into the foundry network in the B-Tech dispensation

University of Johannesburg

Challenging Status Quo in the Mining Industry to Alleviate Unemployment Rate, Slow Economic Growth And Poverty In Sub-Saharan Region

University of Johannesburg

Mechanisms and kinetics of Se and Te removal from aqueous solutions using ionic liquid

University of Johannesburg

Slate-microwave interactions for processing purposes: A proof of concept

University of Johannesburg

Beneficiation of Zambian Cassiterite

Mintek

Fabrication processes for Aluminium matrix composites for automotive and mineral processing industries: A review

University of Johannesburg

Investigating the stage-gate model as a research and development implementation process in modernising the South African mining industry

University of Pretoria

Identifying cost factors relating to mining incidents

University of Pretoria

Creating a Technology Roadmap to Enhance Operational Risk Strategies in the Mining Value Chain

University of Pretoria

A study to determine the optimal net present value maximizing mining strategy for different price environments and practical considerations for an open pit iron ore mine

University of Pretoria

Investigating the impact of drilling and blasting on the highwall stability at a complex graben structure of mimosa opencast

University of Pretoria

Impact of inaccurate drilling on blasting outcome

University of Pretoria

Optimisation of opencast pillar mining for the secondary extraction of old pillars from previously mined underground bord and pillar operations

University of Pretoria

Impact of mining rate on seismic activity

University of Pretoria

An evaluation of innovative initiatives for improving energy efficiency of trucks and shovel system

University of Pretoria

A trade-off between mechanised machines and conventional drilling and blasting in underground platinum mines, to establish the required machine design criteria

University of Pretoria

The impact of South Africa's 'use it or lose it' principles on the platinum sector

University of Pretoria

South West Precursor Exploration at Finsch Mine

Petra Diamonds Project Geologist

Mintek's Advanced Process Control Toolbox

Mintek

Determining effective pulverizing time that will reduce the sample preparation time for XRF testing of foundry silica sand

University of Johannesburg

Young Professionals 2017—Abstracts Submitted (Continued)

Increasing mine life and making uneconomical projects viable by using Aachen™ Technology

Maelgwyn Mineral Services Africa (Pty) Ltd

Void filling and water sealing in the Kalahari manganese field, Advisian

Worley Parsons Group

Investigation into the Effect of Repeated and Single Particle Impact on Bond Crushability Work Index Measurement

Mintek

Product development of a high chrome white cast iron to yield consistent physical and mechanical properties

University of Johannesburg

Magnetic properties of chromite spinels, originating from various reefs

Mintek

Water reticulation system at Shamva mine (Zimbabwe)

The University of the Witwatersrand

Possible heavy metals transportation and ground erosion during heavy rainfall in the rural Mhangweni (Tzaneen, Limpopo, South Africa)

University of Johannesburg

Improved recovery of Base Metal bearing minerals from UG3

University of Johannesburg

Holistic growth in stakeholder partnership for transferring technology to the South Africa foundry industry

University of Johannesburg

Optimization techniques: A strategy for improving production scheduling of small scale mining projects

University of Johannesburg

Artisanal mining and small scale processing of sandstones in QwaQwa and its possible impacts on climate change and biodiversity

University of Johannesburg

The Role of Legislation and Management Practices in the Coal Mining Industry on the Olifants River Catchment, South Africa

SRK

Risk-related Aspects of the Geotechnical Model which may Hinder Realistic Determination of Slope Stability

SRK

Embracing Digital Technology to Improve Mining Productivity

Why should the mining industry invest in minerals beneficiation?

Platinum stock investment decision making informed through market analysis: a case study of Anglo American Platinum

The University of the Witwatersrand

Metallothermic production of cement extender from manganese waste slags

Mintek

Africa to Africa information sharing

University of Pretoria

Review of Mintek's experience on sorting Witwatersrand ore samples using the Rados XRF sorter

Mintek

The effect of magnesia and alumina crucible wear on the smelting characteristics of titaniferous magnetite

Mintek

A Comparative Study of the Vanadium Recovery from Titaniferous Magnetite Using Salt, Sulphate and Soda Ash Roast-Leach Processes

Mintek

The effect of CaO to MgO ratio on the smelting characteristics of vanadium bearing titaniferous magnetite

Mintek

Laboratory Scale Testwork and Thermochemical Simulation of the Sulphation Roasting of Copper and Cobalt Concentrates

Mintek

Recovery of Vanadium and Titanium from Discard Titaniferous Magnetite Slag Using a Combination of Roast-Leach and Upgraded Slag Processes

Mintek

A predictive mass and energy model for SiMn production in Submerged Arc Furnaces

Mintek

Quality control on the installation of carbon-based cold ramming paste installation

Mintek, Elkem Carbon

Round Robin Standard Composition: HFeMn Reference Material

Mintek

Slag Jewellery: A Waste to Art Concept

Mintek

Multi-stakeholder collaboration to unlock the potential of deep level mining in South Africa and ensure sustainability within the industry

Chamber of Mines

Considering the effect of pulp chemistry during flotation on froth stability

Mintek

Modelling of uranium leach kinetics

Namibia University of Science and Technology

Production of magnetite from a coal effluent

Mintek

African Sedimentary Phosphates Occurrence and Generic Minerals Processing Approach

Mintek

Cobalt recovery from waste dumps

Mintek

Impurities removal and NaOH regeneration by chemical precipitation

Mintek

Fatigue management in the South African mining industry

University of Pretoria

Cyanide destruction of gold cyanidation pulp with significant nickel content

Mintek

Identification of microbial communities in biological sulphate reduction systems for acid mine drainage treatment

Mintek

Effect of adding Ru in the weld metal of 316L austenitic stainless steel on their microstructural and mechanical properties

University of the Witwatersrand African Materials Science and Engineering Network

*This list of abstracts has been submitted for the Young Professionals Conferences 2017. Extended abstracts and papers will still go through the review process before final acceptance on the programme.