Keynote Speakers:

Dr Robert Cooke  
Paterson & Cooke

Prof. Andy Fourie  
University of Western Australia

Mr James Lake  
SRK Consulting

Dr Ed Thomas  
Fellow AusIMM, Australia

The 10th International Conference on Mining with Backfill will be held in 21–25 March 2011 in Cape Town, South Africa, one of the world’s most surpassingly attractive cities. Since its inception at Mount Isa in 1973, this conference series has been held in a number of major mining countries. It has established itself over the decades as the key event for recording the advances in backfill technology worldwide. Thus, it provides the international exchange of recent innovations and experiences to ensure cost-effective backfill operations, which are often well-balanced compromises between conflicting requirements.

INTER-ACTIVE WORKSHOP ON ‘Best Practices in Mine Backfill Technologies’
Monday 21 March 2011
This event needs to be booked separately.

Presenters:

Interaction of rock mass with in situ minefill
Prof Jamie Archibald, Queen’s University, Canada

Minefill transportation by pipelines
Dr Robert Cooke, Paterson & Cooke, Denver, USA

Managing underground placement and in situ monitoring
Prof Andy Fourie, University of Western Australia, Australia

Integrated systems approach for optimised minefill designs
Tony Grice, Australian Mining Consultants, Melbourne, Australia

SPONSORS:
KEYNOTE ADDRESSES

Backfill’s fickle journey
R. Cooke, Paterson & Cooke, Denver, USA

A framework for designing and managing cemented mine backfill
M. Heliniska, A. B. Fowie*, and M. Fahey*, "The University of Western Australia and †The University of Newcastle, Australia

Are there opportunities for a positive mining legacy?
J. Lake, SRK Consulting, South Africa

Reflections of the founder of the MINEFILL Symposium Series
E. Thomas, Fellow AusIMM, Australia

BUSINESS DRIVERS

Backfilling on a budget—low capital paste backfill injection for small mines or brownfield site remediation
R. Brown* and I. Ahmed†, *Paterson & Cooke and †Golder Paste Technology

Backfill and grouting technology in underground coal mining with use of saline mine waters
J. Palarski, F. Piewa, and G. Strozik, Poland

Fundamental research on brine based fly ash pastes for underground disposal
P.C. Pretorius, J.S. Mahlaba, U. Nzotta, & S. Hareeparsad, Sasol

The impact of the use of backfill on the mine design process in deep narrow tabular platinum mines
P. Kluge, Hatch Africa

MINING WITH BACKFILL

Experimental study fill body non-uniformity for cut-and-fill mining

Research and practice of unclassified tailings filling for extra-large mined-out spaces
C. Zhang*, J. Zhao*, Y. Kuang*, and H. Sun†, *SinoSteel Maanshan Institute of Mining Research Co. Ltd, †Dongguashan Copper Mine, China

The evolution of mining and support strategies with increasing depth and other factors at Black Mountain
J.V. James* and N. Malltino*, *Celatis Geotechnical and †Black Mountain

Review of backfill in deep level seismically hazardous areas
S. Murphy, AngloGold Ashanti

Backfilling and pillar re-mining in potash industry
H. Marx, D. Lack, and T. Filb, K-UTEC AG Salt Technologies, Sondershausen, Germany

CASE STUDIES—MINING

Three fill stoping methods designed to prevent ground water inrush at the Baixiangshan Iron Mine, China
S. Cai*, D. Wu*, W. Wang†, and P. Yang†, *School of Civil and Environmental Engineering, University of Science and Technology, Beijing and †Gushan Mining Company, Ma-Steel Group, China

Backfill practice at Konkola Mine, Chilliaborbwe, Zambia
C. Katongo*, J. Chola*, and A. Mutawa†, *Konkola Mine and †Nchanga Mine, KCM, Zambia

Mining with backfill at Rajpura Dariba Mine
S. Dutta* and A.G. Grice†, *GM Production, India and †AMC Consultants Pty Ltd, South Africa

Mining with backfill at Nkomati mine, a case study
R. Kersten, Independent Consultant

Rock engineering related experiences with the use of backfill on the deepest platinum mine
S.B. Streuders, Northam Platinum Ltd

Case Study: developing cemented hydraulic mine fill at Pyhasalmi Mine
T. Pekkala and L. Kuosmannen, Pyhasalmi Mine, Finland

LABORATORY

Mechanical properties of cemented rock-tailings backfill material

Research on the mechanical properties of mine fill: influences of material particle size, chemical and mineral composition, binder and mixing water
H. Saw and E. Villaescusa, Western Australian School of Mines, Kalgoorlie, Australia

Investigation into mechanical and microstructural properties of Gelfill
M.F. Keremani*, F.P. Hassan†, I. Isagon†, and M. Nokken‡, *McGill University, †Vale-Inco and ‡Concordia University

Variability reduction for hydraulic fill conductivity measured in laboratory
J. Jofre*, A.G. Grice†, W. Bamford*, and J. Styles*, *University of Melbourne, †AMC Consultants Pty Ltd

PREPARATION

Replacement ratio of cement with fly ash in cemented backfill
Z. Wang, Jinchuan Co. Ltd, China

Benefits of paste aggregate fill
S. Wilson and T. Fetherstonhaugh, Golder Paste Technology (Europe) Ltd

CASE STUDIES—PREPARATION

System design and research application on underground backfill plant
J.-j. Wang, B. Yu, and X.-q. Xu, Beijing General Research Institute of Mining and Metallurgy, Peoples Republic of China

The utilization of paste backfill admixtures at Barrick Gold Mines
T. Weatherwax*, R. Evans*, and F. Haleez†, *Barrick Global Shared Services, Canada and †Barrick Kanowna Bell Mine, Australia

Reclaimed tailings pastefill production at Xstrata George Fisher Mine—Operations challenges and solutions
K. Kuganatha, Xstrata Copper

FAILURE MECHANISM

Unique backfill design methodologies using centrifuge technology
E. De Souza, Queens University, Australia

The behaviour of paste fill under dynamic loading and prediction of backfill and backfill stope failure risk in underground methods
D. Antonov, South Dakota School of Mines, USA

Strength behaviour and failure mechanisms of backfill—Rock mass interfaces
S. Manaras, E. de Souza, and J.F. Archibald, Queen’s University, Canada

Unique backfill technology with underground gasification of coal
E. De Souza, Queen’s University, Canada

Backfilling technologies for special conditions in a final repository of radioactive residues
H.J. Roski, W. Schauenburg, and J. Pier, DMT GmbH & Co., Germany

TRANSPORTATION AND WEAR

A new method for test the resistance loss in pipeline transportation of paste filling slurry
J. Wang*, C. Yang*, D. Chu*, J. Zhang*, S. Guo†, and H.-w. Wang†, *School of resources and Environment Engineering, Shan dong University of Technology, †Changchun Gold Research Institute, and ‡Hunan Style Technology, China

Settlement in backfill pipelines: Its causes and a novel online detection method
P. Goosen*, H. Ligner†, and S. Dumbut*, †Paterson & Cooke Consulting Engineers (Pty) Ltd, South Africa, ‡CSIR - South Africa, and †Barrick Gold Corporation (Pty) Ltd, South Africa

Abrasion mechanism and form of backfilling drill-hole pipelines in deep mine
X.-m. Wang, D.-m. Zhang, and Q.-l. Zhang, Central South University, Changsha, China
List of Hotels

The Table Bay Hotel
www.hoteltablebay.co.za. +27 21 406 5790

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Southern Sun The Cullinan
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Southern Sun Waterfront
www.southernsun.com +27 21 415 4000

Victoria & Alfred Hotel
www.vahotel.co.za +27 21 408 7600

City Lodge Waterfront Hotel
www.citylodge.co.za +27 21 419 9450

TECHNICAL VISITS

This event needs to be booked separately.

The technical visits will take place in the Gauteng region. Delegates may choose one of the following tours:

- Gold Fields’ South Deep goldmine: Extensive surface backfill preparation plant operations with quality control laboratory and a unique application of rock engineering to destress the upper orebody prior to mining of multiple reef bands below the backfilled upper layer.

or

- AngloGold Ashanti’s Tautona and Mponeng goldmine: Deepest goldmine on earth showing mining-induced fractures and backfill integrated with mining.

For further information contact:
Julie Dixon · E-mail: julie@saimm.co.za
SAIMM, P O Box 61127, Marshalltown 2107
Tel: +27 11 834-1273/7 · Fax: +27 11 833-8156 or +27 11 838-5923
Website: http://www.saimm.co.za
**PERSONAL DETAILS**

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If joined by an accompanying persons, please insert name.

Are you a presenting author? 

Do you require an invitation for visa purposes?

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**REGISTRATION FEES** — All prices are inclusive of 14% VAT.

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**CONFERENCE**

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Registration fees include attendance at technical sessions, full colour proceedings, CD, cocktail parties, all refreshments and lunches at the conference. Cancellation: A 50% refund will be made for cancellations received before 20 February 2011. No refunds will be made for cancellations after 20 February 2011.

**TECHNICAL VISIT**

- The technical visits will take place in the Gauteng region.
- Delegates may choose one of the following tours:
  - AngloGold Ashanti’s Tautona and Mponeng goldmine or
  - Gold Fields’ South Deep goldmine
- This fee includes all travel and accommodation costs. All delegates will return to Cape Town after the tour unless otherwise arranged.

**ACCOMPANYING PERSON’S PROGRAMME:**

**PARTNER ACCOMPANYING THE DELEGATE, BUT WHO DOES NOT ATTEND THE CONFERENCE**

- Inclusion in social events i.e. cocktail parties and Harbour cruise: R850
- Full accompanying person’s programme which includes all social activities plus tours to the following:
  - Cultural Tour
  - Winelands
  - Shopping: R2 850

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Prepayment is required for all Registration Fees before the date of this event,

**PROOF OF PAYMENT** reflecting invoice number 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.

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