

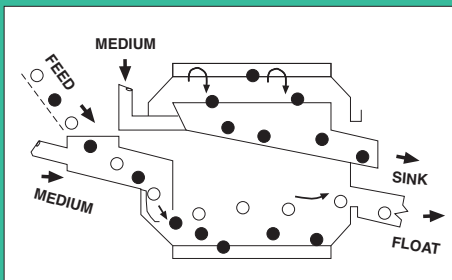
The Southern African Institute of Mining and Metallurgy  
Founded in 1894

are hosting the

# Physical Beneficiation 2010 Conference

4-6 May 2010

CSIR, PRETORIA



## BACKGROUND

Physical beneficiation covers the mineral processing areas of dense medium separation (DMS), gravity concentration, magnetic separation and electrostatic separation. These processes are widely used in the Southern African mining industry.

Dense medium separation (DMS) is critical to the operation of coal and diamond beneficiation plants. It is also utilised in iron ore, manganese, chromite and andalusite beneficiation as well as pre-concentration for PGM-bearing UG2 ore.

Gravity concentration plays an important role in the processing of diamonds, coal, gold, titanium minerals (ilmenite and rutile), zircon, chromite, iron ore and manganese.

Magnetic separation is key to the success of DMS by ensuring efficient recovery and recycle of the dense medium, namely magnetite and ferrosilicon. It features in iron ore recovery circuits and beneficiation of vanadium bearing magnetite. It is an important component in the concentration and separation of ilmenite, rutile and zircon. It is used for removing iron impurities from industrial minerals.

Electrostatic separation is an important component in the concentration and separation of ilmenite, rutile and zircon.

This conference will focus on the operation of DMS, gravity concentration, magnetic separation and electrostatic separation circuits in the Southern African Mining industry. The current status of the technologies and equipment employed will be presented as well as future developments. Operators, equipment and technology suppliers and researchers will participate.

## SPONSORSHIP

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

### For further information contact:

Head of Conferencing,  
Jackie van der Westhuizen, SAIMM,  
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E-mail: [jackie@saimm.co.za](mailto:jackie@saimm.co.za)  
Website: <http://www.saimm.co.za>

## WHO SHOULD ATTEND

The conference should be of value to:

- Plant managers and metallurgists
- Mining company technical personnel
- Equipment suppliers
- Technology development companies
- Industry consultants
- Industry contractors
- Research and academic personnel
- Dense media suppliers

*First Announcement and call for papers*

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## CALL FOR PAPERS

Prospective authors are invited to submit titles and abstracts of their papers, in English. The abstracts should be no longer than 500 words and should be submitted to:

Conference Co-ordinator, Jackie van der Westhuizen  
SAIMM, P.O. Box 61127, Marshalltown 2107,  
South Africa. before 31 August 2009.

Telephonic enquiries may be made at

Tel: +27 (11) 834-1273/7

Facsimile +27 (11) 838-5923 or

E-mail: jackie@saimm.co.za

## TOPICS

### > Coal

DMS, spirals, hindered settling classifiers, magnetite recovery, jigs.

### > Iron ore

DMS, spirals, jigs, hindered settling classifiers, ferrosilicon recovery, magnetic separation (low intensity for magnetite and high intensity for hematite)

### > Vanadium

Magnetic separation for magnetite recovery

### > Heavy Mineral Sands

Spirals, shaking tables, wet low and high intensity magnetic separation, high intensity dry magnetic

separation, electrostatic separation

### > Diamonds

DMS, jigs, ferrosilicon recovery, dry and wet recovery with magnetic separation and X-ray sorting

### > Copper/phosphate

Magnetic separation for magnetite recovery, spirals for baddeleyite recovery

### > Chromium/Manganese

DMS, spirals, ferrosilicon recovery, jigs

### > Gold

Centrifugal concentrators, shaking tables

### > Industrial minerals

High intensity magnetic separation (fluorspar, andalusite), DMS (andalusite)

## KEY DATES

30 September 2009

Submission of abstracts

16 October 2009

Acceptance of abstracts

30 November 2009

Submission of final paper

4–6 May 2010

Conference



**The SAIMM and AMMSA,  
Head of Conferencing, Jackie van der Westhuizen  
Physical Beneficiation 2010 Conference**

P.O. Box 61127, Marshalltown, 2107, Tel: 27 11 834-1273/7

THE DETAILS OF THIS FORM CAN BE POSTED TO US, or E-MAILED TO: jackie@saimm.co.za  
or FAXED TO: 27 11 838-5923 / 833-8156

- I am interested in attending the Conference
- I expect to be accompanied by my partner
- I may be interested in participating in a technical visit
- I intend to submit an abstract of the proposed paper entitled:

Title of paper: .....

Personal details: Name .....

Address .....

Tel: ..... Fax: .....

E-mail: .....