

CLEAN COAL ENERGY

**Clean Coal to Clean Energy Research and Development
to meet Supply and Demand for Africa**

17 and 18 November 2010

Sunnyside Park Hotel, Parktown
Johannesburg, South Africa

**FINAL ANNOUNCEMENT
AND PROGRAMME**

presented by



OBJECTIVES OF THIS CONFERENCE

- Exposure to the latest cutting edge advances in technologies pertaining to the production and use of coal and alternative energy sources
- Presentations from key researcher, developers and innovators
- Platforms for networking, discussion and debate
- Opportunities to evaluate new developments for commercial application
- Cross discipline interaction and information for greater awareness
- Assurance of on-going developments towards a sustainable supply of Clean Energy Technologies for Southern Africa.

BACKGROUND

Indaba 2010 is the 15th Conference in the Series “ The Southern African Conference in Coal, Carbon and Energy Technology”. Held annually, these conferences seek to provide the premier platform in the region upon which global trends and state-of-the-nation reviews are presented along with new and innovative topics in research developments and debatable issues pertinent to coal, carbon, energy and related environmental issues. This is an international event thereby encouraging participation from delegates in all sectors of the community, locally, regionally and abroad.

WHO SHOULD ATTEND

All those in the coal, carbon and energy sectors – whether in research or investigations, manufacturing or designing or in the cutting edge of coal-based energy demand or supply, trade, logistics, environment, project finance or strategic planning.

PROGRAMME*

Wednesday 17th November 2010

07:00 – 07:50 Conference Registration, tea & coffee
07:50 – 08:00 Welcome FFF President

SESSION 1

08:00 – 08:30 PLENARY ADDRESS: Minister TBC
08:30 – 09:00 PLENARY ADDRESS: **CCS in South Africa.** Tony Surrige
SANERI
09:00 – 09:25 **Clean Coal Energy – Black Swan for Africa.** Mike Nightingale
Nightingale Africa Partnership (UK)
09:25 – 09:50 **The effective separation of torbanite from coal using dry coal beneficiation.** Hayley Strydom *TWP Projects*
09:50 – 10:20 Tea & Coffee Break

SESSION 2

10:20 – 10:45 **XRT Dry Coal Sorting - An Update.** Lütke von Ketelhodt
Commodas Ultrasort (Pty) Ltd
10:45 – 11:10 **Optimal yield and cut density prediction of semi soft coking coal in the Waterberg Coalfield, Limpopo Province.** Leon Roux et al *Grooteegeluk Coal Mine*
11:10 – 11:35 **Coal characteristics that lead to abrasion during grinding.** Monnamme Tlotleng *University of the Witwatersrand*
11:35 – 12:00 **A Petrographic reassessment of the Waterberg Coalfield, South Africa.** Nikki Wagner *University of the Witwatersrand*
12:00 – 12:25 **The evaluation of ultrafine coal treatment options at western coal complex.** Vicky van Schalkwyk *Anglo Coal*
12:25 – 12:50 **Sulphur deportment and related impacts in the coal sector: A focus on acid rock drainage.** Lerato Kotelo et al *University of Cape Town*
12:50 – 13:50 Lunch

SESSION 3

13:50 – 14:15 **Tribo-electrostatic separation of Khutala No 2 and No 4 seam coals.** Samson Bada et al *University of the Witwatersrand*
14:15 – 14:40 **Mitigation of acid rock drainage risks associated with coal slurry by means of froth flotation techniques.** Christian Kazadi Mbamba *University of Cape Town*
14:40 – 15:05 **A multi-analytical approach to understanding the chemistry of Fe-Minerals in feed coals and ashes.** Frans Waanders *North West University*
15:05 – 15:30 **The chemical behaviour of added potassium and sodium species during the thermal treatment of a de-mineralized Highveld coal.** Lucinda Klopper *North West University*
15:30 – 16:00 Tea & Coffee Break

SESSION 4

16:00 – 16:25 **The unconventional on-shore gas potential of southern Africa** Oliver Barker et al *Banzi Geotechnics*
16:25 – 16:50 **The effect of an iron oxide catalyst on the characteristics of waxy oil coke** John Clark *Sasol*
16:50 – 17:15 Day's Wrap-up & Discussion
17:15 – Networking Drinks – an opportunity to meet with colleagues whilst the traffic subsides

* Please note that this programme is subject to change by FFF and the organisers

Thursday 18th November 2010

07:30 – 08:30 Conference Registration, tea & coffee

SESSION 5

08:30 – 09:15 PLENARY ADDRESS: Wendy Poulton *Eskom*
09:15 – 09:40 PLENARY ADDRESS: **Recent directions in clean coal science and carbon capture.** Robert Davidson *Clean Coal Centre, UK*
09:40 – 10:05 **The technical and economic potential for the use of algae for CCS in South Africa.** Mike Blenkinsop
10:05 – 10:30 Tea & Coffee Break

SESSION 6

10:30 – 10:55 **A new paradigm for CTL: Small modular plants for making fuel and electricity.** David Glasser et al *University of the Witwatersrand*
10:55 – 11:20 **The influence of particle size and devolatilisation conditions on the CO₂ gasification of Highveld coal.** GL van der Merwe et al *North West University*
11:20 – 11:45 **The study of textural and structural transformations of a high ash South African coal: Comparison between air-blown, oxygen-blown and oxygen-enriched gasification.** Bilainu Oboirien et al *CSIR*
11:45 – 12:10 **The effects of chemical and physical properties of chars derived from inertinite-rich, high ash coals on CO₂ gasification reaction kinetics.** G N Okolo et al *North West University*
12:10 – 12:35 **The influence of particle size and density on the combustion of Highveld coal.** GW van der Merwe et al *North West University*
12:35 – 13:00 **Characterization of particulates produced from chain grate and pulverized coal combustion processes.** Tsebo Molapo *University of the Witwatersrand*
13:00 – 14:00 Lunch Break

SESSION 7

14:00 – 14:25 **Application of the distributed activation energy model to the kinetic modelling of pyrolysis of South African solid fuels.** Qasim Fakir *University of the Witwatersrand*
14:25 -14:50 **Case study of 4 South African high-ash power station coals in a CFBC Boiler: comparable combustion efficiency.** Rosemary Falcon et al *University of the Witwatersrand*
14:50– 15:15 **Potential utilisation of coal beneficiation discard in power generation by applying circulating fluidised bed boilers.** Mohamed Belaid *University of Johannesburg*
15:15 – 15:45 Tea & Coffee Break

SESSION 8

15:45 – 16:10 **Fluidised bed combustion of waste coal in South Africa.** Brian North *CSIR*
16:10 – 16:35 **The realities of the shift from fossil fuels to renewables.** Dave Collins *MAC Consulting*
16:35 – 17:00 Day's Wrap-up & Discussion

POSTERS

- **Characterization of mineral matter in coal using micro-Raman spectroscopy.** Nthabiseng Maledi *University of the Witwatersrand*
- **The path of trace elements in a combustion process: from feed coal to ash products.** Raushaan Mohammed *University of the Witwatersrand*
- **Consideration of criteria required for the selection of a potential underground coal gasification site in South Africa.** Buyisiwe Carol Dzimba *University of the Witwatersrand*
- **Long term effects of CO₂ sequestration in coal seams.** Tshifhiwa Maphala *University of the Witwatersrand*

TECHNICAL ORGANISING COMMITTEE

- Mr Dick Kruger - Chamber/ Mines (Chair)
- Dr Tony Surridge - SANERI
- Mr Chris Gross - Eskom
- Dr Johannes van Heerden - Sasol
- Mr Brian North - CSIR
- Mr Johan de Korte - CSIR
- Prof Quentin Campbell - NWU
- Prof R Falcon - Wits University
- Prof N Wagner - Wits University
- Prof Jen Broadhurst - UCT
- Prof Rick Pinheiro - Riversdale

EXHIBITIONS

An exhibition will take place alongside the conference. Interested parties should please contact the conference secretariat.

SPONSORSHIPS

Several exciting sponsorship opportunities are available to industry members. Sponsorship packages are available as well as sponsorship on specific items.

All sponsors will be offered branding promotion whether this is inclusion of your logo on the sponsored item or as banner displays in the dining hall or venue. The Conference Secretariat has details.

ACCOMMODATION

Accommodation in nearby hotels or B&Bs is available. Please contact the conference secretariat.

CONTACT DETAILS

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REGISTRATION

Title Surname First Name

Postal address

Telephone Mobile Fax

Email (please print clearly)

Company or Organisation
(to be invoiced)

Your company's VAT registration number

Purchase order number

Your position in the company

Accounts contact person

Accounts tel/fax number

Accounts email address

Company's Postal Address

Are you a member of the Fossil Fuel Foundation? YES NO

I would like to attend the cocktail party on 17 November. YES NO

Specific dietary requirements

REGISTRATION FEES

Full Registration fees for the conference include: Delegate folder, name tag, entrance to all sessions, abstract book & programme, CD of presentations, tea/coffee, lunches & cocktail party.

PLEASE ENTER YOUR REGISTRATION CHOICES CLEARLY

	17 Nov	18 Nov
FFF/GSSA Member R1 850+VAT=R2 109 per day	<input type="text"/> R	<input type="text"/> R
Non Member R2 100+VAT=R2 394 per day	<input type="text"/>	<input type="text"/>
Speaker No Charge on day of presentation	<input type="text"/>	<input type="text"/>
Academic/Pensioner/ Full time Student R750+VAT= R855 per day	<input type="text"/>	<input type="text"/>
Cocktail Party – No charge		
TOTAL PAYMENT	<input type="text"/>	

I have read and understood the terms and conditions

Signed:

Date:

Terms and conditions: Please note if your registration fees have not been paid by your company by **10 November 2010**, you will be personally liable for the full amount which must then be paid by **16 November 2010**. Attendance is **STRICTLY** subject to prior payment.

An invoice will be issued on receipt of a completed registration form. Please forward a deposit slip or transfer form with the invoice number as a reference is required as proof of payment.

Please fax this form to +27 11 728 1675 or email to robbie@rca.co.za or techevents@mweb.co.za

CANCELLATION OF THIS REGISTRATION - Cancellation may be made in writing prior to 10 days before the conference; a 25% administration fee will be charged for cancellations made within 10 days of the conference. No refund or credit note will be issued if written cancellation is not received timeously. You will then remain liable for full payment of the invoice. **Registrations are transferable.**