

# Newsletter

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## A message from our chairman

Greetings to all our SACPS members, I would like to welcome all our new members that have joined since our last newsletter and we trust that you will find the society beneficial to you and look forward to your continued membership.

This newsletter is intended to inform all our existing and potential members of events occurring within the society and the coal processing industry as a whole. We welcome your feedback, suggestions, etc for future newsletters. Please follow us on Twitter, LinkedIn and Facebook, check out our website, LinkedIn and Facebook page for up-to-date information on events and happenings within the society and

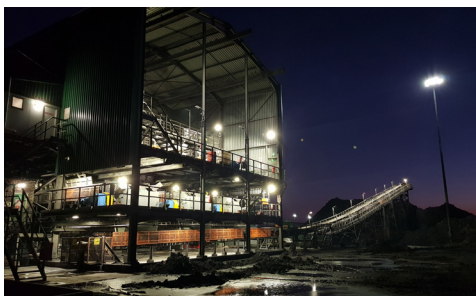
of course we appreciate feedback and suggestions from all members.

The national lockdown has put many events in jeopardy, either being cancelled outright or postponed to a later date.

COVID-19 has impacted our lives and we are allowed an opportunity to do things differently. Technology has come to our rescue, enabling working from home with the use of video calls and online meetings. Coal has become the king of commodities again and we need to extract the greatest value from this opportunity. Stay safe in this trying time and we will overcome this.

## Technical meeting January 2020

Our first technical meeting of the year was held on 30 January 2020 at CTC in Emalahleni. Jaco Scholtz from the Pentalin Group of Companies presented on "Dense Medium Beneficiation of Fine Coal - the South African Experience" and Kobus du Plessis from Malvern Engineering presented on "Reduction on OPEX by Optimising Separator Circuits in Coal Preparation Plants".





**Our aim is to provide a forum for the exchange of knowledge related to coal processing by means of meetings, conferences, seminars and colloquia.**

### Objectives and goals of SACPS

Create forums for the exchange of knowledge related to coal processing by means of technical meetings, conferences, seminars, etc.

To further the education and understanding of coal processing by Society members and industry personnel.

To foster co-operation with appropriate educational institutions and other similar organisations for the furtherance of coal processing knowledge.

To distribute accumulated funds to support the objectives above.

## Technical Meetings and Presentations

Technical meetings are held every two months at Colliery Technical College (CTC) in Emalahleni every two months and very interesting presentations are given by members of the Southern African Coal Processing Society.

January's meeting consisted of presentations given by Jaco Scholt, CEO of Pentalin Group of Companies and Kobus Du Plessis, Sales Director of Malvern Engineering.

Jaco's presentation entitled "Dense Medium Beneficiation of Fine Coal - the South African Experience" discussed the fact that spirals are used in most mines on fine coal which restricts in achieving low cut points; efficient separation in high-gravity environments and cut point control.

Challenges experienced are overloading of discard magnetic separator under low yield conditions and dense medium cyclones separated by size and not density at 24D and there is a reduced speed of cyclone feed pumps to operate at 9D.

Kobus du Plessis from Malvern Engineering presented on "Reduction on OPEX by Optimising Separator Circuits in Coal Preparation Plants". His presentation covered the classification of magnetic susceptibility as well as the basics of magnetic forces in a magnetic separator.

He elaborated that the process of magnetic separation is complex due to various factors which included magnetic susceptibility, magnetic and non-magnetic loadings as well as particle size distribution.

The calendar for the year is available on the website. The technical meeting for 26 March 2020 was cancelled. With South Africa currently under lockdown, in accordance with the directive issued by The President of the Republic of South Africa, the committee of the Southern African Coal Processing Society (SACPS) convened a special meeting (online) to assess the current situation, and map a route forward, with regard to the Annual Dinner/Dance. After deliberation, considering the current situation, and potential future infections, it was decided to cancel the Annual Dinner/Dance scheduled for 15 May 2020.

We understand that you, our members, will be disappointed, however, these are unprecedented times and human lives are important. We cannot take any risk with any possible infections and deem this the safest option. We will ensure that our next Annual Dinner/Dance celebrates our triumphs over this difficult period. If you have any questions or comments, please contact our secretary, Gerda, at [info@sacoalprep.co.za](mailto:info@sacoalprep.co.za).

When you come to the end of your rope, tie a knot and hang on.

Stay Safe.

Yours in safety

SACPS Committee





# Conferences and other events

## Feedback from the ICPC 2019 - 13 to 15 November 2019, New Delhi, India

The 19th International Coal Preparation Congress (ICPC) was held in New Delhi, India from 13 – 15 November 2019. Papers that were presented were thought provoking and interesting.

A number of papers are featured in the Coal Processing Society of India (CPSI) Journal. We will share a few abstracts here and you can download the ICPC journal from our website.

### Coal Preparation in Poland - Ireneusz Baic, Wieslaw Blaschke and Bronislaw Gaj from Lukasiewicz Research Network

The article presents the current state of the structure of hard coal enrichment plants in Poland, taking into account the capacity, the range of grain enrichment and the type of equipment used. These data were presented in a tabular format for each Polish Coal Company operating on the Polish market. The article also presented a simplified flow sheet of steam and coking coal enrichment system. Based on the presented data, the planned needs and trends were described in terms of increasing production efficiency, minimising water consumption and safety of workers.

Poland also has rich deposits of lignite, the so-called brown coal. Balance resources amount to 23.385 million Mg and developed resources amount to 1.276 million Mg (5.46 % of balance resources). Every year in Poland, 63.06 million Mg of lignite is mined (Balance Sheet 2018). These coals currently account for 32 % of electricity generation in Poland. The extracted lignite belongs to the so-called soft coals and therefore it is not enriched by mechanical processing.

### Coal industry in Russian Federation - Dr Boytsova Alexandra - Saint Petersburg Mining University, Russia

Russia is one of the world leaders in coal production (4,5% of world coal production) it ranks sixth after China, the United States, India, Australia and Indonesia. Russian coal industry nowadays includes 176 operating coal mines, among them 57 underground and 119 open pit mines. Coal processing is carried out at 65 preparation plants, as well as on the sorting units at the coal companies. Critical technologies for the coal industry:

- a) robotic coal mining technology without the constant presence of people in the workspace;
- b) coal bed degassing and mine methane utilisation technologies;
- c) preparation and deep processing of coal and other solid fuels into fuel and non-fuel products with high added value.

### Implementation of Clean Coal Technologies to comply with “New Emission Norms” for Thermal Power Plants - Priorities for Way Forward - AV Krishnan and R Srikanth - National Institute of Advanced Studies, Indian Institute of Science Campus, Bengaluru, India

Coal-based Thermal Power Plants (TPP) are the backbone of the power generation utilities in the country. Coal-based TPPs constitute around 56% of the total installed capacity and generate approximately 74% of the electricity generated in India. Considering the high pollution and resource impacts of TPPs the Ministry of Environment, Forest and Climate Change (MoEF&CC) notified the Environment Protection (Amendment) Rules on December 5, 2015, with a two-year window for TPPs to meet these standards (MoEF&CC, 2015). When implemented, these norms are expected to have positive environmental and health benefits by leading to lower pollution levels from TPPs. However, compliance with the new emission norms would require retrofitting existing TPPs with various Pollution Control Technologies (PCTs) in the form of auxiliary systems to control SO<sub>2</sub>, NO<sub>x</sub> and PM emissions. To ensure 24x7 supply of electricity, India's Central Pollution Control Board (CPCB) and Central Electricity Authority (CEA) finalized the time schedules for all TPPs to comply with these emission norms by December 2022 (CPCB, 2018).

While the implementation of the new emission norms is a progressive move, there are various issues and challenges which need to be addressed to ensure a smooth rollout of the new norms.

## One day technical conference

Another event on our calendar is our one day Technical Conference which will be held in August 2020 at The Ridge Casino and Conference Centre. in Emalahleni, Mpumalanga. More information on the conference will be communicated after the lockdown period has ended.



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**COAL PROCESSING SOCIETY**

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