

Issue 37 – November 2018

THE MEDIUM (since 2010) FOR QUICK ELECTRONIC COMMUNICATIONS WITH THE MEMBERS OF THE SACAA

INTRODUCTION

This issue focusses on some research challenges and news on what has been happening in the association to ensure all the members of South African Coal Ash Association (SACAA) remains informed.

SACAA website - www.coalash.co.za Please assist in keeping it current.

- Membership news
- Ash Research Academic v/s Commerce
- Who's Who and What they do? We interviewed Albert Da Serra one of our Manco members

Kind regards

Mark Hunter SACAA GM

MEMBERSHIP NEWS

Reflections of 2018 – The South African Coal Ash Association only exists for the benefit of its members and the advancement of ash beneficiation and usage by them. It is good to sometimes reflect on the achievements during 2018.

- The Ash Conference and site visit to Lethabo power station held during February, was a huge success with over 100 delegates in attendance and 10 papers presented
- The updating and redesign of the SACAA website
- The ASPASA/SACAA joint roadshow to Lephalale and the site visit to Medupi power station
- The 100% payment of membership subs was great, and the membership certificates issued
- Being considered by Department of Environmental Affairs (DEA) to facilitate the Phakisa Waste Initiatives and the signing of the Terms of Reference
- The appointment of Deidre Herbst as President and Ruth Terblanche as Deputy has allowed for SACAA for the first time being led by generators of the ash as well as them being ladies.
- The attendance at the AGM was excellent and shows the interest in our association

MEMBERSHIP NEWS

Honouring our long-standing members – The South African Coal Ash Association decided it is important to recognise our long-standing members and from extracts of the records the following awards were handed out by Deidre Herbst (President) at the November 2018 Council meeting.

- ✤ 30 Year Certificates: Richard Kruger, Bruno Penzhorn and Dieter Heinichen
- 20 Year Certificates: William Burtone, David Gale and Johan van Schalkwyk
- 10 Year Certificate to Mark Hovy

There are several companies that qualify, but due to name changes and lack of historic data, these will still be actioned once we clarify the dates and information.



David Gale



Dieter Heinichen



Mark Hovy



William Burtone



Johan van Schalkwyk

Unfortunately, both Dr Richard Kruger and Bruno Penzhorn were honoured in their absence and their certificates will be forwarded to them. *Congratulations* to all the recipients!!

Thanks – Thank you to those members who have made payments for their 2018/19 subs already. Much appreciated.

ASH RESEARCH – ACADEMIC vs COMMERCE



Reflecting, after having hosted a few joint DEA/SACAA kick-off meetings for the various Chemical and Waste Economic Phakisa work streams as well as the interesting questions and participation of the delegates, one realises that the challenges of creating new jobs and the beneficiation of utilising more ash are going to take longer than realised.

While the Phakisa workshop completed a lot of the planning work, by means of a documented 3 feet plan, the detail and resources to exercise the execution is going to require the correct manpower and clout to make it happen.

Attempting to unpack the current economic climate in South Africa together with the Presidents objectives to grow the economy, one cannot realise the negative impact that the state capture allegations and corruption has had on all the business sectors, where revenue losses exceed trillions of Rands and the job losses expanding day by day. Notwithstanding all the negative situations, SACAA has made a commitment to support the DEA to facilitate the Ash Waste Stream emanating from the Phakisa initiative to formulate a sustainable "WASTE ECONOMY" for South Africa.

The establishment of SACAA way back in 1987 was formulated by academics, producers and business coming together and using research and practical solutions and innovation to make products from the ash waste resource. This required the involvement of senior management in business together with academics to experiment and test several applications and solutions for ash beneficiation. The producers were very much part of the process as they were then being assisted to reduce the waste being dumped. Eventually this became so successful that the producers allowed for infrastructure to be constructed at the generating plants to extract and commercialise the ash as a commodity. This arrangement continued mostly in the cementitious industries where one would say the ash product reached a near saturation point for those applications.

Research in ash has continued for new applications however, the major energy producer for various reasons no longer participated until recently and most of the new research and commercialisation was undertaken by universities sponsored by industry and the ash merchants, in liaison with the relevant government departments. SACAA together with its members provided the assistance and facilitated numerous local conferences, technical talks, research co-ordination and hosting of ash related events. Participation at International conferences by South African delegates continued where several papers were presented on ash by academics and industry. Unfortunately, all this research has not been properly documented or recorded in a single library or database, resulting in it being scattered amongst the institutions and in some cases with individuals. It will be incumbent

on the Phakisa work streams having to solicit all avenues to access the approved research to prevent re-inventing the proverbial wheel (ash research).

With the South African environmental legislation becoming more stringent, compliance to the requirement for dumping became very costly. This has resulted in the re-focus of generators to get involved in ash commercialisation and research was ramped up, however, in most cases this research remained in theory with little new beneficiation taking place.

One of the challenges observed during the Phakisa waste initiative is the question of intellectual property caused by the non-disclosure agreements signed between the university and the company who has paid for the research, or by industry in the hope of creating a market for profitability. Further to this is the problem that a lot of the research has not been published or driven into any commercial operations. While one can understand that some research has been undertaken to ensure environmental compliance or risks assessments, there is a large percentage of research that has been undertaken as a potential solution to benefit new applications or waste reduction.

Considering that the Phakisa workstreams must go about the business of identifying new ash products, ash uses and ash application to stimulate a "WASTE ECONOMY", it is going to be imperative to utilise the completed research to reach the objectives. In the interests of South Africa, it is going to be very important to adopt and utilise the existing research and prototype acceptance tests in the stimulation of more ash usage. The development of these new business ventures will also need to stand the test of being competitive within the rules of competition commission as well as being fair, transparent and creating empowerment obligations as part of the process.

So, to assist SACAA in this role, we are inviting all our members and associates to share as much research information, recipes and success stores, that we may capture and use to get the ash economy working. Baseline measurements are also in the process of being formulated. We are also studying other countries strategies and incentives or legislation that they have used to stimulate their ash utilisation projects.

Just to recap on the streams in the broadest terms. They are:

- Brick and Block (Includes cementitious)
- Soil Amelioration and Sludge
- Mine rehabilitation and Acid Mine Drainage (AMD)
- Roads and Embankments
- Exportation of ash

An appeal is made to all to please get involved in the streams that you feel will best add value, even if it is only on an ad-hoc basis. If you have any information or suggestions please share, as the time to assist South Africa in dealing with job creation within the Waste Economy in NOW!!!

26 000 new jobs from Ash can make a big difference



Everyone counts!!

NEWS - VIEWS - INTERVIEWS



Introduction to Albert Da Serra - SACAA Manco member

It's a privilege to have joined the SACAA Manco team, I am looking forward to adding value to this institution through my experience in the industry.

I am a family man, married for 13 years to the most wonderful lady and blessed with two beautiful children. We enjoy the outdoors and action sports together.

My experience has been in the construction and quarrying industry for the past 14 years. I joined SA Block and Clinker Supplies, subsidiaries of Afrimat, in 2012.

I started as SA Block Operations Manager, then moved to Clinker Supplies during 2016 also as Operations Manager. I currently have two portfolios, Clinker Supplies Operations as well as Sales and Marketing for SA Block and Clinker Supplies. As a result of this exposure I gained extensive experience and knowledge in the reclamation of clinker ash dumps as well as the utilisation of ash. General business management on all aspects of the organisation is where my key strengths lie.

I have the following qualifications: (Bcom) Marketing Management completed with University of Pretoria; USB Senior Management Development program completed with University of Stellenbosch; SCT41 & 42 Concrete technology and construction completed with The Concrete Institute.

Under the mentorship of Bruno Penzhorn who has been a SACAA executive for over 30 years, I am now able to contribute in the Phakisa waste stream economy for the betterment of South Africa, particularly in the brick and block and alternative building solutions.

Albert da Serra

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INTERNATIONAL CONFERENCE



Early update on the World of Coal Ash (WOCA) 2019 conference:



13 – 16 May 2019 St Louis, Missouri USA

This conference is jointly facilitated by the American Coal Ash Association (ACAA) and the University of Kentucky, Centre of Applied Research. The conference attracts over 1000 delegates from across the world.

They have early bird registration at discounted prices.

The call for papers and/or posters is open, so are we going to see someone from South Africa presenting?

http://worldofcoalash.org/register/

2019 CALANDER

Please diarise the SACAA meeting dates for next year:

- 13 February 2019 Council meeting and Technical Talk
- 15 May 2019 Council meeting and Technical Talk
- 14 August 2019 AGM and Technical Talk
- 13 November 2019 Council meeting and Technical Talk

This will be the final Ash Flashes for 2018, and the SACAA Manco would like to wish all our members a *Merry Christmas* and a blessed festive season to you and your families.

ALL FOR NOW

Regards