

## Message from the President - Otis Nyandoro

SACAC's new website has been launched ([www.sacac.org.za](http://www.sacac.org.za)), and will form the basis of a more efficient communication strategy to add value to our members. It is envisaged that the website would play an important role in ensuring that members are kept up to date with future events and that queries and recommendations can be responded to quickly.

A rolling banner at the bottom of the website provides a window to SACAC's membership. Several enhancements are envisaged, to provide more exposure to SACAC members and the opportunity to provide some background to the activities they are involved in. Contact the secretariat if your banner is not currently displayed and with any ideas or recommendations.

## In this edition

### Past events

The SACAC AGM was held at Forum Homini on 26 February and was well attended by our members and associates.

### Future events

SACAC has some exciting workshops lined up for 2016, read more on page 3 or keep an eye on our newly launched website.

### IFAC News

See details on the IFAC MMM 2016 in Vienna and the IFAC 2017 World Congress in Toulouse.

### Member updates

The 2016 SACAC EXCO was appointed at our AGM on 26 February 2016, and we warmly welcome our new members..

## Past SACAC events



### SACAC AGM

The SACAC AGM was held at Forum Homini on 26 February and was attended by 23 delegates from 17 organisations. Dr. Margret Bauer provided an interesting and informative break to the formalities with her talk that included topics such as 'Industrie 4.0' and 'Low Cost Sensing'. The AGM was followed by a scrumptious lunch at the Roots restaurant.



### SACAC's annual Control Systems Day

SACAC's annual Control Systems Day was hosted by Dr. Lidia Auret at Stellenbosch University on 12 November 2015. An interesting range of presentations in the fields of metallurgy, aviation and medicine were presented, stimulating fruitful discussion. The Control Systems Day provides an opportunity for postgraduate and final year students from various universities to network and present their work to industry and their peers. This event will be repeated in November 2016.



### Energy Optimisation and Management through Control

An afternoon-session on Energy Optimisation and Management through Control was held at the University of Pretoria on 16 October 2015. Presentations from vendors, users and academia provided valuable insights on the topic.

### Functional Design Specification Workshop

A Functional Design Specification workshop was hosted by Alfred Schroder at NMMU on 14 October 2015. This popular practical workshop was well received, and an effort will be made to host more workshops outside of Gauteng similar to this one.

## Future SACAC events

### Modern Techniques and Software for Process Control Workshop

Invitations have gone out for the one-day interactive, CPD Accredited, Modern Techniques and Software for Process Control Workshop. This will take place at Mintek on 21 July 2016, and will be presented by Dr Kevin Brooks (BluESP) and Dr Loutjie Coetzee (Mintek). The workshop will cover the fields of linear and nonlinear model predictive control. Each topic will be presented by an expert in the field, and the delegates will be given the opportunity to do practical sessions using advanced controllers.

### Observer Design workshop

An Observer Design workshop will be hosted by Derik le Roux at the University of Pretoria on 12 August 2016. This workshop will discuss the tools available to an engineer to design linear and nonlinear observers for industrial processes.

### Automation and the 4th Industrial Revolution workshop

A workshop on Automation and the 4th Industrial Revolution will be hosted by Prof. Ian Craig and Laurentz Olivier at the University of Pretoria during September 2016. More details will follow closer to the time.

### Nonlinear Optimisation workshop

A workshop on Nonlinear Optimisation is planned for 2016. The Workshop will be presented by Dr Otis Nyandoro and will discuss the principles necessary to apply nonlinear optimisation in practice. More details will follow once the date has been set.

## IFAC News

### Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing

The 17th IFAC Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing takes place in Vienna, Austria from 31 August – 2 September 2016.

A detailed programme is available at: <http://www.ifacmmm2016.org/>

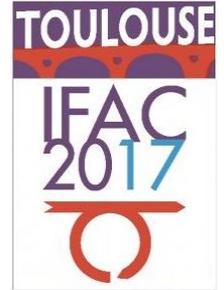


The poster for the 17th IFAC Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing (IFACMMM2016) in Vienna, Austria. It features a photograph of the St. Stephen's Cathedral in Vienna. The text on the poster includes the event title, dates (August 31 – September 2, 2016), location (Vienna, Austria), and logos for IFAC (International Federation of Automatic Control) and ACIN (Automatiken & Control Institute).

## 20th IFAC World Congress

The 20th IFAC World Congress will take place in Toulouse, France from 9 – 14 July 2017, following the 19th IFAC World Congress SACAC hosted in Cape Town in 2014. The paper submission deadline is 31 October 2016 and members are urged to participate in this prestigious event.

For more information: <http://www.ifac2017.org/> or follow IFAC on Twitter (@IFAC\_Control) and Facebook (<https://www.facebook.com/IFACcontrol/>)



### TOULOUSE, FRANCE | 9-14 JULY 2017



## Control Conference Africa

CCA 2017 will take place at Lilliesleaf, Johannesburg from 7 - 8 December 2017. The conference specifically addresses control engineers from all African countries as well as overseas Africans, working in control, who would like to reconnect with their roots. The paper submission deadline is 2 June 2017.



For more information, see the First Call for Papers at: <http://sacac.org.za/pages/cca/>

## Member update

SACAC would like to warmly welcome our new EXCO members, as well as those returning for a second term.



John Burchell is a process control specialist at Lonmin where he is currently leading a project for the advanced process control upgrade of their base metal refinery. His interests include plant-wide control, model predictive control, machine learning, and image processing. Before joining Lonmin, John worked for a number of start-ups involved in developing novel software systems for processes monitoring and control.



Deon Sabatta obtained his B.Eng in Electronic Engineering and BSc. Hons in Applied Mathematics (both cum laude) from the Rand Afrikaans University in 2004 and his M.Eng (cum laude) from the University of Johannesburg in 2007, where he also received the chancellor's medal for best master's degree in engineering. In 2015 he obtained his doctoral degree from ETH Zurich, Switzerland, working with the Autonomous Systems Lab (ASL).

He is currently at the Electrical and Electronic Engineering Department at the University of Johannesburg where he lectures Analog Electronics and Control Systems; and continues to work on his research into mobile robots. His research interests include computer vision, machine learning, simultaneous localisation and mapping (SLAM), and control theory as related to robotics.

## Stop Press

### **Sponsorships to attend IFAC events**

SACAC just announced R100 000 in sponsorships to enable its members to participate in international IFAC conferences. Sponsorship money is made available for flight tickets and conference registration fees up to a maximum of R20 000 per recipient. One [sponsorship](#) is made available for presenting a paper at any upcoming or past IFAC conference during 2016. Four [sponsorships](#) are made available to present a paper at the 20th IFAC World Congress in Toulouse, France in 2017. Details on application deadlines and the evaluation processes are available on our [website](#).