

PRESIDENT'S ANNUAL REPORT FOR 2013

2013 has been a challenging year for the South African Council for Automation and Control. We have been largely externally focused, with efforts centred on the organisation of the 19th world congress of the International Federation of Automatic Control (IFAC) to be held in Cape Town in August. Our relationship with, and knowledge of the work of, IFAC have been vastly improved by the fact that Professor Craig is president of IFAC. Our role in facilitating contact between researchers, practitioners, vendors and suppliers in the automation and control domains remains strong, and has indeed been strengthened by the formation of a sub-committee to study the university/industry interface in our profession.

SACAC has maintained its presence as the foremost South African body fulfilling member organisation's needs in the automation and control fields. Planning for the future continues, even as we prepare for the largest conference we have ever been involved in.

EVENTS

Several SACAC activities took place in 2013:

SACAC presented a repeat of the interactive workshop on modern techniques and software for process control on 29 August at Mintek in Johannesburg. The workshop covered the fields of linear and non-linear model predictive control, and was attended by thirteen delegates. The workshop was presented by myself and Dr. Loutjie Coetzee, and involved hands on use of leading edge software. At the conclusion of the workshop the attendees gained a thorough understanding of both the modern techniques and software that is used in implementing advanced control schemes. Our sincere thanks goes out to Loutjie for organising the event.

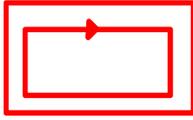
The SACAC control systems day was hosted by the Department of Electrical Engineering at the University of Cape Town on the 27 November 2013. The day was a great success and attracted around forty attendees from a several universities and industry. Some fourteen papers were presented in areas ranging from unmanned aerial vehicles, state and parameter estimation for mill circuits, actuator fault detection and isolation, to a lizard inspired robot. This event highlighted the high quality and diversity of research being undertaken in the areas of control and automation at South African universities and gives us an indication of what is in store for next year's International Federation of Automatic Control (IFAC) World Congress. Many thanks to Robyn Verrinder of UCT for organising this event.

IFAC 2014

Preparations for this prestigious event have successfully continued, with much hard work being put in by the National Organising Committee(NOC), chaired by Dr Fernando Camisani Calzolari and the International Paper Committee co-chaired by Professors Ed Boje Xiaohua Xia. Paper submission has now closed, all papers reviewed and the authors informed of the reviewer decisions. The number of accepted papers has met our expectations, meaning that the not only do we expect a successful congress from a content perspective, but also from an economic one,

In this regard we are grateful to our sponsors, which include Exxaro, Festo, Anglo American and of course our platinum sponsor the Technology Innovation Agency.

Apart from the papers themselves, a number of workshops are planned for the week before the conference. Details of these will be on the website when finalised.



South African Council for Automation and Control

Marketing has been progressing well with an appealing and user friendly website having been set up. Six newsletters having been sent out since May 2013, flyers distributed at leading conferences such as the Chinese, European and American Control Conferences. Furthermore, the conference is being marketed locally to achieve a high local representation at the conference. In this regard the assistance of our sister professional organisations such as SAIChE, SAIMC and SAIEE is being sought.

African Agenda has also been working closely with élan communications to host the Process-Expo Africa 2014 exhibition in conjunction with the conference at the Cape Town ICC.

Plans for the social events are in place, and a number of technical tours have been arranged.

OPERATIONS

Together with the events, we have continued to consolidate the organisation, based on our primary objectives:

- strengthening SACAC's relationship with IFAC,
- improving co-operation between industry and institutions,
- developing capacity within the automation industry
- providing value for our members and
- developing a strong balance sheet to support the 2014 Congress preparations.

In support of these objectives, a number of continual actions have been undertaken, and include;

- updating of the membership information database
- revision of the SACAC website and addition of a google words facility
- addition of a Linked In group which is used to inform members of events
- the workshops which aimed at providing both educational and practical value to the attendees, and received positive feedback,
- making effort to broaden our relationships with fellow associations

On the last point we have had robust discussions with SAIMC on their aim to have control engineering declared the tenth discipline. At this time we are not supporting this effort, mainly due to the implications for universities. We however will continue discussing this important issue, both internally and with other interested parties.

As a SACAC initiative a sub-committee was formed to look at the industry/university interface. This sub-committee consists of Dr Margret Bauer, Mr Carl Sandrock and I. We collected information on all control courses lectured in the country, as well as conducting a survey in industry on their perceptions. The results were very interesting and have been written up as a paper to be presented at IFAC 2014. The results have been shared with SAIMC.

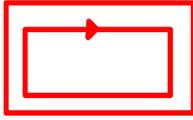
RELATIONSHIP WITH IFAC

We are currently enjoying a strong relationship with IFAC, as several of our members are participating on various IFAC committees, either as members, chairs or the president!

FINANCES

Our Honorary treasurer and Honorary Secretary, Kobus Oosthuizen, is holding a firm hand of control over the SACAC balance sheet. We have employed a new accountant, Ms Riana Oranje, who has been successful in chasing up membership dues. We have however had to suspend the membership of some members who have not paid subscriptions for a number of years.

OUTLOOK FOR 2014



South African Council for Automation and Control

Apart from the World Congress, SACAC has planned several activities for 2014. These include a workshop in April entitled "Optimisation For Engineering Applications –A Hands On Introduction". This workshop will be held by Professor Brian Wigdorowitz, Dr Margret Bauer and Dr Otis Nyandoro of Wits, and will utilize the GAMS modelling system.

Other workshops planned for the year include "Dynamic Modelling for Control System Design", presented by myself, Carl Sandrock of Up and Dr Grant Grobbelaar of Optinum. Autonomous mining remains a topic that we are sure will interest members. We also intend to have a seminar on EtherCAT - Ethernet for Control Automation Technology - an open high performance Ethernet-based fieldbus system. We encourage members to both support these events, as well as provide suggestions for topics that are of specific interest to themselves.

SACAC would like to thank all the current executive committee members for their continued support during the year, and to Jean McKenzie, Riana Oranje and Kobus Oosthuizen for their dedicated and sometimes less visible behind the scenes secretarial, administration and finance management support.

To all the members of SACAC, thank you all for your ongoing support of the organisation. I look forward to seeing SACAC continue to grow and to host a magnificent 19th IFAC World Congress in 2014. Good luck to the new EXCO for this most exciting year.

Kevin Brooks
28 February 2014