



University of Pretoria lecturer at the forefront at Windhoek conference

Mr Saurabh Sinha, a senior lecturer from the Department of Electrical, Electronic and Computer Engineering at the University of Pretoria, was the co-chairperson of a peer-reviewed conference held in Windhoek, Namibia in September 2007.

→ Mr Saurabh Sinha



The eighth IEEE Africon 2007 was held under the auspices of the Institute of Electrical and Electronics Engineers (IEEE) – the biggest professional society of its kind in the world with around 370 000 members internationally, including about 70 000 in Africa, Europe and the Middle-East (IEEE Region 8).

“The IEEE has the obligation to promote networking between various engineers, not only in South Africa, but – due to the translational nature of the organisation – in various other countries as well. Thirty-five countries were represented at this specific conference,” says Saurabh Sinha.

Mr Saurabh Sinha – currently also Vice-Chairman of the South Africa section of the IEEE – was the co-chairperson of Africon 2007 along with Prof Nico Beute of the Cape Peninsula University of Technology.

“Africon 2007 is a regional conference of the IEEE that took three years to organise. We wanted to involve as many people as possible from Africa in arranging the conference. This is reflected in the fact that there were 90 people on the organising committee – many of whom were connected virtually,” says Sinha.

Around 275 papers were submitted for presentation at the conference, of which only 199 were accepted. From the perspective of the University of Pretoria, academics from the Department of Electrical, Electronic and Computer Engineering, the Graduate School of Technology Management and the School of Information Technology submitted 33 (around 15%) of the accepted papers. Sinha believes that this is not unusual. The University of Pretoria is, after all, a major research leader in the southern hemisphere.

“This was a general conference and involved general categories such as engineering in medicine and biology, electron devices, circuits and micro-electro-mechanical systems (MEMS), energy and power systems and communication and signal processing.

“It was decided not to have a single theme for this conference, but to keep

the theme broad to attract more people. The networking component of the conference had a stronger impact than the technical component and therefore the greater focus was on bringing technical people together,” says Sinha.

Lead editors of some influential accredited technical journals also attended the conference, and certain papers were selected from the conference. It was planned that the authors of such selected papers should be contacted again to upgrade their papers for submission to a peer-reviewed technical journal. Saurabh Sinha submitted five papers to the conference and hopes to be invited to resubmit at least three of the papers to accredited journals. “This is an important priority for our microelectronics research group and for our University,” he says.

“There are also huge possibilities of building and renewing relationships with representatives from some 50 institutes (academia and industry) who attended the conference. There was a sharing of information and also the possibility of joint research initiatives and funding for these joint initiatives,” he says.

According to Sinha, a further benefit from the University’s perspective is that there was cooperation with other researchers. He says that through this cooperation, top international external examiners in their fields can also be attracted to become involved in the University of Pretoria.

“The President of the IEEE, Prof Leah Jamieson, attended the conference and the University’s association with this conference, where we were able to attract someone of her quality, is a big deal. It shows that the University also has the standard to attract someone of her calibre,” says Sinha.

Companies who become involved in the conference continue their involvement long after the conference has ended. This is another huge advantage, according to Sinha. His Excellency, President Hifikepunye Pohamba, who also attended the conference, said: “Namibia, like many other African countries, will not achieve higher levels of economic

development and prosperity if the people are not trained in critical scientific, engineering and technological fields that have potential to accelerate the process of socio-economic advancement.” President Pohamba viewed the hosting of such a conference in Namibia as a significant achievement as it will enhance the country’s profile as a committed partner in the advancement of development.

“When the National Research Foundation (NRF), for instance, calls for bilateral cooperation between two governments – especially in Africa – one always needs a contact on the other side and events like this facilitate contact-building,” he says.

Saurabh Sinha says certain papers were highlighted at the conference because they question how certain things are done and hint at how certain areas of technology are going to change in the years to come. These papers were isolated as plenary papers.

An example of this was the technical keynote address by Dr Daniel Foty, the President of Gilgamesh Associates, LLC, in the USA.

“One of the things he focused on was next-generation wireless networks (WiMax). He questioned whether this technology is really going to be successful as there is a trade-off between data rate, range and power requirements. He asked whether other technologies such as millimetre wave – something that has been overlooked in the past – could be a viable alternative,” he explains.

“Essentially,” says Sinha, “engineers are problem-solvers and this conference brought together people who, over the three days, shared and exchanged knowledge that could facilitate problem-solving.”

→ The 7th Symposium on Non-linear Control Systems (NOLCOS) of the International Federation of Automatic Control (IFAC) was held at the international conference centre of the Council for Scientific and Industrial Research (CSIR) on 21 August 2007. **Prof Fernando Camisani-Calzorlari** of the Department of Electrical, Electronic and Computer Engineering was the Chairperson of the National Organising Committee.



→ **Prof Josua Meyer** (right), Head of the Department of Mechanical and Aeronautical Engineering, was recognised as a fellow of the American Society of Mechanical Engineers (ASME). This society has 127 000 members and fellowship of the society is awarded in recognition of significant engineering achievements and contributions to the engineering profession. Presenting him with his certificate is **Prof Calie Pistorius**, Vice-Chancellor and Principal.