


April 2011



UNIVERSITY  
OF  
JOHANNESBURG



# Faculty of Science NEWSLETTER

**Achievements by  
Staff and Students**



THIS ISSUE FOCUSES ON THE  
ACHIEVEMENTS BY STAFF AND STUDENTS



23rd Colloquium of African Geology (CAG23) took place at UJ

## Achievements by Staff and Students

### Geoscientists to scrutinize Africa's geological history

For the first time in South Africa, the 23rd Colloquium of African Geology (CAG23) took place in January 2011 at the University of Johannesburg (UJ).

No less than 400 geoscientists from African, European, American, Australian and Asian countries reflected on the challenges, threats, obstacles, advances and opportunities in different aspects of geosciences, earth science, research and education in Africa and around the world at 16 scientific sessions and workshops.

The CAG23 opening ceremony took place at the UJ's Soweto Campus. The South Africa Minister of Science and Technology, Naledi Pandor delivered the opening address at this special occasion. All the scientific sessions, short courses, workshops and exhibitions took place on the University's Auckland Park Kingsway Campus.

"The conference enhanced the understanding of the mitigation of a large range of natural hazards that affect society. CAG23 has evolved over the last 47 years and became the foremost African geology forum, internationally. It also plays a crucial role in stimulating scientific

collaboration and networking within African countries and the rest of the world," according to Prof Hassina Mouri, a senior lecturer and researcher at the UJ's Department of Geology.

CAG23 was hosted by UJ in cooperation with the University of Witwatersrand, the Geological Society of South Africa, the Mineralogical Association of South Africa and the Nuclear Energy Corporation of South Africa under the auspices of the Geological Society of Africa, aims to develop research and education related to the earth sciences in Africa.

### Inauguration of the South African Cell Death Society

Cell death is essential for a plethora of physiological processes, and its deregulation characterizes numerous human diseases. The in-depth investigation of cell death and its mechanisms constitutes a formidable challenge for fundamental and applied biomedical research, and has tremendous implications for the development of novel therapeutic strategies.

The SA Cell Death Society (SA CDS) promulgates a better understanding of the mechanisms of cell death, establishing communication among the various branches of the research and communicating and coordinating the application of research findings. To ensure a local platform to disseminate research findings and foster collaborations, the inaugural SA CDS symposium was

hosted at the Two Oceans Aquarium in Cape Town, 10<sup>th</sup> – 12<sup>th</sup> January 2011. The symposium was organized by Dr Marianne J Cronjé from the Department of Biochemistry, University of Johannesburg and was assisted by Dr Lester Davids from UCT.

Many *cell death* researchers were brought together to share research findings and had the opportunity to establish or strengthen collaborations. Keynote lectures were presented by Prof Richard Lockshin and Prof Zahra Zakeri, both from NY and director and president of the International Cell Death Society, respectively. The status of the meeting was further enhanced by colleagues attending from various SA universities, other states in the USA, Switzerland, Singapore and Czech Republic.



Symposium delegates: Inauguration of SA Cell Death Society



Prof Bruce Cairncross



Dr Anthony Magee

## First prize photographic competition

Prof Bruce Cairncross, Head of the Department of Geology, won first prize at the 27<sup>th</sup> Annual Tucson Gem and Mineral Show photographic competition held in Tucson, Arizona. He entered a picture he took of a macro specimen of topaz on quartz from Pakistan. The specimen measures 16 cm. A panel of judges decide on photographs of mineral specimens in various categories including microscopic crystals and macro specimens.

## SAAB Bronze Medal

The South African Association of Botanists (SAAB) awarded the SAAB Bronze Medal to Dr Anthony Richard Magee at a function in Grahamstown on Wednesday 19 January 2011.

The medal is awarded annually for the best PhD thesis in Botany in South Africa.

Dr Magee graduated in 2009 with a thesis entitled *Generic relationships of selected African genera of Apiaceae*. The promoter was Prof Ben-Erik van Wyk (Department of Botany and Plant Biotechnology, UJ), with Prof Patricia Tilney (of the same Department) and Prof Stephen Downie (University of Illinois, USA) as co-promoters. In his thesis, Dr Magee showed that Africa is not only the *Cradle of*

*Mankind* but also the *Cradle* of large parts of a cosmopolitan plant family known as the Apiaceae or Umbelliferae. Seven research papers on this work alone have already appeared in international journals.

Dr Magee is currently working as a senior researcher at Kirstenbosch in Cape Town. He is a research associate of the Department of Botany and Plant Biotechnology, and contributes to ongoing collaborative research work in the Apiaceae and other families. Dr Magee was recently appointed on the editorial board of the South African Journal of Botany, an international journal managed by Elsevier.



Geology macro specimen of topaz on quartz from Pakistan



Ms Lindy Esterhuizen

## Pannar Seed floating trophy and book prize of R1500 for best student paper presentation

Ms Lindy Esterhuizen, from the Department of Biochemistry, Faculty of Science, received the Pannar Seed floating trophy and book prize of R1500 for best student paper presentation at the 47th Congress of the South African Society for Plant Pathology (SASPP) at the Berg-en-Dal Conference Centre in the Kruger National Park. Her abstract entitled *Epidemiology and molecular characterisation of Tomato curly stunt virus and its insect vector Bemisia tabaci*

in South Africa was accepted for an oral presentation. As she is in her final year of her PhD, her presentation was a summary of the work she did on *Tomato curly stunt virus and its insect vector in South Africa*.

The SASPP aims to promote Plant Pathology in southern Africa and for that reason provides the opportunity for plant pathologists to meet and exchange information of mutual scientific interest at a biennial congress.

## The South African Academy for Science and Arts MT Steyn Medal

The South African Academy for Science and Arts announced that the MT Steyn Medal for Scientific and Technical Achievement for 2011 had been awarded to Prof CW Holzzapfel, an Emeritus Professor in the Department

of Chemistry, University of Johannesburg.

The Academy describes the award as follows: The medal is one of the most important awards made by the Academy for leadership on the highest level in an area of science and

technology. The award is the crown on a life time career, and can only be awarded to a person once in his/her life time. The award reflects the candidate's creative contributions towards the development, organization and continuous expansion of a branch or branches of scientific or technology, where such contribution has played a significant part in the advancement of science and technology, and had also been to the benefit of the country.

Prof Holtzapfel had been attached to the Rand Afrikaans University, and now the

University of Johannesburg, as Professor of Chemistry, a position he held until his retirement in 2002. He was intensely involved in the teaching and training of both undergraduate and post-graduate students, acting as promoter for 35 MSc and 34 PhD students and publishing widely. His involvement also extended to numerous elements of the organisational and operational activities of the University. He held NRF research grants from 1984 to 2000 and held NRF ratings of A (1993) and A+ (1998), a clear indication of his standing in the research community.



Prof Holzzapfel

## The International Student Festival Globalize This: Health

Matlhari Baloyi, a MSc student in the Enerkey Sustainable Mega-cities Programme, Department of Geography, Environmental Management and Energy Studies, has been invited to participate in The International Student Festival in Trondheim (ISFiT) 2011, in workshop 7. ISFiT

2011 has received about 4300 applications from 147 nations and only 450 of the most motivated and dedicated students were selected

The conference took place in Trondheim, Norway, from 11 February to 20 February 2011. The title of ISFiT 2011 is *Globalize This: Health*.

The ISFiT Foundation consists of the Norwegian University of Science and Technology (NTNU), Sør-Trøndelag University College (HiST), the Student Society of Trondheim, "Studentsamskipnaden i Trondheim" (SiT), Trondheim local authority and Sør-Trøndelag County Authority.



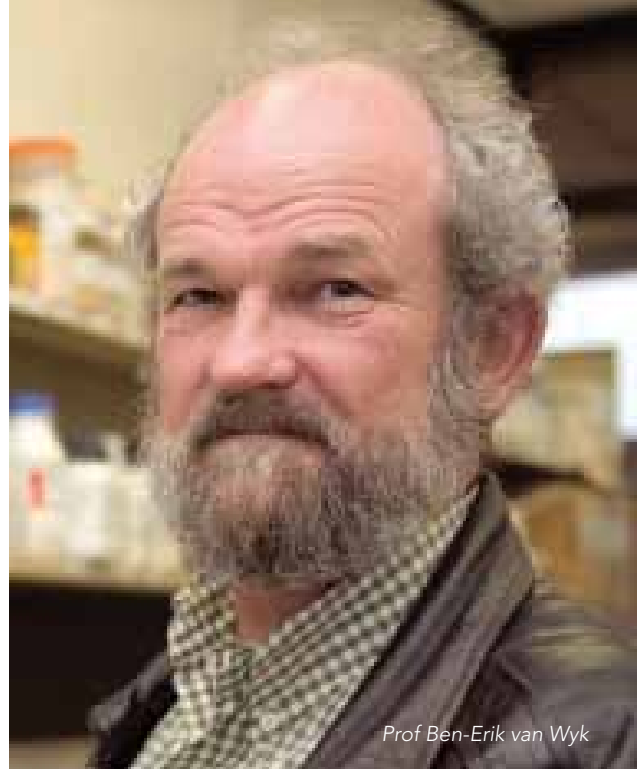
## The South African Academy for Science and Arts Medal of Honour

The South African Academy for Science and Arts awarded the 2011 Erepenning van die Fakulteit Natuurwetenskappe en Tegniek (Medal of Honour from the Faculty of Science and Technology) to Prof Ben-Erik van Wyk from the University of Johannesburg's Department of Botany and Plant Biotechnology.

The Medal of Honour is awarded for contributions and achievements with respect to the promotion and development of a specific study field and is only awarded

in extraordinary cases. Prof Van Wyk received this prize in recognition of the work he has done in Namaqualand and in the Karoo on medicinal plants and on the conservation of indigenous knowledge about the uses of plants.

Prof van Wyk has been attached to the Rand Afrikaans University (currently the University of Johannesburg) since 1984. He specializes in the classification and naming of plants (plant taxonomy) and is author of several books, mainly on medicinal plants and useful plants.



Prof Ben-Erik van Wyk



IT Mark Heydenrich (middle),  
Mteto Nyati (Managing Director Microsoft SA),  
Clifford De Wit (Developer and Platforms  
Group Lead of Microsoft)



## The Microsoft Imagine Cup South Africa 2010 competition

The Microsoft Imagine Cup South Africa 2010 competition, which showcases a number of top Information Technology projects as developed by university students from all over South Africa, was held at the Farm Inn in Pretoria from 6 to 8 December 2010.

In a show of continued active involvement in such a prestigious national event, a total of seven projects developed by Honours and Third-year students at the

Academy for Information Technology, Faculty of Science were entered into the flagship Software Design competition category. Furthermore, Mr Kieron Ekron, the Academy's winner of Imagine Cup South Africa 2009, was a member of the panel of judges which include professionals and researchers from the CSIR, industry (local and abroad) and other tertiary institutions.

Under the mentorship of Professor Ehlers, Mr Mark Heydenrych's Project Blaze

was placed second in the main competition of the Imagine Cup, Software Design. While announcing the winners, the MC noted that the decision between first and second place had been very close.

In addition to Mr Heydenrych receiving a certificate to attend a training course and a monetary gift card, the Academy has also been awarded with a ML110 G6 server.

Adding to Mr Heydenrych's accomplishment, the Imagine Cup Interop Award was bestowed upon Mr Jean-Louis Kroon whose Project PS under the guidance of Professor

Coetzee was acknowledged as being the best example amongst all 38 projects present of how various platforms could achieve integration. Mr Kroon was awarded a monetary gift card with a second server for the Academy.

Mr Michael Dowse, a third-year student managed to pick up a third award for the Academy for his contribution to the Microsoft Opinion Poll. Amongst all students who participated, Mr Dowse's suggestions were regarded as being the most constructive. He was awarded with a Microsoft X-Box gaming console.

## Public Lectures 2011

<b>20 JANUARY:</b>	Prof Martyn Poliakoff	D Les 103	13:00 – 14:00
<b>22 FEBRUARIE:</b>	Prof Rui Krause	B Les 103	13:00 – 14:00
<b>17 MARCH:</b>	Prof Steven Karataglidis	B Les 104	13:00 – 14:00
<b>12 APRIL:</b>	Prof Jan Kramer	B Les 104	13:00 – 14:00
<b>24 MAY:</b>	Dr Eduard Venter	D Les 103	13:00 – 14:00
<b>16 AUGUSTS:</b>	Dr Bobby Tait	Council Chambers	13:00 – 14:00
<b>20 SEPTEMBER:</b>	Prof Hartmut Winkler	Council Chambers	13:00 – 14:00
<b>4 OCTOBER:</b>	To be confirmed	Council Chambers	13:00 – 14:00



## Next Issues

This Newsletter focusses on Chemistry and the next Newsletter on Chemical Technology. Thereafter it will be:

- MAY** Geology | Geography, Environmental Management and Energy Studies
- JUNE** IT | Applied Mathematics | Statistics | Mathematics
- AUGUST** Biochemistry | Zoology | Botany | Food Technology | Biotechnology
- SEPTEMBER** Physics



The **FACULTY OF SCIENCE** is committed to the practice of science and technology, with the explicit aim of achieving outcomes which are crucial in the promotion of SET (Science, Engineering and Technology).