UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

ATMOSPHERIC RESEARCH WORKSHOP

Participants at the ATMRESET Workshop.

UKZN's Atmospheric Research Group, Atmospheric Remote Sensing Education and Training (ATMRESET) in the School of Chemistry and Physics, hosted a workshop on the Westville campus titled: "Laser and Optics in Atmospheric Remote Sensing".

The workshop, which featured a course on Laser Safety, was organised to coincide with the celebration of 2015 as UNESCO's International Year of Light and Light-Based Technologies.

The workshop was funded by the African Laser Centre and the National Research Foundation (NRF) which made it possible for participants working in the field across South Africa to attend the workshop free of charge.

A total of 25 students attended the Laser Safety course while 45 took part in the workshop, including participants from Ethiopia, Zimbabwe, Algeria and Réunion.

There were also participants from institutions and organisations such as the South African Weather Service (SAWS), UKZN, the University of Pretoria, North-West University and Stellenbosch University.

ATMRESET organised the event to increase knowledge-sharing among academics and atmospheric science practitioners in the region, particularly postgraduate students.

Presenters included Professor Sivakumar Venkataraman of ATMRESET, Professor Hassan Bencherif of the University of La Réunion, Dr Traiche Mohammed of the Centre de Développement des Technologies Avancées (CDTA) in Algeria, and Ms Paulene Govender and Dr Yaseera Ismail of UKZN.

Lectures on light and light-based technologies were given on the second day of the workshop by UKZN Physics staff members, Professor Jon Rash, Professor Thomas Konrad and Professor Francesco Petruccione. Dr Aletta Karsten of the National Metrology Institute of South Africa (NMISA) provided the safety course training.

Topics covered during the training included remote-sensing techniques in atmospheric sciences, the use of LIDAR and SUN-PHOTOMETER technologies and Solar Radiometry instrumentation at UKZN, and Laser Space communication.

Participants commented after the workshop that the event had been very well organised and useful in exposing students to the capabilities of instruments used for collecting data in this field.

This is the second workshop of this nature to be organised by ATMRESET, and the one of the first events at UKZN to celebrate the International Year of Light and Light-Based Technologies. The group hopes to be able to organise more such workshops in the future.

'The workshop provided tremendous benefit to UKZN, with 13 students from various disciplines in the Institution taking part,' said Venkataraman.

'Hosting an event like this has also given the ATMRESET team greater motivation to excel in the research and training they provide, as well as the initiatives they are a part of in this field,'

According to the group, these kinds of international collaborations and research networks in atmospheric and climate research are increasingly important in the context of significant global changes.

Christine Cuénod