NMMU hosts top global change conference

THE brightest young "green" minds in South Africa will gather at Nelson Mandela Metropolitan University this week (1 to 4 December) to share, discuss and debate ways of sustaining the planet.

About 300 postgraduate students and their mentors from across all disciplines will attend the 2nd Global Change Conference to seek solutions for complicated challenges around climate, water, food security, pollution, the environment, transformation, heritage and the like.

The conference is part of a ten-year Global Grand Challenge designed by the Department of Science and Technology as a project for global science, and is co-sponsored with the National Research Foundation.

In a bid to "walk the talk", the student delegates will attend a paperless conference, check programmes and abstracts on their mobile phones and listen to the keynote speaker, the world's leading economist Australian Robert Costanza, via Skype.

"Nelson Mandela Metropolitan University wants to show that it is doing things differently. Going paperless and bringing students from all disciplines to work together shows we are a leader in new ways of integrating and communicating our work," says Prof Maarten de Wit, Chair of Earth Stewardship Sciences at NMMU.

The conference - Global Change Research in South Africa: towards integration across disciplines, sectors and scales — at NMMU's South Campus will also open its debate and plenary sessions to the public.

"The Global Change Conference is very much about understanding and managing our natural and social systems and preserving our cultural heritage. We don't want to think and act separately, but rather work in a comprehensive way – it's about a transdisciplinary approach," says Dr De Wit, whose discipline links the hard sciences with the humanities in tackling challenges affecting the earth and humanities' future.

The four-day conference also includes field trips to expose students to the rich bio-diversity of the Eastern Cape.

"It's another reason why NMMU was selected to host the conference – we are able to offer so much. We are so rich in diversity and able to offer so much within 'spitting distance' of our five campuses.

"From our marine to Karoo landscapes, our plants and animals, our conservation programmes, our ways of exploring new energy technologies and our cultural history, including newly-emerging paleosciences to 'read' the archives of early humans that are so richly preserved along the coast and in caves of the Eastern Cape."

This, he adds, "will surely bring home to young people across the country that Nelson Mandela Bay is a unique place to come and study".

And, it seems, a brave enough university to debate controversial topics.

As such, one of the debates - "Environmental concerns are playing too much of a role in shaping South Africa's future energy system" - will be open to the public during the Tuesday evening session at 7pm in Building 123 on South Campus.

This topic covers an important aspect of global change, today, tomorrow and for the foreseeable future: access to reliable energy.

Prof de Wit says it will stimulate questions about how we can best cope with uncertainties and the present lack of confidences to deliver energy to all in South Africa.

"Does the gap between an expectation of no uncertainty and the recognition that science always comes with uncertainty create a dead-end for dealing with critical environmental and energy issues? And how can scientists and science communicators best bridge this chasm?"

Over three days, students from all academic institutions across the country will present more than 170 papers ranging from agriculture to carbon cycles, conservation, education, mining, shale gas, transformation, shale gas, climate change, urban and rural development, economics, oceans, technology, health and ethics in a comprehensive approach to global change.

Some of the interesting topics include:

- Socio-economic and political implications of the controversial Karoo shale gas by Barry Morkel of NMMU
- Combating South Africa's acid mine water crisis using bio- and geo-engineering solutions by Thakane Ntholi of NMMU

The conference is part of a bigger drive implemented by the government four years ago to seek solutions to the challenges of global change.

"We are not steering our Global Commons on the right path. The question is how do we get back on the right path? My vision is to get young people involved in this and drive it forward."

Prof de Wit, other NMMU academics, environmentalists and conservationists, are hopeful that the conference will offer students, their mentors and other invited experts, the opportunity to come together in effecting positive change.

The students will also be exposed to top minds Prof David Bell, NMMU's new Research Chair in Earth Systems Science at NMMU, NMMU biodiversity researcher Prof Richard Cowling and systems ecologist Dr Bob Scholes during the conference.

"I'm excited about the connections that may be formed in going forward," says the founder of Africa Earth Observatory Network (AEON).

For the full programme, go to: http://globalchange2014.nmmu.ac.za/

For those who wish to attend the student debate and plenary sessions by keynote speakers, should email mel@icesolutions.co.za to ensure their inclusion

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