**CELEBRATING THE UNIVERSITY OF PRETORIA'S WATER-RELATED KNOWLEDGE - 28-29 OCTOBER, SANLAM AUDITORIUM**

**PRELIMINARY PROGRAMME**

**Day I - 28 October**

**07:30-08:30 Registration (Refreshments)**

**08:30-10:00 Opening Session**

08:30-08:40 Welcome and introduction, Prof A Strőh

08:40-08:50 Opening address, Prof S Burton

08:50-09:20 Keynote address: “Research in biological water treatment over two decades", Prof Burton

09:20-09:30 Introduction to the Water Institute and the conference, Prof H Rautenbach

09:30-10:00 Applied Drama “H2O - Manzi for sho! “

**10:00-10:30 Refreshments**

**10:30-11:45 Session I: Water Quality and Human, Animals and Environmental Health (1)**

10:30-10:50 Enteric viruses in South African water and food sources, Prof M Taylor

10:50-11:10 Integrating water chemistry, biological assays and health effects for endocrine disruption in aquatic and terrestrial sentinel species in an urban nature reserve, Prof R Bornman

11:10-11:30 Endocrine disrupting chemicals (EDCs) and a relevant battery of screening assays to determine estrogenic activity in water sources for South Africa, Dr N Aneck-Hahn

11:30-11:50 Malaria Vector Control: Implications for water quality and health, Prof C de Jager

11:50-12:10 Panel Discussions (Q&A)

**12:10-13:30 Session II: Water and Agriculture**

12:10-12:30 Responsible municipal sludge beneficiation through agricultural production: matching nutrient supply to crop uptake, Prof JG Annandale

12:30-12:50 The prospects of future potato water use and production in a changing climate, Prof JM Steyn

12:50-13:10 Learning through the use of a wetting front detector, Dr JB Stevens

13:10- 13:25 Panel Discussions (Q&A)

**13:25-14:00 Lunch**

**14:00-15:40 Session III: Water Quality and Human, Animals and Environmental Health (2)**

14:00-14:20 Developing chromatography and mass spectrometry methods for the analysis of organic environmental pollutants, Prof E Rohwer

14:20-14:40 Diversity of *Escherichia coli* associated with aquatic environments, Prof SN Venter

14:40-15:00 Potential effects of groundwater quality constituents on livestock and rural communities, Prof N Casey

15:00-15:20 Overview of Olifants River aquatic animal health issues investigated over the last 10 years – a multi-disciplinary and multi-institutional approach, Dr JG Myburgh

15:20-15:40 Panel Discussions (Q&A)

**15:40-16:50 Session IV: Water Resources**

15:40-16:00 The current status of fog water harvesting in South Africa, Prof J Olivier

16:00-16:40 Downscaling of summer rainfall over South Africa using three convective parameterisation schemes in the WRF model, Prof H Rautenbach

16:40-16:50 Panel Discussions (Q&A)

**16:50-17:00 Summary of Day I**

**17:00 Cocktails**

**Day II - 29 October**

**08:30-09:00 Registration (Refreshments)**

**09:00-10:00 Session V: Water Education**

09:00-09:20 Practice-oriented education and training in sanitary engineering (ProESE), Prof EMN Chirwa

09:20-09:40 Studies of water as an ideal vehicle to train postgraduates, Prof JWH Ferguson

09:40-10:00 Panel/group discussions

**10:00-10:10 Refreshments**

**10:10-11:40 Session VI: Water Utilisation, Conservation and Energy Production and Management**

10:10-10:30 Shattering the illusions related to ks influence in determining the hydraulic capacity of pipelines, Prof SJ van Vuuren

10:30-10:50 Asset integrity management in a water utility context, Prof PS Heyns

10:50-11:10 A process systems engineering approach to water, Prof T Majozi

11:10-11:30 Energy generation utilizing conduit hydropower, Mr M van Dijk

11:30-11:50 Panel Discussions (Q&A)

**11:50-13:10 Session VII: Water, Nutrition and Food Safety**

11:50-12:10 Nutritional water productivity: An emerging approach for tackling malnutrition in South Africa, Prof F Wenhold

12:10-12:30 Microbiological hazard characterisation of irrigation water; irrigated fresh fruit and lettuce, Prof EM Buys

12:30-12:50 Evaluation of irrigation water quality and the impact on the microbiological safety of fresh fruit and vegetables, Dr E du Plessis

12:50-13:05 Panel discussions (Q&A)

**13:05-13:30 Lunch**

**13:30-15:10 Session VIII: Water Resource Management – Society, Cultural History and the Economy**

13:30-13:50 Geoarchaeology and Water History in the middle Limpopo Valley and at Great Zimbabwe, Prof I Pikirayi

13:50-14:10 Assessing the gender responsiveness of national water policies in Africa – designing a methodology, Prof E Salo

14:10-14:30 The role of scenarios in the South African water sector, Dr M Claassen

14:30-14:50 Groundwater-related research in the Department of Geology, Mr MA Dippenaar

14:50-15:10 Panel discussions (Q&A)

**15:10-15:20 Refreshments**

**15:20-16:35 Session VIIII: Water Resource Management – Policy, Strategy, Economics and Climate**

15:20-15:40 The challenges of rescaling South African water resources management: Catchment Management Agencies and Interbasin Transfers, Dr M Bourblanc

15:40-16:00 Research on water economics and policy at CEEPA, Prof R Hassan

16:00-16:20 Resilience to climate change and climate variability: what may it take? Prof C Vogel

16:20-16:35 Panel discussions (Q&A)

**16:35-16:45 Summary of Day II**

**16:45-17:00 Closing Remarks**