

CWRR Graduates 2018

We are proud to celebrate our brand new Doctors and Masters of Science! CWRR's PhD Graduates for 2018 are Dr. Shaeden Gookol and Dr. Jean Namugize. The MSc Graduates are Maqsooda Mahomed (cum laude), Megan McNamara, Sli Mtshali, Tracey Pearton and Shuaib Suleman. Congratulations to all and wishing you a prosperous future!

Centre members editing Water SA

CWRR Associate Dr. Nick Rivers-Moore is now joining Dr. Michele Toucher and Dr. Gordon O'Brien as a subject editor of Water SA. Prof. Graham Jewitt is part of the editorial board.

Zip lines move the Centre forward

On 26 March the CWRR members took off into the depth and height of the indigenous forest of Karkloof outside Howick. Coached by Dr. Monique Salomon (www.korumo.org), the group spent a day strengthening the team and re-connecting to our vision. The morning started off with a group exercise where members, accompanied by the sounds and moisture of a fast moving river, created outlines of a 2-minute video clip promoting the important work of CWRR. This inspiring exercise was followed by a tour up into the canopy of the forest. The group swished down along the ten zip-lines landing on platforms (the highest of which reaching a height of 35 m!) overlooking water falls, tree tops and the Karkloof valley below. The breathtaking speed, thrilling heights, and marvellous flora and fauna, helped building new connections both with nature and each other as a team. After lunch the group wrapped up the plans of moving the Centre forward along with our vision to become the 'go-to' research and education centre in South Africa on pressing issues in water.



Wednesday 4 April 2018

The CWRR Newsletter

You are now reading the third issue of CWRR's Newsletter 2018.



Please send stories and photos of your fieldtrips, information about new projects, interesting courses or conferences, links to publications, and more, to MalingaR@ukzn.ac.za.

The Newsletter is also available online at CWRR.ukzn.ac.za



A new postdoc fellow

CWRR is welcoming Dr. Sheldon Strydom who has recently started as a post-doctoral fellow at the Centre, supported through the Umgeni Water Chair. Dr. Strydom started his BSocSci degree in Geography and Environmental management in 2010 and his BSc(Hons) in Geography and Environmental management in 2013. Dr. Strydom completed his MSc in Agrometeorology in 2014, followed by his PhD degree in the same subject in 2017, supervised by Prof. Michael Savage. Dr. Strydom's research interests include theoretical and applied climatology and agro-climatology. He will be working with Prof. Graham Jewitt on various projects, currently on using replacement cost theory to value naturally generated water in the uMgeni catchment.

NEW CWRR PROJECTS

The project titled “**Assessing the state-of-art of the Water – Energy – Food nexus in South Africa**” has received funding from the Water Research Commission. The project is a short-term research project and will run for 5 months starting 1 February 2018, led by Dr. Tafadzwa Mabhaudhi.

The general aim of the project is to conduct a state-of-the-art literature review on past, present and ongoing work on the Water – Energy – Food nexus focusing on current status, potential, challenges and opportunities for inter-sectoral WEF Nexus planning and to develop a program/framework for linking the WEF Nexus to the Sustainable Development Goals (SDGs), paying particular emphasis on SDGs 2, 6 and 7. The project specifically aims at the following:

- ◆ Review of current knowledge on water–energy–food nexus in South Africa, including the review of current water, energy, food policies and strategies at national level.
- ◆ Identify policy and research gaps, and make recommendations for practical application of the water-energy-food nexus in bringing about policy alignment and coherence. Develop a draft framework for implementing the water-energy-food nexus, linked to the SDGs, for the Water Research Commission and South Africa.
- ◆ Develop mechanisms for identifying local research champions for the water - energy – food nexus and development of a database of professionals working on the water - energy – food nexus.
- ◆ To develop a national guideline and research agenda for prioritizing water-energy-food nexus research, development and innovation for South Africa. The agenda should align with international initiatives to allow South Africa to tap into global funding for water, energy and food nexus.

The project team members at this stage are: Prof. Graham Jewitt, Dr. Aidan Senzanje, Gareth Simpson, Prof. Albert Modi and Prof. Roland Schulze.

Applying Hydrologic Logic and Getting Your Hands Dirty. M Horan

27 February - 1 March saw the 2018 Honours class on their first Cathedral Peak field trip. The weather was perfect and birds sang in the trees as we worked. The rivers were in spate, thundering down from the high mountain basalts following the heavier than usual summer rains. The real journey commenced on Tuesday with the students wading in some fast flowing torrents to use water clarity testing tubes to determine the levels of sediment load in the rivers at various points along the route. The students had their first opportunity to present “in the wild” where they explained the function and purpose of rain gauges, anemometers, A-Pans, fog interception gauges and automatic weather stations to their class mates. The following days included watching a video by Prof. Roland Schulze on the layout and challenges of the catchment and getting an understanding of the history of the research catchment and upcoming field experiments by Dr. Michele Toucher and Byron “U-Byron” Gray. Then the students were off to undertake their tasks, and had presentations on Eddy Covariance Systems, Large Aperture Scintillometers, Soil Respiration Monitoring systems, Soil heat flux plates and the Cosmic Ray Probes. At the river bend the students measured the river dimensions to calculate cross-sectional areas as well as flow speeds using flow planks to determine the total discharge. Clarity measurements were taken to assess the water purity as one moves higher and higher upstream towards the source. There was a hero born that day, he who braved the depths to rescue equipment from the unforgiving rapids while his class mates looked on. Hats off to “Indiana Ramlall”.

Our thanks must be expressed to SAEON and Ezemvelo KZN Wildlife for the use of their facilities, to Dr. Michele Toucher and Byron (U-Byron) Gray from SAEON who gave so much of their time and energy. Well done to Jade Moody who under the duress of 14 different menu requests managed to keep everyone alive and healthy.

By Mark Horan

