

A Tribute to Sesethu Matta

Friday 29 November 2019

The CWRR would like to express our great sadness and offer our condolences to the family and friends of Sesethu Matta, who has sadly passed. Sesethu was doing her MSc research with the CWRR, titled "Citizen science and catchment water quality in KwaZulu-Natal, South Africa". Prof. Graham Jewitt and Dr. Jim Taylor had the pleasure to supervise Sesethu. These are Dr. Taylor's thoughts about Sesethu: "I was first introduced to Sesethu Matta by Prof. Jewitt. He described her as a young, enthusiastic scientist who would go far. Whether it was participating in faculty seminars or collecting data, Sesethu was never without her winning smile. She always bore her illnesses bravely and never complained about anything at all. I recall a day on the Mthinzi stream just above Midmar Dam. Sesethu was there with other students but it was Sesethu who was making the most of the opportunities presented to them. Wearing waders she was in the stream, up to her waist in the polluted water, doing all she could to collect data for SASS and mini-SASS. Sesethu was a calibre lady. She was not an ordinary person you meet in life. Rather she was confident and engaging, yet friendly and sensitive. All who knew her speak highly of these qualities. Where ever your ongoing journeys take you we will miss you. We will try and take comfort from your example and the love and conviction you shared with all of us." The photo below is of Sesethu (top right) and her close friends Sibumajozi (left) and Simone Chetty (bottom right).



Student presentations and defenses

On 22 November, our Hydrology honours class presented their final research reports to their peers, fellow students and members of the CWRR. They all presented highly relevant and interesting research projects that have rigorously introduced them to what academic research is all about. We congratulate Nelisiwe Khusi, Khodani Khakhu, Zama Ndlovu, Trisha Sukhdeo, Sanelisiwe Mncube, Kivana Naidoo, Sayuri Tasha Srikissan, Yadir Ramnarayan and Ashvir Ramchandra for getting this far, and hoping you will proceed doing research with us at the CWRR.

On 27 November, four of our hard working MSc students presented and defended their research proposals including extensive literature reviews. They all got a number of intriguing questions and constructive suggestions by colleagues and the other students, to further improve their proposals. We wish Nosihle Mkhize, Jade Moody, Xolisile Yende and Christie Terrell all the best in pursuing your MSc research.

The CWRR Newsletter

You are now reading the tenth and last issue of the CWRR Newsletter for 2019, with news and updates of the achievements and endeavors of CWRR's members, staff, associates and students.



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

For suggestions and queries, please email MalingaR@ukzn.ac.za

Research on Tap by Prof. Kebede Gurmessa

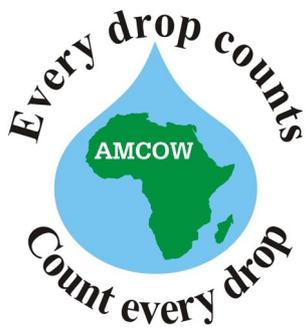
On 4 November the CWRR hosted our last Research on Tap Seminar for 2019, by welcoming our new Professor in Hydrology, Prof. Seifu Kebede Gurmessa. Prof. Kebede Gurmessa held an inspiring seminar about the research he has been involved in prior to arriving at UKZN, as well as about his future plans and visions for his time here at the CWRR. We are excited to welcome Prof. Kebede Gurmessa and looking forward to collaborations in the future.



CWRR Annual Report 2017-2018



The Centre for Water Resources Research has now launched the Annual Report for 2017-2018 which includes a comprehensive account on our activities, completed and ongoing projects, the members' achievements, publications and much more. The annual report can be found at the Centre web page CWRR.ukzn.ac.za.



CWRR member at AMCOW workshop

AMCOW ([African Minister's Council on Water](#)) organized an 'Experts and Stakeholders' workshop (Nairobi, 1-2 October) to announce the launch of the Pan-African Groundwater Program (APAGroP) - a program envisaged to serve as a platform for collaboration among groundwater stakeholders in Africa. The concept of the APAGroP was presented along the major current groundwater activities across the continent, followed by fruitful discussions regarding the program's modalities and priorities. Prof. Seifu Kebede Gurmessa from the CWRR participated in the workshop and co-presented the current groundwater policy and practice settings in the Eastern and Central African region, including the river basin organizations. In his presentation, Prof. Kebede Gurmessa underlined the need to consider regional geophysical settings in formulating policies and practice guidelines.

AFRICAN MINISTERS' COUNCIL ON WATER

By Seifu Kebede Gurmessa

CWRR PhD candidate receives awards

The 35th Annual Conference of the South African Society for Atmospheric Sciences (SASAS) was held on the 8-9 October at the Riverside Sun, Vanderbijl park in Gauteng. This year, the conference was hosted by the Agricultural Research Council - Soil, Climate and Water (ARC-SCW), under the theme 'Climate Meets Agriculture – The Interplay'. The theme was chosen and encouraged by the necessity to increase as well as spread awareness on the connection between agriculture and climate in the broader southern African context. The agriculture sector is known to be affected by climate and producers need climate information for decision-making. It was a well-attended conference by academics and students from various institutions, researchers working within the various sub-disciplines of Atmospheric Science, Climate Change, Agrometeorology, Weather Forecasting, Earth and Oceanic Observations, as well as policy-makers and officials from various industries. The conference had concluded with an awards and closing ceremony, which saw CWRR's PhD student Maqsooda Mahomed being awarded first place with the title "Best Student Oral Presenter" for her PhD research. On 19 November Mahomed received yet another award (Best runner up oral presentation) for the same presentation, during the Annual Research Day of the Durban Research Action Partnership (D'RAP) that was held at the Paradise Nature Reserve.

By Maqsooda Mahomed



Latest publications

- ◆ Simulation of Nutrient Fluxes from Deep Trenched Faecal Sludge with Hydrus-2D. [Journal of Hydrogeology & Hydrologic Engineering, 2019](#). Patrick Adadzi, David Still, Harrison Coffie, Emmanuel Afetorgbor and Simon Lorentz.
- ◆ Calibration and evaluation of aquacrop for groundnut (*Arachis hypogaea*) under water deficit conditions. [Agricultural and Forest Meteorology, 2019](#). Tendai Chibarabada, Albert Modi and Tafadzwa Mabhaudhi.
- ◆ Water productivity of selected sorghum genotypes under rainfed conditions. [International Journal of Plant Production, 2019](#). Sandile Hadebe, Tafadzwa Mabhaudhi and Albert Modi.
- ◆ An assessment of groundwater use in irrigated agriculture using multi-spectral remote sensing. [Physics and Chemistry of the Earth, 2019](#). Luxon Nhamo, Girma Ebrahim, Tafadzwa Mabhaudhi, Sylvester Mpandeli, Manuel Magombeyi, Munyaradzi Chitakira, James Magidi and Mbulisi Sibanda.
- ◆ Options for improving water productivity: a case study of bambara groundnut and groundnut. [Physics and Chemistry of the Earth, 2019](#). Tendai Chibarabada, Albert Modi and Tafadzwa Mabhaudhi.
- ◆ Assessing climate change and adaptive capacity at local scale using observed and remotely sensed data. [Weather and Climate Extremes, 2019](#). Sylvester Mpandeli, Luxon Nhamo, Mokhele Moeletsi, Teboho Masupha, James Magidi, Khathu Tshikolomo, Stanley Liphadzi, Dhesigen Naidoo and Tafadzwa Mabhaudhi.
- ◆ The water-energy-food nexus in the anthropocene: moving from 'nexus thinking' to 'nexus action'. [Current Opinion in Environmental Sustainability, 2019](#). Gareth Simpson and Graham Jewitt.
- ◆ Identifying hotspots for investment in ecological infrastructure within the uMngeni catchment, South Africa. [Physics and Chemistry of the Earth, Parts A/B/C, 2019](#). Shaeden Gokool and Graham Jewitt.
- ◆ Quantifying the contribution of riparian total evaporation to streamflow transmission losses: Preliminary investigations along the Groot Letaba River. [Physics and Chemistry of the Earth, Parts A/B/C, 2019](#). Shaeden Gokool, Eddie Riddel, Jaco Nel, Reinhardt Raubenheimer, Tercia Strydom, Anthony Swemmer and Kershani Tinisha Chetty.