



NEWSLETTER

2026 AUTUMN GRADUATION SPECIAL

CWRR

MAKING A DIFFERENCE - ONE DROP AT A TIME



5 JUNE 2026

THE NEW CWRR NEWSLETTER

Welcome to the third, SPECIAL GRADUATION issue of the CWRR Newsletter 2026! As always, the CWRR Newsletter carries news and updates from our members, including staff, associates and students. For contributions, suggestions and queries, please email Dr Shaeden Gokool, GokoolS@ukzn.ac.za



CWRR CELEBRATE OUR 2026 SPRING GRADUATES

In May 2026, the CWRR proudly celebrated another inspiring group of graduates as they received their well-earned degrees alongside fellow students, supervisors, friends, and family. We are delighted to celebrate our doctoral graduate, Dr Thando Lwandile Mthembu, who was awarded a PhD in Hydrology. This outstanding achievement reflects years of commitment, critical thinking, and meaningful contribution to advancing knowledge in water-related research. Congratulations, Dr Mthembu!

A warm round of applause goes to our Master's graduates: Bridgette Lerato Molokomme (Hydrology) and Knowledge Tinotenda Muchaonyerwa (Hydrology). These achievements reflect your commitment to applying science, research, and innovation to the complex challenges facing society and the environment.

We also proudly recognise our Hydrology Honours graduates: Babongile Nonzuzo Dlamini, Bontle Finger (*Cum Laude*), Lindokwakhe Malinga, Siphamandla Maseko, Nontando Nomfundo Mkhulise, Luyanda Mpanza (*Cum Laude*), Zandile Mandisa Mthimkhulu, Thabiso Maxwell Ngubane and Nokwazi Kwanele Sangweni. This important milestone marks the beginning of exciting new academic, professional, and personal pathways.

The CWRR community celebrates each of you and the hard work that brought you to this moment. We look forward to seeing the contributions you will continue to make to water research, sustainability, and positive change in South Africa and beyond.

FROM RESEARCH TO REAL-WORLD IMPACT: CELEBRATING DR MTHEMBU'S PHD ACHIEVEMENT



We proudly celebrate the PhD graduation of Dr Thando Mthembu. Supervised by Dr Shaeden Gokool and Mr. Richard Kunz, Dr Mthembu's doctoral study focused on the development and application of an agricultural database for taro, a neglected and underutilised crop with significant potential for food security and climate resilience. His research brought together crop water productivity and nutritional data within a centralised platform designed to improve access to critical agricultural information. The database supports more informed decision-making by farmers, researchers, and policymakers, contributing to sustainable farming practices, efficient water use, and long-term food security planning across the region.

Beyond his academic research, Dr Mthembu played an active role in student development through lecturing, mentorship, and leadership within the CWRR, including serving as former Chairperson of the Hydrators Club. Today, he continues to make an impact as a Hydrologist at WSP in Africa, where he applies his expertise in water resources and environmental consulting.

We congratulate Dr Mthembu on this outstanding achievement and wish him continued success as he advances both science and sustainable development in Africa and beyond.



FROM WEEDS TO WISDOM: MAPPING SMARTER SOLUTIONS FOR SMALLHOLDER FARMING 🎓

Mr Knowledge Tinotenda Muchaonyerwa graduated with an MSc in Hydrology for his research on improving weed management in neglected and underutilised crops (NUCs). Supervised by Dr Maqsooda Mahomed, Dr Shaeden Gokool, and Prof. Alistair Clulow, his study explored the use of multispectral UAV imagery and Google Earth Engine cloud computing to map crop-weed interactions in smallholder taro farms across KwaZulu-Natal.

Motivated by growing concerns around food insecurity and population growth, his research focused on taro (*Colocasia esculenta*), a resilient but under-researched crop widely cultivated in sub-Saharan Africa. The study found that object-based image classification using textural properties was highly effective for weed detection, while evapotranspiration models successfully tracked crop water

use under different weed management conditions. Funded by the Water Research Commission (Project C2023/2024-01248), the research contributes valuable tools for precision agriculture and sustainable smallholder farming. Knowledge thanks his supervisors and the broader CWRR team for their guidance and support throughout his MSc journey.

BALANCING EXCELLENCE: MS. FINGER'S JOURNEY OF ACADEMIC AND SPORTING SUCCESS 🎓

Ms. Bontle Finger graduated *Cum Laude* with an Honours degree in Hydrology. She is now continuing into her MSc research titled “Evaluating Physics-Based and Data-Driven Hydrological Modelling Approaches in South Africa’s SWSAs” supervised by Dr Michele Toucher, Dr Feroza Morris and Dr Shaeden Gokool. Alongside her academic achievements, Bontle has excelled as a dedicated student-athlete. In 2025, she reached three USSA Finals, securing two gold medals in indoor and beach volleyball, where she was also named *Best Attacker*, as well as a silver medal in basketball, contributing to advancement into the 2026 USSA Division Basketball competition. She also earned a silver medal at the Aqua Darshan Choc Tournament.

“It was a mentally exhausting journey trying to balance both sports and academics. Especially with sports not making it easier for me to breathe outside my academics.” Despite these challenges, Bontle persevered. “Luckily, I met people who supported me when I couldn’t support myself, and I’m grateful for how they made my 2025 in KZN meaningful.” Her hard work and dedication were further recognised at the College of Agriculture, Engineering and Science 2026 College Awards Ceremony on 12 May, where Bontle was awarded the CWRR Top Hydrology Honours Student Award, presented by Ms. Kershani Tinisha Chetty, Hydrology Academic Coordinator.

Reflecting on her journey, Bontle credits her faith as a constant source of strength and guidance. “Lastly, I will truly be grateful for being rooted in Christ. Great is His faithfulness to me.”



RIISING THROUGH THE RANKS: PRIVILAGE SHABALALA RECEIVES PRESTIGIOUS HYDROLOGY AWARD 🎓

Among the evening’s distinguished achievers celebrated at 2026 College Awards Ceremony was Ms. Privilage Shabalala, who received the Roland Schulze Award for the Best Third-Year Hydrology Student Continuing with Hydrology Honours.

Reflecting on the achievement, Privilage shared: “I am deeply honoured to receive the Roland Schulze Award as a top third-year Hydrology student progressing into Hydrology Honours. This award reflects the hard work and dedication I have invested throughout my undergraduate studies. I am grateful for this recognition, which motivates me to continue striving for excellence.” Privilage also expressed enthusiasm for the opportunities ahead as she continues her academic journey and pursues her passion within the hydrological field.

