

WASA Summer School

Innovative Technologies to Improve Water Security

Invitation

Target group: WASA PhD students

We are pleased to invite you to participate in the **WASA Summer School 2025**, titled “*Innovative Technologies to Improve Water Security*”, taking place from **23 to 27 October 2025**. The summer school is fully integrated into the **WaterNet Summer School** and will bring together PhD students from across the WASA research programme for an intensive and interdisciplinary learning experience.

The programme includes expert-led lectures, practical exercises, a field excursion, and a student presentation session, with thematic focuses on hydrological modelling, water reuse innovations, and forecasting techniques for integrated water resources management (IWRM).

Participation is free of charge for all WASA PhD students. In addition, funding support is available through WASANet for one African PhD student per project. Selected candidates will also take part in the WaterNet Symposium and contribute to the WASA Special Session.

Application Procedure

We kindly ask interested students to submit a letter of motivation, a supervisor’s reference letter, and a presentation topic by **8 August 2025** to **Dr. Joerg Helmschrot** (joerg.helmschrot@kit.edu).

Selected participants will be notified by **15 August 2025**.

We look forward to your participation in this important training and networking opportunity!

WASANet Coordinator

Dr. Joerg Helmschrot, +264 81 141 4182

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watersecurityafrica.org

WASANet African Speaker

Dr. Nico Elema, +27 21 808 9381

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WASANet Project Partners





Water Security in Africa

WASA Summer School 2025

Draft Programme (30 July, 2025)

23 Oct 2025	Part 1: Applied Water Modelling	Moderator: Dr. Joerg Helmschrot (KIT, WASANet)
08:30	WASA Summer School Introduction	Dr. Joerg Helmschrot (WASANet)
09:00	Innovative Hydrological Modelling technologies (Lecture)	Dr. Joerg Helmschrot (KIT)
10:30	Tea Break	
11:00	Surface Water Modelling	Banda (UNZA)
12:30	Groundwater Modelling	Banda (UNZA)
14:00	Lunch	
15:00	A) Modelling Practical or B) Isotope-based Modelling	(tbc) (Dr Andrew Watson)
17:00	Science Diplomacy in the Water Sector	tbd (SANWATCE, AUDA-NEPAD)
18:30 – 19:30	Dinner	
24 Oct 2025	Part 2: Innovations & State of the Art in Water Reuse; Water & Mining; Urban Water, Groundwater Exploration	Moderator (tbc)
08:00	Recap	
08:30	Hydrology and Water Management in Mining Areas – Predicting where Water and Contaminants flow	WaMiSAR, MAMDIWAS (tbc)
10:30	Tea Break	
11:00	New Technologies for Aquifer Exploration; How to use New Hydrological Data in Groundwater Management in Africa	BGR (tbc)
12:30	Thinking Water Reuse on the Large Scale; The Hydrology of Water Reuse	WaReNam (tbc)
14:00	Lunch	
15:00	Climate Services for Urban Water Management	WaRisCo (tbc)
16:30	Nature Engineered Urban design for Water Recycling and Reuse	NEU-Water (tbc)
18:30 – 19:30	Dinner	

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German Water Partnership





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25 Oct 2025	Part 3: WASA – Innovative forecasting techniques to support IWRM	Moderator: tbc
08:30	Lecture: State of the Art and New Models to Predict Seasonal Rainfall – and how to use it in Water Management	Prof. Dr A. Fink/Dr. S. Ageet (KIT)
10:00	Tea Break	
10:30	Seasonal and Sub-Seasonal Hydro-Meteorological Forecasting - Practical	Dr. S. Ageet (KIT) - Tbc
13:00	Lunch	
14:00	Results Presentation & Discussion	Dr. S. Ageet (Co-HYDIM-SA, KIT)
15:00	Scientific Paper Writing	Tbc (SANWATCE, AUDA-NEPAD)
16:00	Tea Break	
16:15	Scientific Paper Writing (Practical)	Tbc (SANWATCE, AUDA-NEPAD)
17:30	WrapUp/Closure WASA	Dr. Joerg Helmschrot (WASANet)
18:30 – 19:30	Dinner	
26 Oct 2025	Excursion: Reiz Dam, Chongwe (UAV demonstration)	
18:00 – 19:30	Dinner	
27 Oct 2025	Closing day	Moderation: UNZA, WaterNet, WASANet
08:00	Excursion Report Presentations	
08:30	Scientific Paper Concept Presentation	
10:30	Tea Break	
11:00	Feedback Session	
13:00	Closure & Handout of Certificates	
14:00	Lunch	
18:00 – 21:00	Closing Ceremony	

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