

7th International Summer School on Managed Aquifer Recharge – MARISS 2026
University of Applied Sciences Dresden/HTWD, Division of Water Sciences, Germany
1 – 11.09.2026

organised in scientific collaboration with



Draft program week 1 from 1 – 4 September 2026

Monday, 31.08.	Arrival of participants
19:30	Welcome dinner
Tuesday, 01.09.	Block 1: MAR Principles, Hydraulic Aspects and Case Studies
08:30	Registration
09:00	Opening and introduction
09:10	Keynote speech by International Association of Hydrogeologist's Managed Aquifer Recharge Commission's co-chair
09:30	Keynote lecture: Hydraulic aspects of MAR and management of clogging – <i>Thomas Grischek</i>
10:30	Photo session and break
11:00	Presentations by participants
12:30	Lunch
14:00	Keynote lecture: Development and evaluation of RBF in a saline coastal aquifer: an integrated groundwater flow modeling and particle tracking approach – <i>Y. R. Satyaji Rao</i>
14:45	Keynote lecture: 20 years of development and operation of RBF for drinking water production in Uttarakhand, India – experiences and challenges – <i>Prakash C. Kimothi</i>
15:00	Break
15:30 – 17:00	Field practicals / techniques – <i>Philipp Marx, Cornelius Sandhu</i> - double-ring infiltration experiment - manual measurement & automatic data-recording of groundwater level

Wednesday, 02.09.	Block 2: Water Quality and MAR experiences
09:00	Keynote lecture: Water quality aspects of MAR – Thomas Grischek
09:45	Keynote lecture: Groundwater salinity: challenges, mitigation and role of MAR – case study from Mewat, India – Gopal Krishan
10:30	Break
10:45	Lecture: From columns to wells: tracking microplastics in RBF – transport, retention and sampling – Jiaxing Ding
11:15	Lecture: Removal of tire-particles by column experiments and quantification – Cindy Rau
11:45	Lecture and laboratory technique: Detection of microplastics using flow cytometry – Mareike Michaelis
12:10	Lunch and transfer to TU Dresden, Institute of Water Chemistry
13:30	Lecture: Behavior of organic micro-pollutants during managed aquifer recharge – Hilmar Börnick
14:15	Lab tour of Institute of Water Chemistry – Hilmar Börnick
15:00	Break and transfer to HTW Dresden
15:30 – 17:00	Online MAR Seminar – “Long-standing experience in MAR” organized by IAH-MAR Commission - Lessons learned from 40 years’ MAR experiences in Belgium – Emmanuel Van Houtte - The MAR of the Geneva auifer: after more than 40 years successful operation, what are the next challenges? – Gabriel de los Cobos - Decades of drinking water treatment using MAR in Finland: aspects of sustainability and resiliency – Petri Jokela
Thursday, 03.09.	Block 3: MAR Excursion 1
08:00 – 18:00	Excursion to UNESCO-World Heritage Site Muskau Park in Bad Muskau and to RBF waterworks in Sdier
Friday, 04.09.	Block 4: Water-Nexus Modelling and INOWAS Web-based MAR tools
09:00	Keynote lecture: Hydro-economic modelling of food-energy-water nexus – Hemant Kumar Numerical practical with Python: Simulating yields and water requirement of wheat crop under different irrigation strategies – Hemant Kumar
10:30	Break
11:00	Numerical practical with Python: Development of surrogate crop yield models using machine learning – Hemant Kumar
12:30	Lunch
13:30	Keynote lecture: Guiding principles for MAR suitability mapping and introduction to web-based numerical modelling of MAR – Catalin Stefan
15:00	Break
15:30 – 17:00	Group-work: “Five years. Multiple stakeholders. One aquifer. You decide!” – The (serious) MAR Game – Catalin Stefan
Sa., 05.09.	
So., 06.09.	Optional excursion to National Park Sächsische Schweiz

Draft Program Week 2 from 7 – 11 September 2026

Monday, 07.09.	Block 5: Site-investigation and Design of RBF schemes and MAR Project
09:00 – 09:45	Lecture: Site-selection concept for RBF schemes – Cornelius Sandhu
09:45	Keynote lecture: Site-selection methodology for RBF schemes and its application in GIS – T. Ngoc Anh Hoang
10:30	Break
11:00	Exercise: Design of a RBF well scheme – Cornelius Sandhu
12:30	Lunch
13:30 – 14:15	Lecture: Isotopes in water resources management with focus on MAR – Gopal Krishan
14:15 – 15:00	Lecture: From floods to recharge: MAR for flood resilience and groundwater sustainability in Punjab, India – Gopal Krishan
15:00	Break
15:30 – 17:00	MAR group project: MAR design and site-selection – Cornelius Sandhu
Tuesday, 08.09.	Block 6: Numerical Groundwater Flow Modelling for MAR Schemes
09:00	Keynote lecture: Numerical modelling of MAR schemes – theoretical and conceptual aspects – Thomas Reimann
10:30	Break
11:00	Application: Numerical modelling of MAR schemes – Thomas Reimann
12:30	Lunch
13:30	Application of numerical modelling to MAR group project – Thomas Reimann , Cornelius Sandhu
15:00	Break
15:15 – 16:30	Application of numerical modelling to MAR group project – Thomas Reimann , Cornelius Sandhu
Wednesday, 09.09.	Block 3: MAR Excursion 2
08:00 – 18:00	Excursion to RBF site in Torgau and waterworks of Fernwasserversorgung Elbaue-Ostharz GmbH
Thursday, 10.09.	Block 7: Cross-cutting MAR topics
09:00	Discussion on numerical modelling of MAR group projects – Thomas Reimann , Cornelius Sandhu
10:30	Break
11:00	Keynote lecture: Potential of MAR for spring-shed management in mountainous regions – case studies from Central Himalayas – Moti Rijal
12:30	Lunch
13:30	Lecture and laboratory practical / techniques: Removal of pathogens by RBF and their detection – Cornelius Sandhu
15:00	Break
15:30 – 17:00	MAR group project work
Friday, 11.09.	Block 8: MAR Project Presentations and Summary and Discussion of MARISS Content
09:00	MAR group project presentations
10:30	Break
10:45	Summary and MAR Discussion – Cornelius Sandhu , Moti Rijal
12:00	Closing and distribution of participant certificates
12:30	Farewell lunch for participants