Hybrid Conference

27 - 28 October 2026

Water as a Critical Geological Resource

CONFERENCE PROGRAMME

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Tuesday 27 October		
0915 - 0945	Registration opens, tea & coffee	
0945 - 0955	Welcome address	
Session one: Regulation, Risk & Protection		
0955 - 1045	**Keynote:** Water for the Future: securing a critical resource for people, nature, and growth	Roger Hoare, *Environment Agency*
1045 - 1110	Water Trading – can we make it work more effectively in the UK	Rachel Dewhurst, *Stantec*
1110 - 1135	Hydrogeological Risk Assessment for Sustainable Development of Conservation Zones	Leenu Raju, *AtkinsRéalis (Virtual)*
1135 - 1145	Lightning talks	
1145 - 1210	Tea & coffee break	
1210 - 1235	Predicting groundwater contamination risk for a karstic quarry in the Edwards Aquifer Recharge Zone: a geospatial analysis of post-mining reclamation scenarios	Kaitlyn Tran, *Austin Community College (Virtual)*
1235 - 1300	Best Practices for the continuous Inspection, Testing and Monitoring of Groundwater Abstractions, to safeguard it as a Critical Resource	James Watson, *OGI Groundwater Specialists Ltd*
1300 - 1325	Problem to Resource: Smart Water Communities and the Role of Sports Turf in Delivering Water Resilience	Anthony Hanson, *Environmental Solutions International Ltd*
1325 - 1425	Lunch and posters	
1425 - 1510	**Panel Discussion: What can we do to successfully address the water conundrum facing our world?** Water is the elixir of life and is crucial for sustaining life, livelihoods, and nature on earth. It is a critical strategic asset needed for human civilisation to persist and thrive. We know that water sustains life, but it can also destroy lives and inflict irreversible damage on people and nature, if not carefully managed. It is vulnerable and prone to be abused by humans through excessive usage and polluting activities. Wars have been fought and are still being fought in some form over access to water. Water has, and is being used as a weapon of deprivation, subjugation, and underdevelopment. But there are emerging opportunities in science and technology that could be beneficial to how we manage water if we align water policy and regulation to take advantage of these new developments.	Chaired by: Michael Kehinde Holger Kessler, AtkinsRéalis Sofie de Volder, TRAQUA Craig Speed, SLR Consulting Rachel Dehurst, Stantec Alan MacDonald - BGS
1510 - 1535	Groundwater as critical resource during drought: examples from Africa and Asia	Alan MacDonald, *British Geological Survey*
1535 - 1600	The Water Risk Immune System: A Framework to Enable Proactive Water Management and Decision-Making	Matthew Damhuis, *Acqua Rinova Group (Pty) Ltd (Virtual)*
1600 - 1625	Tea & coffee break	
1625 - 1650	Management of basal aquifers on small volcanic islands: A case study of Graciosa Island	Francisco Cota Rodrigues, *CIBIO-Azores*
1650 - 1715	More water for everyone? Efficient irrigation and other myths explored	Mal Graham, *Mott MacDonald*
1715 - 1725	Summary of day one	

Wednesday 28 October		
0915 - 0945	Registration opens, tea & coffee	
0945 - 0955	Welcome address	
Session two: Tools and data-driven approaches		
0955 - 1045	**Keynote:** *Title TBC*	*Speaker TBC*
1045 - 1110	The benefits of a hybrid machine learning and physical model approach to predicting groundwater flows in Chalk catchments in England and infiltration to sewers	Mark Fermor, *GeoSmart*
1110 - 1135	Rinova Nexus AI: An Agentic Intelligence Platform for Mine Water Data, Compliance and Decision Support	Matthew Damhuis, *Acqua Rinova Group (Pty) Ltd (Virtual)*
1135 - 1200	Tea & coffee break	
1200 - 1225	A National Groundwater Nitrogen Inventory for England: data driven tools to inform risk based regulation and groundwater protection	Craig Speed, *SLR Consulting* & Natalie Kieboom, *Environment Agency*
1225 - 1250	Geochemical Characterization of Ore and Waste Materials at Cu-Mo Porphyry Deposit: Implications for Acid Rock Drainage and Metal Leaching Management, Peru	Albert Murillo, *Colegio de Ingenieros del Peru*
1250 - 1255	Virtual Poster Presentations	
1255 - 1355	Lunch and posters	
Session three: Water as a commodity, resource, or tool		
1355 - 1420	What the Water Industry Can Learn from the South West Water Case: Lessons in Environmental Compliance and Water Stewardship	Danny Locke, *ByWater Services*
1420 - 1445	Geological Interpretation to Resource Assurance: Evidence-Based Management of aVulnerable Chalk Supply	Carl Gilbert, *Tetra Tech* & Simon Deacon, *Portsmouth Water*
1445 - 1510	Mine Water Re-Use in the UK: Opportunities for potable and non-potable uses	Shona Symon, *Envireau Ltd*
1510 - 1535	Tea & coffee break	
1535 - 1600	Adsorptive Removal of Zn(II) Ions from Polluted Water Using an Eco-friendly Biomodified Cordierite/ZrO_2 Ceramic Microfiltration Membrane	Fatima Jmaito, *Ibnou Zohr University*
1600 - 1625	Tracer testing and residence times for better resource management: two case studies in Geothermal Energy and Aquifer Storage and Recovery.	Sofie de Volder, *TRAQUA S.A.*
1625 - 1650		
1650 - 1710		

Poster Title	Author(s)
Navigating the Regulatory Landscape: Environmental Permitting for Groundwater Dewatering Operations Across the United Kingdom	Ashleigh Vause, *OGI Groundwater Specialists*
Can the application of remote sensing improve bathing water quality assessments?	Kiera McMahon, *University of Surrey*
Analysis of the surface water balance of the Chancay–Huaral basin using the SWAT model	Jhon Sotil Huamani Sanchez & Estefany Nycol Pasquel Rojas Pasquel, *Universidad Peruana de Ciencias Aplicadas*
Pesticide risk in groundwater	Aimee Fraser, *WSP*

Convenors:

- **Dr Michael Kehinde MBE CGeol** - Environment Agency
- **Phil Merrin** - Severn Trent Water
- **Rhiannon Marchi-Smith** - RMS Groundwater Strategies Ltd
- **Anna Besien** - Environment Agency

THANK YOU

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