Dr Dan Lapworth
Principal Hydrogeochemist, British Geological Survey
Chair of IAH Groundwater Quality Commission

Groundwater is a critical resource enabling adaptation due to land use change, population growth, environmental degradation, and climate change. It can be a driver of change and adaptation, as well as effectively mitigate impacts brought about by a range of human activities. Groundwater quality is key to assessing groundwater resources and we need to improve our understanding and coverage of groundwater quality threats if we are to use groundwater sustainably to not further burden future generations by limiting resources and/or increasing treatment or abstraction costs. Good groundwater quality is key to progress on a range of Sustainable Development Goals, but achievement of those goals most affected by groundwater contamination is often hindered by a lack of resources to enable adaptation. A range of threats to groundwater quality exist, both natural and anthropogenic, which may constrain groundwater use. However, groundwater often provides good quality water for a range of purposes and is the most important water resource in many settings.

May 19, 2023
4.00 PM IST

Google Meet link
https://meet.google.com/snz-feei-shn
dial +1 956-520-3550 and enter this
PIN: 576 616 923#

Host
Prof. A. K. Sinha
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Moderator
Sh Amlanjyoti Kar
Secretary, INC-IAH
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About Speaker

Dr Dan Lapworth

PhD, Hydrogeology, UCL, Chartered Chemist (CChem), Royal Society of Chemistry, MRes Earth and Atmospheric Science, University of Reading, BSc (Hons) Environmental Chemistry, University of Reading

Dan has a strong track record in applied groundwater science in Europe and also in Africa and South Asia in the context of environmental change, adaptation and impacts on groundwater resources. He has led research teams developing novel sensors for real-time detection of faecal contamination investigating, macronutrients in the environment and leads BGS research on contaminants of emerging concern in waters, including pharmaceuticals and microplastics. Dan has been part of the European working group for the groundwater watch list for emerging substances in groundwater and is Chair of the IAH Commission on groundwater quality. Dan is regularly involved developing and organising sessions on groundwater, quality and adaptation at Stockholm Water Week, was a panel member for COP26 and chaired a session at the recent Africa Water Week 2021. He was an author of the recent UN World Water Development Report 2022. Dan currently supervises 5 PhD students and is an external advisor for other PhDs.

Dan has published >100 peer review research papers in international journals and has over 200 publications. He has also published 2 book chapters numerous technical reports on a range of topics. For a full list of publications see: http://nora.nerc.ac.uk/view/author/2574.html

- In-situ monitoring of faecal contamination in groundwater
- Water safety plans and the use of sanitary risk assessments
- Assessments of groundwater recharge processes
- Groundwater resilience to climate change and other anthropogenic pressures

Membership of professional societies, institutions and panels

- Chartered Chemist (Royal Society of Chemistry)
- Member of the International Association of Hydrogeologist, Chair of IAH Groundwater Quality Commission: https://gwquality.iah.org