



Urban Groundwater, Monday 25<sup>th</sup> November 2019, Burlington House, London



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Geological Society, Burlington House, London

*A joint meeting of the British Chapter of the International Association of Hydrogeologists (IAH) and the Hydrogeological Group of the Geological Society, including the 2019 Ineson Lecture.*

The **2019 Ineson Lecture** will be presented by **Prof. Mario Schirmer**, Head of the Hydrogeology Research Group at Eawag, the Swiss Federal Institute of Aquatic Science and Technology and Professor at the Centre for Hydrogeology, University of Neuchâtel, Switzerland.

Professor Schirmer is a world-renowned hydrogeologist with an extensive publication history will be presenting a lecture titled “Challenges in Urban hydrogeology – groundwater quality and resources”. He will be supported by seven leading UK speakers addressing a broad range of urban groundwater issues.

- Full day meeting including lunch and drinks reception
- Seven supporting talks
- Poster session
- IAH John Day Bursary Award (Early Career Hydrogeologist)
- Geological Society Whitaker Medal Award
- AGM of Geological Society Hydrogeological Group held at lunchtime

**Please note there will be no registration on the door**

 [#Ineson2019](https://twitter.com/Ineson2019)



## Programme

- 09:30 Registration - with refreshments in the Library
- 10:30 Welcome
- 10:35 **Helen Fallas** – BGS: “New city planning policy processes – creating a prescient awareness of groundwater for future places and people”
- 11:05 **Gareth Farr** – BGS: “Low carbon heat recovery and storage in the shallow urban subsurface”
- 11:35 **Dr. Andrew Hughes** – BGS: “Groundwater or underground water: how human activities creates new sub-surface pathways using case studies from London
- 12:05 Award of the John Day Bursary to Angélique Buisson, Hydrogeology MSc, University of Birmingham
- 12:15 Lunch - including Posters and the Hydrogeological Group AGM
- 13:15 **Dr. Geoff Parkin** - University of Newcastle: “Changing flow pathways from rising urban groundwater - potential flooding and other impacts in Newcastle and Gateshead”
- 13:45 **Dr. Mike Jones** - Thames Water: Groundwater resources in London – past, present and future” – an overview of issues and developments
- 14:15 Award of the 2019 Geological Society Whitaker medal and hydrogeology group announcements – Rolf Farrell
- 14:30 Tea
- 14:55 **Dr. Mike Rivett** – GroundH2O Plus and University of Strathclyde: “Birmingham groundwater and some contrasting legacies: solvents, de-icing salts and stuff in the streambeds”
- 15:25 **Matt Tidy** – Severn Trent Water: “The use of urban groundwater for supply, and providing resilience to the Midlands”
- 15:55 Introduction to the Ineson lecture by Dr Mike Rivett
- 16:00 **2019 Ineson lecture - Prof. Mario Schirmer** (Eawag & Neuchâtel): “Challenges in Urban hydrogeology – groundwater quality and resources”
- 17:00 Drinks reception in the Lower Library



## Speaker Abstracts

**Helen Fallas – BGS: “New city planning policy processes – creating a prescient awareness of groundwater for future places and people”.** City Development Plans and National Planning policy are the key spatial strategies which will deliver our future cities around the world, in a wide variety of landscapes. It is essential these policies are developed with increased awareness of the role, and various interactions, groundwater can play in the urban context, alongside other environmental facets. This will require increased professional collaboration in city planning; and the realization of more effective evidence processes throughout city development processes. Both of these are vital to achieving more effective and pertinent cascades of information, and a prescient awareness of how groundwater can be best harnessed and managed to deliver future cities.

This presentation provides a review of some of the roles and interactions groundwater has across range different urban geographies; and, evaluates some of the different knowledge exchange approaches used in Europe to develop earlier cross-sectoral awareness of groundwater in city planning. The presentation examines key emerging lessons learnt so far; and the changing relationships and knowledge exchange required to support these.

**Dr Gareth Farr – BGS: “Low carbon heat recovery and storage in the shallow urban subsurface”.** Gareth will share experiences of the ‘Cardiff Urban Geo-Observatory’ – a city scale project aiming to better understand the hydrogeology of the urban subsurface and how we can sustainably utilise, regulate and plan for heat recovery and storage, as we move towards a low carbon future

**Dr Andrew Hughes – BGS: – “Is it groundwater or underground water? – how have human processes affected subsurface water systems?”** – rising groundwater, urban karst and lessons from construction in a highly urbanized setting.

**Dr Geoff Parkin - University of Newcastle: “Changing flow pathways from rising urban groundwater - potential flooding and other impacts in Newcastle and Gateshead”** Abstract to be confirmed

**Dr Mike Jones - Thames Water: “Groundwater resources in London – past, present & future”** – an overview of issues and developments Abstract to be confirmed

**Dr Mike Rivett – University of Strathclyde: “Urban groundwater and some contrasting legacies: solvents, de-icing salts and stuff in the streambeds”** – the



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development of the understanding of water quality issues across the Birmingham Sherwood sandstone aquifer.

**Matt Tidy – Severn Trent Water: “The Birmingham aquifer - potential of resource for future public water supply & overview of city resilience”**. Abstract to be confirmed

**Ineson lecture, Prof. Mario Schirmer (Eawag & Neuchâtel): “Challenges in Urban hydrogeology – groundwater quality and resources”** Abstract to be confirmed