



Global Water Security Symposium

Celebrating 70 years of water and environmental health research and
teaching at Newcastle University

23 - 24 January, 2020

Frederick Douglass Centre, Newcastle University, Newcastle Helix

Programme

Supported by:



Global Challenges Academy

**Institute
of Water**



ARUP

Thursday 23 January

09:00 Registration and refreshments

Session 1. Chair: Dr Claire Walsh, Newcastle University

10:00 *Opening address*

Professor Chris Day, Vice Chancellor and President, Newcastle University

10:10 *A drop of local history, from Dr John Snow to today*

Professors Tom Curtis and Richard Dawson, Newcastle University

10:30 *Plenary 1*

Water Resource Engineering: 5 things that have changed and 5 things that haven't in the last 30 years

Jeremy Benn, JBA Consulting Engineers & Scientists, UK

Resource Recovery from Wastewater Treatment Plants

Professor Mark van Loosdrecht, Delft University of Technology, Netherlands

Just add water – a platform for the NE to become famous again?

Nigel Watson, Northumbrian Water Group, UK

Discussion

11:50 **Session 2. Parallel Sessions. Refreshments available**

Water and the circular economy

Professor Arnold Tukker, Leiden University, The Netherlands

Fiona Townend, Procter and Gamble, UK

Martin Shouler, ARUP, UK

Dr Majed Khalem, Newcastle University, UK

Dr Oliver Heidrich, Newcastle University, UK

Legacy and emerging contaminants in the water cycle

Dr Manish Kumar, IIT Gandhinagar, India

Dr Adam Jarvis, Newcastle University, UK

Dr Anke Neumann, Newcastle University, UK

Emmanuel Johnson, Newcastle University, UK

Water engineering for, and with, nature

Minni Jain, The Flow Partnership, UK

Mike Norbury, Mersey Forest, UK

Dave Brown, Environment Agency, UK

Dr Caspar Hewett, Newcastle University, UK

Dr Paul Quinn, Newcastle University, UK

Ensuring access to sanitation for all

Dr Shaaban Mgana, Ardhi University, Tanzania
Dr Muhammad Nauman Ahmad, Agricultural University Peshawar, Pakistan
Dr Olayinka Osuolale, Elizade University, Nigeria
Dr Sara Waring, University of Liverpool, UK
Dr Shadrack Sabai, Ardhi University, Tanzania
Dr David Werner, Newcastle University, UK

13:20 Lunch

Session 3. Chair: Dr Anke Neumann, Newcastle University

14:15 *Plenary 2*

Triggering Transformational Change on Water
Andrew Roby, Department for International Development

Integrated Water Resources Management in South Africa: applying the adaptive paradigm
Professor Tally Palmer, University of Rhodes, South Africa

Interdisciplinary water research: 30 years of experience on socio-technical innovations in water and sanitation
Professor Miguel Peña-Varón, University del Valle, Colombia

Discussion

15:35 **Session 4. Parallel Sessions. Refreshments available**

Socio-hydrology: water and people

Dr Anna Mdee, University of Leeds, UK
Dr Cat Button, Newcastle University, UK
Dr Eleanor Starkey, Newcastle University, UK
Dr Geoff Parkin, Newcastle University, UK

Rational engineering of biological treatment

Professor Cindy Smith, University of Glasgow, UK
Dr Marta Vignola, University of Glasgow, UK
Dr Russell Davenport, Newcastle University, UK
Dr Dana Ofiteru, Newcastle University, UK

Water, public health and sustainable livelihood

Dr Heike Schmitt, National Institute for Public Health and the Environment, The Netherlands
Amelie Ott, Newcastle University, UK
Dr Josh Bunce, DEFRA, UK
Dr Kishor Acharya, Newcastle University, UK
Dr Myra Giesen, Newcastle University, UK
Professor David Graham, Newcastle University, UK

Water in a changing climate

Professor Justin Sheffield, University of Southampton, UK

Katy Peat, Environment Agency, UK

Chris Parker, WSP, UK

Professor Hayley Fowler, Newcastle University, UK

Session 5. Chair: Luke Stanbridge (Z-tech)

17:00

Plenary: Water careers

Richard Warneford, Northumbrian Water Group

Rose Shisler, Anglian Water

Jonathon Banks, Northumbrian Water Group

Dr Alex Nicholson, ARUP

Sue Petch, Drinking Water Quality Regulator for Scotland

17:30

Drinks reception: career tables, posters, exhibition

18:30

Dinner: posters, exhibition

20:00

Close

Friday 24 January

Session 6. Chair: Professor Chris Kilsby, Newcastle University

09:00

Plenary 3

Towards data-driven water management

Professor Dragan Savic, KWR Water Research Institute, Netherlands

The long journey from balancing water supply and demand to resilient water resource systems

Professor Jim Hall, University of Oxford, UK

Water Resilience of Cities – Leading Edge Thinking

Dr Mark Fletcher, ARUP, UK

A supply chain view: Industrial-Academic collaboration in the water sector

Adam Cartwright, Siemens, UK

Discussion

Session 7. Parallel Sessions. Refreshments available

10:40

Big water data + digitisation

Professor Dragan Savic, KWR Water Research Institute, The Netherlands

Dr Gemma Coxon, University of Bristol, UK

Dr Muhammad Shahzad, Northumbria University, UK

Dr Elizabeth Lewis, Newcastle University, UK

Dr Luke Smith, Newcastle University, UK

Water Security risks, challenges and opportunities

Professor Ashvani Gosain, IIT Delhi, India

Professor Shuaib Lwasa, Makerere University, Uganda

Kalyan Pantha, Group for Rural Infrastructure Development, Nepal

Professor David Hulme, University of Manchester, UK

Dr Nathan Forsythe, Newcastle University, UK

Dr Claire Walsh, Newcastle University, UK

Leak-free and safe water distribution

Jo Parker, Pipelines Industries Guild

Professor Joby Boxall, University of Sheffield, UK

Professor Pranab Mohapatra, IIT Gandhinagar, UK

Professor David Werner, Newcastle University, UK

Professor Catherine Biggs, Newcastle University, UK

Wastewater as a resource

Professor Zhiyong (Jason) Ren, Princeton University, USA

Professor John Lloyd, University of Manchester, UK

Dr Zeyi Dai, Aqua Enviro, UK

Dr Eileen Yu, Newcastle University, UK

Dr Elizabeth Heidrich, Newcastle University, UK

Dr Matthew Wade, Newcastle University, UK

Dr Jan Dolfing, Newcastle University, UK

12:10 Lunch

Session 8. Chair: Professor Richard Dawson, Newcastle University

13:00 Reports from the parallel sessions (3 minutes, 3 points)

13:40 *Closing address and remarks*

Water Journey: From Engineering to Ecosophy

Professor Zaini Ujang, Former Vice-Chancellor UTM and Secretary General, Ministry of Energy, Green Technology Malaysian, Malaysia

Closing remarks

Professor David Werner, Newcastle University, UK

14:15 **Close**

14.30 **National Green Infrastructure Facility Tours (optional)**

With thanks to:



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