

31st January 2018



Exhibition & Conference Centre, University of the West of England, Filton Rd, Stoke Gifford, Bristol BS34 8QZ



Water and Health are linked not only by the potable quality of drinking water but also via risks associated with exposure to aerosols and contaminated bathing waters. While drinking water production is closely monitored in the UK, the complexities associated with water distribution systems (WDS), storage tanks and air conditioning systems, together with the impact of hydraulic regime, can impact on the quality of the water supply. This can be exacerbated by interactions with pipework, nutrients, treatment chemicals, and processes associated with biofilm formation. In addition the EU 2006 Bathing Water Directive focuses exclusively on microbiological parameters to determine the acceptability and quality of bathing waters. The availability of new monitoring techniques facilitates a better understanding of potential problems and improvements in tracking and control, leading to greater assurance of water quality.

In ensuring that the health of the nation is given priority, the EPSRC have identified a "Healthy Nation" as one of their Prosperity Outcomes of the strategy and delivery plan up to 2020. The EPSRC identifies that the development of new technologies materials will enhance our ability to predict, detect and treat disease. Clean water and food are critical elements in ensuring a healthy nation, reducing the burden on the NHS.

The application of new sensing technologies along with more traditional approaches and the application of connected systems can be used for the early detection of microbial pathogens and toxic chemicals, ensuring the supply of clean water, free of waterborne disease, and contributing towards a healthy nation.

This workshop is jointly organised by RSC and SWIG. It will open with a keynote talk from Public Health England giving an overview of waterborne disease followed by presentations from companies and researchers showcasing the latest devices and sensor technologies that are able to rapidly detect microbiological and related contaminants.





AGENDA (LATEST)

09:30 Tea, Coffee & Registration

10.00 Introduction

SWIG Chairman, Prof Richard Luxton, Institute of Bio-Sensing Technology, University of the West of England (UWE).

10.20 Keynote: Waterborne Disease.

Prof Nigel Silman, Public Health England (PHE), Porton Down.

- **10.50 New Rapid Microbiological Techniques for the Detection of Legionella.** *Elise Maynard, Water Management Society.*
- 11:20 Tea & Coffee; Exhibitor displays.
- **11.50 Novel Microbiological Monitoring Techniques for Water Quality.** *Robert Pitchers, WRc Plc.*
- **12.20** *E.coli* **Detection at Remote Sites.** *Dr Stephen Gundry, Brightwater Diagnostic.*
- 12.50 13.50 Discussion & Lunch; Exhibitor displays.

Afternoon Session

- **13:50 Biofilms and Drinking Water Quality.** Dr Katherine Fish, Sheffield University.
- **14:20 The Application of Fluorescent Measurement in Water Monitoring.** James Sorensen, British Geological Survey.
- **14:50 Making the Most of Data to Benefit Public Health.** Steve Markham, Marquis & Lord.
- 15:20 Deckchair, Sun Cream, Bathing Water Test Kit Screening bathing water quality at the point of use. Ian Leahy, Palintest.
- 15:50 Discussion & Close.

Kindly hosted by:





Objectives

The proposed event will:

- Review the main causes of waterborne disease.
- Consider sources of risk, including biofilm formation.
- Describe new microbiological monitoring techniques for water quality.
- Present examples of new rapid microbiological detection methods.
- Learn how to maximise use of water quality and hydraulic data to benefit public health.
- Provide a forum for equipment developers, researchers, regulators and end users to meet and discuss requirements.

Who should attend

- Water industry personnel analytical and operational scientists, water quality staff, laboratory managers.
- Equipment manufacturers, suppliers and service providers to the water industry.
- Researchers concerned with water quality, microbiology, and sensor development.
- Water engineers and consultants working for the water industry.
- Regulators DWI, Ofwat, PHE, Environmental Health Officers.
- Users of bathing water monitors including EA, and DAERA Marine & Fisheries Division.

For further information please visit RSC Conference and Events website: <u>http://www.rsc.org/events?MemberNetwork=73&PageTitle=73</u>

For further information on the Water Science Forum membership and activities please see:

http://www.rsc.org/Membership/Networking/InterestGroups/WaterScience/index.asp

Or write to:

Hon. Secretary Water Science Forum c/o The Royal Society of Chemistry Burlington House, Piccadilly London W1V 0BN

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Registered Charity Number 20789

REGISTRATION

Registration includes attendance at the speaker presentations during the morning and afternoon sessions, refreshments throughout the meeting and any exhibitor displays.

Final booking deadline is 24 January, unless paying by cheque using the form below. *Please note places are strictly limited for this shared event and early booking is advised.*

Registration fees are as follows:

	Registration fee (inc VAT)
Members of RSC, SWIG	£89
Non-members	£161
Students	£20

Exhibitors: A limited number of table top displays are available at £128 each. Literature may be distributed for a fee of £67.

Cancellation policy: Refunds can only be made if cancellations are notified at least 5 days in advance of the workshop date.

Online Registration: Eventbrite -

https://www.eventbrite.co.uk/o/water-science-forum-6292385515

Or by completing the following form

(Please complete a separate form for each delegate) A £10 booking charge will apply if payment is not received with registration. If you prefer to pay by cheque, or for late payments up to 29 January, please complete the form below (cheques payable to "RSC Water Science Forum"): Title (Dr, Mr, Mrs etc)First Name(s) SurnameJob Title Organisation/Affiliation AddressPost Code Email Do you have any special dietary or other needs? If so, please specify below: RSC Membership Number (if applicable) The completed form should be returned to the Treasurer: Mr Jonathan Mace, Quality Manager ALS Life Sciences Division, Environmental Unit 11. Silkwood Park, Janes Hill Wakefield WF5 9TG, email: jonathan.mace@ymail.com.

For all enquiries regarding the event please contact: Adrian J Clark Telephone: 01326 240194, email: <u>adrian.clark@btinternet.com</u>.