

Role of Sensors in Disinfection control – minimising by-products and maximising disinfection

26 September 2012

Scottish Government offices, Leith, Edinburgh, EH6 6QQ

By far the most common chemical disinfectant for water treatment, and the one that has historically made the greatest contribution to the prevention of disease from drinking water worldwide, is chlorine. Chlorine is used not only as a primary disinfectant in water treatment, but is also added to provide a disinfectant to protect the water during distribution to the tap. This is aimed largely at preserving the quality of water delivered to the customer, but may also provide a measure of protection against ingress of pathogens. The use of chlorine has led to some concerns over organochlorine by-products, which arise from reaction with natural organic material in water. The most well-known of these by-products are the trihalomethane (THM) compounds such as chloroform, other organochlorine by-products of increasing concern are the haloacetic acids (HAAs).

The use of chlorine sensors has grown steadily since their introduction in the 1950s to be an established and fundamental part of water treatment, although much more challenging on-line sensor systems are now available to monitor disinfection by-products. This workshop will look at the role of sensors in managing water treatment to maximise disinfection whilst minimising the production of un-wanted by-products such as THMs.

10% Early Bird Discount for bookings by 29th August 2012

Chairman: Ian Walker, Innovation Director, WRc plc

09.30 Coffee & registration

10.00 Welcome and Introduction from Chair

10.10 Disinfection By-products – Do they really matter?

Matt Bower, Operations Team Leader, Drinking Water Quality Regulator for Scotland

10:35 A water company view on DBP issues, the Scottish Waters perspective

Simon Parsons, Chief Scientist, Scottish Water

11.00 Tea / coffee

Session 1: Minimising by-products through process control

11:30 Advanced Coagulation Control using submersible UV-VIS & Compass NOM Characterisation techniques

Roger Powell, Sales Director, Process Measurement & Analysis

12.00 Streaming Current Monitoring and Coagulation Control...what happened to it?

Mike Riding, Managing Director, Process instruments

Session 2: On-line monitoring of THMs

12:30 ROI model for management of THMs, highlighting how sensors might help

Dr Emma Goslan, Research Fellow in Water Chemistry, Cranfield Water Science Institute

13.00 Lunch and networking (includes **SWIG AGM 13.00-13.30**)

14:00 On-line monitors/sensors for THMs

Dr Michael West, Chief Scientist, Aqua Metrology

14.30 Controlling THMs in Drinking Water

Dr Mark Brown, Director of Sales, Multisensor Systems Ltd

15.00 How do disinfection by products affect residual chlorine monitors?

Mike Strahand, General Manager, Analytical Technology

15.30 Discussion & close

REGISTRATION: The cost of attending the Workshop is £78.00 inc VAT for SWIG members. £140 inc VAT for non-members. Literature may be distributed for a fee of £60 and a limited number of table top displays are available at £110 each. Registrations can be made by Tel: 01934 830658, email: rosa.richards@swig.org.uk web: www.swig.org.uk using the on-line booking form. **Please advise if you have special dietary needs.**
Cancellation policy: Refunds can only be made if cancellations are notified at least 5 days in advance of the Workshop date.