

Sensor Evolution

8th November 2011

ABB, Oldends Lane, Stonehouse, GL10 3TA

Location map: [here](#)

This workshop will seek to chart the development of sensor technologies applied to the water industry and future-gaze as to what technologies will be implemented. Sensor evolution can be described in terms of the complexity of the sensor system and also the evolving legislative drivers for measurement and some ways these go hand-in-hand. Some of the earliest “bio-sensors” were aquatic creatures such as fish or invertebrates which were used to assess water quality. It was then deemed necessary to measure particular components in the water that affect the water quality and a number of simple sensors were developed. Moving from simple single analyte sensors modern and future sensor technologies will employ multi-analyte, remote sensing arrays. In addition, the development of different technologies used in water sensing will be discussed, for example comparisons between electrochemical or optical methods. **Evolving sensor technologies** that will be covered in this workshop will include simple physical sensors such temperature, flow and pressure; chemical sensors, biological sensors and finally complex sensing systems encompassed in biosensors.

Early Bird Discount: 10% discount for bookings received by 11 October 2011

Chairman: Richard Luxton, Director, Institute of Bio-Sensing Technology (UWE)

09.30 Coffee & registration

10.00 Introduction and overview

Richard Luxton, Director, IBST (UWE)

10.10 The History of Sensors in Water Monitoring

Robin Lennox, ICA Specialist, South West Water

10.40 ABB's Aztec Colorimetric Journey

Mike Sparrey, Analytical Sales Specialist, ABB

11.10 Tea / coffee

11.40 Screen printed carbon electrodes for stripping analysis of trace metals in water

Dr Kevin C. Honeychurch, UWE,

12.10 Biosensors (electrochemical, MEMS) – Title TBC

Guido Drago, Director, Applied Enzyme Technologies

12.40 Lunch

13.40 *Quasi-Vivo*[®] in-vitro models as an alternative to use of animals for toxicity

Malcolm Wilkinson, Managing Director, Kirkstall Ltd

14.10 Sensor Integration: the Pros and Cons

Andy Wallace, Sales Engineer, Partech Instruments

14.40 Issues with current sensors and where the future will take us

Discussion session, led by Richard Luxton

15.10 Close

REGISTRATION

The cost of attending the Workshop is £75.00 inc VAT for members of SWIG and £135 inc VAT for non-members. Literature may be distributed for a fee of £55 and a limited number of table top displays are available at £105 each. Registrations can be made by Tel: 01925 855741, email: linda.smith@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.