

# **Developments in Nutrient Monitoring**

3 July 2019

National Motorcycle Museum, Coventry Road, Bickenhill, Solihull, B92 0EJ

Nutrients are essential for biological systems, but too much can create problems for rivers, lakes and beaches. The water framework directive creates requirements to control nutrient discharges, so the Environment Agency is commencing trials of a new way of regulating using Catchment Permitting and Catchment Nutrient Balancing. Both initiatives will require focused measurements to demonstrate the effectiveness of proposed schemes.

This workshop will look at a variety of measurement technologies available to monitor and control key nutrients including nitrates and phosphorous compounds. It will help water companies and others select suitable instruments for nutrient management projects.

Chair: Andrew Chappell, Environment Agency

## 09:30 Tea, Coffee & registration

10:00 Introduction by the Chairman. Andrew Chappell, Environment Agency

- 10:10 Utilising Flexible Permitting Approaches in England. Barrie Howe, Environment Agency
- 10:40 Proficiency testing. Wayne Gaunt, LGC Ltd

## 11:10 Tea & Coffee

- 11:30 Near real time Phosphate monitoring in natural waters. Adam Dutton, Sea-bird Scientific (OTT Hydromet)
- 12:00 Intelligent Autonomous Iron Additive Control to Meet New P Consents. **Prof Pete Skipworth, EMS Ltd**
- 12:30 Using nutrient sensors for environment monitoring. Harry Lloyd, Environment Agency

## 13:00 Discussion & Lunch

- 14:00 A new field deployable nitrate analyser. Xize Niu, South West Sensor Ltd
- 14:30 Portable low cost microfluidic chromatography with UV detection to measure Nitrate/Nitrite *in situ*. **Mark Bowkett, TE Laboratories Ltd**

#### 15:00 Discussion

#### 15:30 Close

**REGISTRATION:** The cost of attending the Workshop is £95.00 inc VAT for RSC and SWIG members. £171 inc VAT for non-members. £22 for students. Literature may be distributed for a fee of £71 and a limited number of table top displays are available at £136 each. Registrations can be made by Tel 01934 830658 or by email to <u>rosa.richards@swig.org.uk</u> or using the on-line booking form. **Please advise of any special dietary requirements at time of booking.** Cancellation policy: Refunds can only be made if cancellations are notified at least 5 days in advance of the Workshop date.