



Sensors for Anaerobic Digestion

18th October 2012

Lancashire Digital Technology Centre, Burnley, BB10 2TP

Anaerobic digestion was first used to generate biogas from UK municipal wastewater sludge in the late nineteenth century, since which time it has become widely used across the industry. Initially used principally to reduce the volume of biosolids residuals, AD is now seen as the most sustainable technology for recovering energy from sludge. This focus on energy has led companies to explore how these processes can be better managed to enhance biogas production whilst maintaining compliance of the process and outputs. Improvements in the control and optimisation of AD process will be of interest to producers of other organic waste streams including agricultural and food wastes.

This workshop will explore the needs and aspirations of the end-users around anaerobic digestion and discuss the technology that underpins the measurement and control of these processes.

10% 'Early Bird' discount for bookings received by 21 September 2012

Chair: Chris Jones; R&D Manager, Northumbrian Water Ltd.

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| 09.15 | Coffee & registration |
| 10.00 | Introduction
Chris Jones, Northumbrian Water Ltd |
| 10.10 | Instrumentation for Anaerobic Digestion: An operator's view.
Malcolm Meadows, Sludge Process Optimisation Controller & Donna Rawlinson, AAD Commercial Project Manager, Northumbrian Water Ltd |
| 10.25 | Where there's muck there's brass
Richard Lancaster, SBAP Operational Readiness Manager and Neil Baird, Senior Design Manager United Utilities |
| 10.50 | Gas Quality Monitoring for Biomethane Injection to the Grid
Iain Ward, Project Director, CNG Services Ltd |
| 11.15 | Coffee |
| 11.45 | Online dry solids monitoring
Mike Riding, Managing Director, Process Instruments |
| 12.15 | Process and analytical sensors- effective use and lessons learned
John Marsh, Business Development Manager (Municipal Water Team) and Bob Lane, Business Manager (Process Analytics), Siemens |
| 12.45 | Discussion & Lunch |
| 13.30 | Towards Advanced Control for Anaerobic Digesters: Volatile Solids Inferential Sensor
Grace Oppong, Research Student, Biopharmaceutical Bioprocessing Technology Centre (Newcastle University) & Perceptive Engineering Ltd |
| 14.00 | A new and straightforward biosensor to quantify volatile fatty acids in digestates
Ana Soares, Lecturer in Biological Engineering, Cranfield University |
| 14.30 | Analysing AD processes with high-throughput sequencing
Matthew Wade, Newcastle University |
| 15.00 | Discussion & close |

REGISTRATION: The cost of attending the Workshop is £78.00 inc VAT for members of SWIG and £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 or by email to rosa.richards@swig.org.uk 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.