

SWIG Workshop: Instrumentation & Asset Management 28 September 2022

Conference Room, Thames Barrier Information Centre, 1 Unity Way, London, SE18 5NJ

As the UK water industry continues to migrate from the more traditional CAPEX/OPEX models to an integrated TOTEX model there is an ambition to understand the health of assets in real-time to optimize systems, plan maintenance and better inform future designs. The need for data on asset condition, health, performance and efficiency creates a need for sensors and systems to provide the data and information to the right people at the right time.

A change in mindset and application from reactive or time-based maintenance to condition-based maintenance requires sensors and systems to drive proactive interventions and improve overall equipment effectiveness (OEE). Many methods are available online and off-line for monitoring assets of varying criticality such as vibration monitoring, acoustics, thermography, motor current signature analysis and tribology to name but a few. As a strategy matures the implementation of the relevant technology is key to ensure engineers can diagnose a problem once identified.

REGISTRATION: The cost of attending the Workshop is £110 inc VAT for SWIG members in person or online. £210 inc VAT for non-members in person or online and £27 for students. Literature may be distributed for a fee of £85 and table top displays are available at £210 each. Registrations can be made by email to hannah.casswell@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.

Chair: Alex Gray, Thames Water

09:30 Tea, Coffee & registration

10:00 Introduction by the chairman. **Alex Gray, Thames Water**

10:30 Prediction and validation of storm overflows using networks of sensors as a digital twin.
Jethro Yates, Thames Water

11:00 Didn't see that coming ... really? **Paul Egan, 8 Power**

11:30 Tea & Coffee

12:00 Technology's Great – Maintenance Matters. **Angus Fosten, Partech**

12:30 Wireless Sensors: A Low-Cost Option for Advanced warning of Potential Flood Situations.
James Devereux, PSItech

13:00 Lunch

14:00 Detecting bursts and performance degradation through monitoring Rising Mains. **Alex Forbes, Syrinix**

14:30 Machine learning for data driven management of UK railway drainage infrastructure. **Ehsan Kazemi, University of Sheffield**

15:00 From loggers to levers: when will the internet of things help us manage stormwater overflows and reduce flood risk. **Peter Melville Shreeve, University of Exeter**

15:30 Discussion

15:50 Close

Table top exhibitors:

