

# Waste Water Treatment: The Drivers Practicalities and New Technologies

**This workshop will be run on Friday February 19<sup>th</sup> at Environ2010.**

Wastewater is water that has been adversely affected in quality by anthropogenic substances. It comprises liquid waste from domestic residences, commercial properties, industry, and agriculture. It composition can include a wide range of potential contaminants including bacteriological and chemical. The proper management of waste water treatment plants in Ireland is important in order to protect our ecosystems from the treated water that is discharged.

This workshop will involve a tour of the Limerick City Main Drainage Bunlicky Dock Road limerick. The city drainage infrastructure covers some 30km<sup>2</sup>. The Limerick Main Drainage Project has significantly upgraded the existing sewer network and pumping facilities. The new system is linked to a state-of-the-art waste water treatment plant, thereby eliminating untreated discharges to the Shannon and Abbey Rivers from Limerick. The €300 million investment has improved river water quality in the whole area, from Parteen in Co. Clare to the Shannon Estuary.  
[www.limerickcity.ie/ourservices/waterservices/LimerickMainDrainage](http://www.limerickcity.ie/ourservices/waterservices/LimerickMainDrainage)

The tour will involve visiting the water treatment plant and sludge treatment plant facilities. During the tour there will be an opportunity to see state of the art wireless sensors for water and air quality measurements.

The workshop will then be following by a selection on talks in areas such as

- Environmental management
- Legislation
- Emerging novel contaminants of waste water.

Places are limited so register your interest when booking online on [www.esaiweb.org](http://www.esaiweb.org)

**Waste Water Treatment Plant Workshop**  
**The Drivers, Practicalities and New Technology**

9am Bus leaves for Waste water Treatment plant Bunlicky Dock Road Limerick

9.20 am Tour begins

Group Split into two (alternate)

9.20-10.20 Waste Water Treatment Plant

10.20- 11.20 Sewage Sludge Treatment Plant

Return to Limerick Institute of Technology

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**Lectures**

**11.50 -12.20 Title: EPA Report on Urban Waste Water Discharges in Ireland**

by Ms Ann Marie Egan EPA

**12.20- 12.50 Title: Applications of Wireless Sensors to Environmental Monitoring**

by Mr Gary Carroll EPI Sensor L.t.d., Enterprise Acceleration Centre LIT

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Lunch (prize giving) 12.50-1.20 pm

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**Lectures**

**1.20 pm Title: The Use of Biomarkers and Bioassays in ecotoxicology and for environmental monitoring of effluents and aquatic environments**

by Dr Brian Quinn Galway Mayo Institute of Technology

**1.50 pm Inquiry Based Simulated Learning Environment for Undergraduate Science Researchers *design and operation of wastewater treatment systems***

By Dr William Fitzgerald Sligo Institute of Technology

