# World-leading monitoring technologies

Modern Water Monitoring is expert in the design, development and provision of analytical instruments and technologies for monitoring toxicity, trace metals and environmental contaminants in water, soil, food and industrial process streams.



### **Toxicity**

Our online, portable and laboratory systems use bioluminescent bacteria to perform biosensor testing to detect the presence of toxic substances.

### **Environment**

Our portfolio of environmental products include immunoassay, fluorometry and advanced headspace monitoring systems that can selectively identify and quantify contaminants.

### **Trace Metals**

Our online and portable instruments provide the perfect solution to monitor and control metals discharged from industrial processes or naturally occurring in aquifers.





## recognised as the gold standard for toxicity testing

### Toxicity

Our Microtox® M500 toxicity test system is the industry standard for laboratory-based rapid toxicity screening and analysis. Deltatox® II is the portable, acute toxicity analyser used with the Microtox® technology. Modern Water's new Microtox® CTM is a site-based, broad range Continuous Toxicity Monitor (CTM)

**Microtox® M500** The Microtox® M500 analyser is a laboratory-based, temperature-controlled, self-calibrating photometer that measures acute toxicity. Microtox® rapid toxicity detection is an in vitro test system that uses bioluminescent bacteria for the detection of toxicity and is used as a screening system to detect the relative toxicity of a sample.

### **Product features include:**

- Test is sensitive to more than 2,700 different simple and complex chemicals
- Results available in as little as 15 minutes after reconstitution incubation period
- Cost effective and easy to perform tests
- Complies with ISO 13348-3:2007 (luminescent bacteria test).

### Microtox® CTM



- Real-time and truly continuous monitoring
- 4 week, autonomous operating cycle
- No manual intervention except for monthly maintenance
- Automatic diagnosis of system faults
- Remote control, data analysis and troubleshooting
- Detects thousands of chemical compounds with lower levels of detection than most other biosensor systems

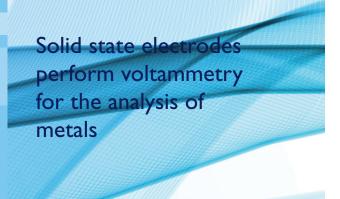
### **Deltatox® II**

A simple, rapid and extremely responsive portable toxicity analyser using Microtox® technology.

Deltatox® II uses

bioluminescence technology to screen for both acute toxicity and microbial contamination (ATP method).

- Sensitive to more than 2,700 different chemicals
- Results available in 5 minutes after reconstitution incubation period
- Microbial detection level in drinking water 100 cfu/mL
- Excellent correlation with HPLC and GC methods
- Cost effective and fully portable



## Trace Metal Monitoring

Modern Water's trace metal product range includes the portable PDV6000ultra and the on-line, continuous systems: the OVA7000, OVA7000 Dual Cell and the OVA5000. Our technology is robust and reliable, can be operated by technicians anywhere in the world and is relatively low maintenance.

### PDV6000ultra - Portable Laboratory Monitor

The PDV6000ultra is an ideal tool for site monitoring and laboratory use, offering an enhanced measurement range and VAS software for real time visualisation of analytical results.

### **OVA Systems - 24/7 Online Monitoring**

The OVA is a fully automated on-line metal monitor; developed as a modular system, to provide continuous or intermittent monitoring of metals in process streams, effluent discharges, river and potable water. The OVA is based on internationally recognised voltammetry (ASV and CSV) technologies, which provides quick and accurate determination of metals at the micrograms per litre level, directly comparable with laboratory analysis using AAS or ICP.



### The benefits of our trace metal analysers include:



- Market leading customer support service and user training via Modern Water
- Ability to react to unexpected events and protect reputation
- Improves treatment efficiency and lowers operating costs
- Modern Water provides a range of standards, electrolytes and other reagents

### **Applications**

- Municipal and industrial wastewater
- Manage dosing of flocculants
- Power plant flue gas condensate
- River water monitoring
- Drinking water
- Mine leachate
- Municipal incineration wastewater
- Automobile manufacturing effluent
- Copper, lead, zinc smelting
- Manufacturing effluent in the electronics industry
- Contaminated land/ ground water remediation

### Environmental MODERNWATER Monitoring

Our Environmental range of products use immunoassay test kits and fluorometers to selectively identify environmental contaminants such as pesticides and petroleum hydrocarbons and monitor BOD and algae.

### **Fluorometers**

Modern Water's portable fluorometer range includes the AlgaeChek (single parameter) and the AlgaeChek Ultra (multiple parameter), which identify potentially harmful cyanobacteria and turbidity. The AlgaeChek Ultra can be configured to detect up to three parameters

It additionally includes BODChek and PetroChek in-situ, real-time monitors. The BODChek detects a fluorescent indicator compound that is inherent in sewage and slurry and provides an output to measure BOD equivalent units. PetroChek detects polycyclic aromatic hydrocarbons (PAHs) originating from crude oil and refined fuels and lubricants



### **Test Kits**

We offer a wide variety of test kits which include the following product ranges: EnSys; EnviroGard; RaPID Assay and QuickChek.

The EnSys range are rapid field or laboratory colorimetric tests for the analysis of explosives in soil. The RaPID Assay range is a rapid field or laboratory enzyme immunoassay method for the analysis of soil and water for remediation, assessment and industrial testing. EnviroGard is a rapid field or laboratory immunoassay method using an antibody coasted test tube or plate technology. QuickChek SRB detection is a rapid enzyme immunoassay which detects Sulphate Reducing Bacteria.



### Online THM and VOC

Modern Water's Multisensor range includes the Multisensor I 100 which is a VOC and oil in water event monitor whilst the Multisensor I 200 is a VOCs concentration monitor. The Multisensor2000 is a total Trihalomethanes (THMs) monitor. The entire Multisensor range uses a non-contact and reagent-less measurement technique with virtually no moving parts, eliminating the need for frequent maintenance and has detection limits down to 1ppb.



### General enquiries

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