

***Online Toxics Measurement:  
Keeping Water Safe***

***ITA Workshop Proceedings***

Prepared by the **ITA 2002 Toxics Measurement Workshop Task Force**

2002

**Instrumentation Testing Association**

## ***Abstract***

These proceedings contain papers presented for a one-day workshop regarding online toxics measurement. Chapter 1 provides an introduction to the workshop program, speakers, and facilities.

Chapters 2 through 7 discuss varying technologies and research that can be used to provide physical barriers to intruders and assist with increasing the number of guards and patrols that are designed to close the early warning gap in treatment facilities. Technologies discussed in the workshop include:

- Electronic Security Measures;
- Automated Water and Air Quality Monitoring;
- Microelectromechanical Systems (MEMS);
- Early Warning Using Odors Sensors; and
- Early Warning Using TOC Analyzers.

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ITA's Workshop Task Force was formed by the ITA Board to originate and produce educational programs for water and wastewater instrumentation to address the needs of ITA's membership. ITA's workshop proceedings are intended to provide supplemental materials of ITA workshop speaker presentations.

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The Instrumentation Testing Association is an international nonprofit technical and educational organization dedicated to promoting the understanding, selection, improvement, and cost-effective use of instrumentation and automation applications for monitoring and controlling water, wastewater, and industrial systems. Since 1984, ITA has provided educational and technical services to environmental specialists, including civil, mechanical, electrical, and environmental engineers; scientists; local, state, and government officials; treatment plant operators, technicians, and collection systems personnel; laboratory personnel; chemists; industrial technologists; students; academics; and equipment manufacturers and distributors.

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## ***Preface***

The purpose of this publication is to provide supplemental materials to ITA workshop speaker presentations regarding online toxic measurement technologies for water and wastewater treatment applications. The reader of this report is responsible for determining which parameters are of most importance to their application to select the most suitable technology for their respective needs. It is also emphasized that a complete assessment of the information presented herein requires attendance of ITA's workshop and the presentation of supplemental materials by ITA's Workshop Task Force.

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