



## **Advanced Technologies For Monitoring Air Pollution**

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### **Bio:**

Dr. Andrea Polidori is the Quality Assurance Manager for Science & Technology Advancement at SCAQMD and is responsible for the development and implementation of quality assurance control methods, plans, procedures, and programs. He is currently leading the design, development and implementation of the Air Quality Sensor Performance Evaluation Center (AQ-SPEC), a program created to conduct comprehensive performance tests of commercially available, low-cost air quality sensors. Prior to joining the SCAQMD, he was a Research Assistant Professor at the University of Southern California, Los Angeles where he conducted extensive research on the relationships between indoor and outdoor air pollutants, and the health impacts caused by exposure to air toxics.

### **Abstract:**

During the past few years the South Coast Air Quality Management District (SCAQMD) has been testing, developing, and using emerging technologies for measuring air quality. The Air Quality Sensor Performance Evaluation Center (AQ-SPEC; [www.aqmd.gov/aq-spec](http://www.aqmd.gov/aq-spec)) was established in 2014 to conduct a thorough and systematic characterization of currently available “low-cost” air quality sensors under ambient (field) and controlled (laboratory) conditions. Similarly, SCAQMD’s fenceline monitoring program was created in 2008 to evaluate the performance of various optical remote sensing (ORS) techniques and their ability to quantify fugitive VOC emissions from refineries and other industrial facilities. During this presentation, the main activities conducted within the AQ-SPEC and the fenceline monitoring programs will be discussed in detail, along with the results from recent air monitoring studies involving the application of “low-cost” sensors and ORS methods.