R. Scott McEwan

Senior Measurements Specialist

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Mr. McEwan joined Sonoma Technology in 2021 and works collaboratively with the company's Industrial Services and Field Operations groups. He has over 15 years of experience in air quality field measurement work and is an expert at instrumenting regulatory-grade open path (OP) fenceline monitoring systems (FLMS), regional air monitoring networks, and process control systems. He supports measurement project design, deployment, and operations. Mr. McEwan also helps clients purchase measurement instruments tailored to site conditions, compliance requirements, and research needs.

Education

BS, Physics, University of West Georgia, Carrollton, GE

Instrumentation Expertise (Partial List)

Gaseous, Particulate, and Visibility Instruments

- FTIR, UV-DOAS, UV Fluorescence, CEMs
- OP, ambient, and portable point analyzers
- Tapered Element Oscillating Microbalances
- Nephelometers, Hi-Vol particulate sampling
- PTFE filter sampling

Meteorological and Other Support Instruments

- Vaisala, Climatronics, RM Young Met. Sensors
- Mass flow and sample control

For a full list of instrument experience
http://www.sonomatech.com/sites/default/files/filedepot/RSM.pdf

Fenceline Analyzers with OP-UVDOAS and OP-FTIR. Prior to Sonoma Technology, Mr. McEwan's career included manufacturer-level monitoring instrument application engineering and sales management. While in his previous role, he assisted Sonoma Technology in building one of the largest U.S. fenceline analyzer networks. This network, operated by Sonoma Technology, is comprised of in-house managed OP Ultra-Violet Differential Optical Absorbance Spectroscopy (UV-DOAS) and Fourier-Transform Infrared Spectroscopy (FTIR) systems.

Gaseous and Particulate Measurement Expertise. Mr. McEwan has spent over 10 years deploying FTIR and UV-DOAS systems for monitoring gas concentrations; this work included engineering and sales management for point and OP UV-DOAS and FTIR technologies. He is also an expert at running flow control systems for accurate sample collection of particulate matter concentrations. Mr. McEwan's work has been funded by a variety of organizations, including the U.S. Pacific Northwest National Laboratory, the U.S. Department of Energy, various industrial clients, and the U.S. Environmental Protection Agency (EPA). For example, he has worked on air toxics monitoring projects with the U.S. Department of Defense, U.S. Army, U.S. Army Corps of Engineers, EPA, and other clients worldwide in the power, petroleum, petrochemical, mining, and semiconductor industries. His background in optical absorbance spectroscopy technologies includes detection of Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) material; process control; and continuous emissions monitoring systems (CEMs). Mr. McEwan has also worked on quality assurance project plans (QAPPs), such as those for the EPA Mountain Acid Deposition (MADPro) Clingman's Dome site, and the EPA's Clean Air Status and Trends Network (CASTNET) program.

Training and Design Work. Mr. McEwan has trained numerous staff in measurement equipment deployment, calibration, and on-site troubleshooting. For example, Mr. McEwan formerly coordinated daily field operations for a 70-station segment of CASTNET. That work involved training and working with laboratory technicians and field operators in the daily operation, calibration, and periodic upgrading of air monitoring equipment. In addition, Mr. McEwan's work has often included instrument and systems design. He has initiated development of new FTIR systems and developed Factory Acceptance Testing (FAT) and traceable instrument calibration methods. He also collaborated in the design, fabrication, and deployment of hardware upgrades for CASTNET.

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