



Yachun (Anna) Tai

Air Quality Measurements Scientist



Ms. Tai joined Sonoma Technology in 2022. As a member of the Southern California Field Operation Group, she supports project tracking, assists the operation manager and field technicians to implement crucial quality control measures in the field, and helps streamline quality assurance processes for several fence-line monitoring projects in California.

Prior to joining Sonoma Technology, Ms. Tai worked as a Senior Quality Assurance Specialist in the Air Quality Program at the Washington State Department of Ecology, where she developed an extensive knowledge of quality assurance processes for monitoring critical criteria pollutants and was the maintenance lead on audit instrumentation for the gaseous pollutants (carbon monoxide, nitrogen oxides/reactive nitrogen compounds, sulfur dioxide, and ozone). Ms. Tai performed regular data review and validation on critical criteria pollutants and meteorological parameters, prepared standard operating procedures (SOP) and quality assurance project plans (QAPP), conducted statewide performance audits at ambient air monitoring stations, and performed quarterly and annual data assessment reports for the program.

During her graduate studies at the Desert Research Institute, Ms. Tai focused on establishing a 1-year atmospheric deposition measurement campaign using a novel sampling methodology developed at the Institute to collect daily atmospheric dry and wet deposition on surrogate surfaces at Lake Tahoe. Some of the commercially available instruments used in the project included size-segregated particulate matter monitors, ultrasonic anemometers, and Scanning Electron Microscopy (SEM) and Energy Dispersive X-ray Spectroscopy (EDX). Ms. Tai took on many roles in laboratory analysis, sample collection, quality control and quality assurance, instrument maintenance, and data analysis to derive seasonal and annual estimates of atmospheric deposition fluxes of particles to Lake Tahoe to understand Total Maximum Daily Loads (TDML) for water transparency restoration interests.

With over a decade of experience in field and audit work, handling large atmospheric science datasets, performing data validation, and working with complex calibration systems, Ms. Tai holds expertise in quality assurance of ambient air monitoring pertinent to critical criteria pollutants. She also continues to seek collaboration with people of various backgrounds to learn and provide defensible and high-quality air monitoring data to communities and clients in need.

Education

- MS, Atmospheric Sciences, University of Nevada, Reno (Desert Research Institute)
- BS, Atmospheric Sciences, Florida State University

For a list of publications, see sonomatech.com/ResPub/YXTpub.pdf.