



Abhilash Vijayan, PhD, PE

*Vice President, Air Practice Area Lead
Principal Scientist*

Dr. Vijayan joined Sonoma Technology in 2021 and leads the Air Quality Practice Area at Sonoma Technology and Spheros Environmental. He has extensive experience in air pollution, transportation, and climate change programs, policy, and research.

Dr. Vijayan has been responsible for building and expanding the Community Air Quality and the Climate programs at Sonoma Technology. He specializes in designing and implementing state-of-the-art air quality, air toxics, and climate change planning, monitoring, and mitigation projects for communities and agencies. He has also implemented various regulatory and research-grade monitoring solutions, including mobile monitoring studies, regulatory and air sensor network deployments, and satellite and remote sensing data applications, as well as advanced modeling and data analyses and education and outreach projects to support air quality and climate change programs. Dr. Vijayan has also served as the principal investigator for several key climate change research projects for the Department of Energy to study and mitigate the emissions of methane and other co-emitted air pollutants from the oil and gas sector.

Prior to joining Sonoma Technology, Dr. Vijayan worked at the California Air Resources Board (CARB) for over 12 years, where he most recently served as the Manager of CARB's Emission and Exposure Research Section. In this position, he oversaw the Agency's air pollution exposure and greenhouse gas (GHG) emissions research portfolio and managed a variety of innovative in-house and extramural research projects, as well as collaborated studies with leading air quality and climate researchers across the nation. Dr. Vijayan has contributed to a variety of air quality and climate change programs, which included air quality and GHG monitoring and measurement research projects, emissions inventory and health risk assessments, and transportation and mobile source program evaluations, as well as project-level assessments for federal, state, and local programs. Dr. Vijayan has also contributed to a variety of complex emissions modeling exercises for regional air quality and transportation conformity analyses and program evaluations and regulatory support assessments. While at CARB, he led the design and development of several key modules of EMFAC 2011, California's official regulatory model for estimating mobile source emissions to evaluate transportation growth scenarios and regional transportation conformity assessments. He also led emission modeling for regional GHG Emission Reduction Targets for the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375) and contributed to AB32 Scoping Plan updates.

Dr. Vijayan serves as a Global Air Quality Fellow with the U.S. Department of State, and has served in various capacities at the Air & Waste Management Association. He is a registered Professional Engineer in Chemical Engineering (California) and Environmental Engineering (Arizona).

Education

- PhD, Civil and Environmental Engineering, University of Toledo, OH
- MS, Civil and Environmental Engineering, University of Toledo, OH
- BTech, Civil Engineering, University of Kerala, India

Licenses

- California Professional Engineer, License No. CH 6431 (Chemical)
- Arizona Professional Engineer, License No. 50976 (Environmental)

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