

# Michael McCarthy, PhD

## Contact Info

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## Summary

Founder and Chief Scientist at the environmental consulting firm **Radical Research, LLC**. Adjunct Professor of Environmental Analysis at Pitzer College. Vice-chair of Riverside Neighbors Opposing Warehouses. I have 25 years of experience as an atmospheric scientist, 20 years of experience as an environmental consultant, and a little over a year of experience as a community activist and professor.

My atmospheric science expertise includes near-road pollution gradients, health-risk assessments, spatio-temporal variability, source apportionment, emissions characterization, climate change, air toxics, and isotopic compositions. I typically apply statistical analysis and geospatial visualization methods to quantify and characterize air quality issues. I also develop custom applications for the display and visualization of large and complex datasets.

## Work

### Experience

Title	Organization	Where	
Founder	Radical Research LLC	Riverside, California	March 2018
Adjunct Professor	Department of Environmental Analysis, Pitzer College	Claremont, California	August 2017
Senior Atmospheric Scientist	Sonoma Technology, Inc.	Petaluma, California	January 2016
Air Quality Analyst	Sonoma Technology, Inc.	Petaluma, California	October 2015

### Skills

Domain	Skills
Programming and Markup Languages	R, SQL, C+, BASH, fortran, IDL, Markdown, CSS, HTML, LaTeX
Web Applications	R Shiny, HTML, API
Database Software	R tidyverse, SQL
Quality Assurance	QAPPs, QMPs, DQOs SOPs, Dashboards, audits, verifications, blanks, one-point
Statistical Analysis	Regressions, factor analysis, time-series analysis, distributions, significance testing
Network and Monitoring Evaluations	Collocation comparisons, network assessments, community-scale monitoring, GIS,

## Academia

### Education

Degree	Institution	Where	Time
PhD in Chemistry	University of California at Berkeley	Berkeley, California	August 1998 – December 2003
BS in Chemistry	Creighton University	Omaha, Nebraska	August 1994 – May 1998

## Teaching Experience

Title	Organization	Where	Time
Adjunct Professor	Department of Environmental Analysis, Pitzer College	Claremont, California	August 2022 – Jun 2023

## Dashboards

### Applications

- Warehouse CITY - (2022 to Present)
- Air Toxics Dashboard - (2021)
- PM<sub>2.5</sub> Data Quality Dashboard - (2018 to Present)
- Ozone Data Quality Dashboard - (2020 to Present)
- NO<sub>2</sub> Data Quality Dashboard - (2020 to Present)
- NCore Dashboard - (2020 to Present)
- Annual Monitoring Network Report - Under Development