

Anna Ruth Robuck, Ph.D.

SUMMARY

My research experience spans analytical chemistry, water quality, marine ecology, toxicology, statistical modeling, geospatial statistics, data science, and oceanography. I have led a team since 2022 at the US EPA as a Chemist/Principal Investigator focused on the measurement of PFAS, microplastics, and other organic pollutants in environmental matrices using mass spectrometry and subsequent delivery of datasets or interpretation serving stakeholder needs. I specialize in deriving and interpreting PFAS data in fish, wildlife, plants, surface water, ground water, sediment, and soils, with capacity to empirically comment on bioaccumulation, fate/transport, and remediation efficacy. I also specialize in non-targeted analysis of complex matrices (biological tissues, sediment/soil) and subsequent quality control, reporting, visualization, and interpretation of complex NTA datasets. I have previous experience in analytical method development, metabolomics and human health studies, multiple types of passive sampling (PE sheets, DGT, POCIS – deployment, analysis, and sampling rate calculations), field sampling across a range of environments, working with state and municipal partners to ensure CWA 303d compliance, nutrient analysis, and watershed modeling.

With recent reorganization of the US EPA, I am now part of the Office of Applied Science and Environmental Solutions/Coastal Science and Solutions Division/Atlantic Coastal Sciences Branch. Our mission with the reorganization is to provide place-based science and support to States, Regions, Tribes, and other stakeholders along the US Atlantic Coast. I am interested in becoming an At Large Committee Member to better understand the needs and issues wrt toxic contaminants in the Chesapeake Bay. I have analytical, data processing, and/or field experience with: PFAS, microplastics, 6-PPD/Q, phthalates, bisphenols, pharmaceuticals and personal care products, UV filters, PCBs, organochlorine pesticides, PAHs, PBDEs, PCDD/Fs

EDUCATION

University of Rhode Island <i>Ph.D. in Oceanography, Environmental Organic Chemistry</i>	Dec. 2020
University of North Carolina Wilmington <i>M.S., Marine Science, Graduate Certificate in GIS</i>	July 2015
University of North Carolina Wilmington <i>B.S., Marine Biology, Chemistry, magna cum laude</i>	May 2010

PUBLICATIONS AND MANUSCRIPTS

See Google Scholar page: <https://scholar.google.com/citations?user=-4sV0MEAAAAJ&hl=en>

PRESENTATIONS AND POSTERS

Scientific communications also include invited keynote lectures (2), presentations to state agencies (7), class lectures (14), technical reports (7), first-author conference oral presentations (13), first-author conference poster presentations (19), and co-author oral presentations/posters (24) — omitted for brevity, more details available upon request.