



Kathleen O. Orrson

Senior Chemist



Sheppard T. Powell
Associates, LLC

EXPERIENCE

Senior Chemist

2003-Present

Chemist

1998-2003*

EDUCATION

University of Maryland, College Park

B.S. in Chemistry

MDE

Certified for the Collection of
Drinking Water Samples

Mrs. Orrson joined Sheppard T. Powell Associates, LLC in 2003, having served as chemist for Powell Labs Ltd. from 1998-2003. Her primary focus has been on water and wastewater analysis using Ion Chromatography (IC), Graphite Furnace Atomic Absorption Spectroscopy (GFAAS), Flame AAS, Total Organic Carbon (TOC), Total Inorganic Carbon (TIC), and other instrumental, wet, and gravimetric analytical techniques. Mrs. Orrson also is in charge of quality assurance for STPA Testing Services.

Mrs. Orrson started her career in 1979 at the Uniformed Services University of the Health Sciences in Bethesda, MD. There, she performed routine chemical analysis of biological specimens. After graduation from the University of Maryland, she joined the Naval Surface Warfare Center, Carderock Division. There, she became an expert in battery and electrochemical research and development. She is the author of 12 publications in the open literature, 18 governmental publications, two patents, and numerous technical presentations and military specifications.

Mrs. Orrson has assisted in the development of a new instrument to measure the amount of heavy metals in wastewater. This included optimization of new methods for various metals. She also worked to develop an EPA-approved sensor to measure phenols in wastewater. She has set up SOPs for analysis of electrochemical plating tanks. She has built pilot plants for battery manufacture and various electroplating methods. Her main emphasis during these investigations was the quality control of various processes.

At STPA, Ms. Orrson is available for discussions of the Water Analysis needs of Clients. This includes method development on our instruments for any unusual samples or matrices in addition to our routine water analysis services. The Water Laboratory can offer same day priority service with advance notice. We have many customers throughout the country and Canada. These include Consulting Companies that want a full service laboratory that can give them the personal attention and service that they deliver to their own clients. We also welcome companies that need routine analysis of specified parameters.

* In 2003 STPA acquired the laboratory staff of Powell Labs Ltd.