Thursday 19 Nov 2020

Analytical Chemistry Applies to Everything!

Kenneth P. Roberts
Department of Chemistry and Biochemistry
University of Tulsa, Tulsa, OK

The field of analytical chemistry continues opening doors to discovery. Research as a senior undergraduate chemistry student upgraded my view of chemistry from just a degree to get a job, to seeing chemistry as a career filled with discovery. Performing experiments with unknown outcomes was/is exhilarating and rocket-fuel for the imagination. Throughout the years, pairing imagination with the scientific method continues to offer opportunities for discovery. From graduate studies in cancer research that extended into low-temperature spectroscopy, I began to appreciate how advances in analytical chemistry could be used to answer age-old questions related to the biochemistry of disease, and then how analytical chemistry could be applied to science in general. This has led to a range of research topics taken on by our group such as chemical carcinogenesis, pharmacokinetics, nanotechnology/nanotoxicology, photovoltaics, and environmental chemistry. Highlights from these research areas will be presented.

6:45-7:00 pm Social
7:00-8:00 pm Presentation

The meeting will be virtual via zoom.

This meeting has a waiting room. Please wait for the host will let you in.

ZOOM LINK Meeting ID: **930 3687 1815** Passcode: **071920**

zoom meeting link

You can also join by calling one of these phone numbers and follow the prompts.

+1 346 248 7799 US (Houston)
+1 408 638 0968 US (San Jose)
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
+1 301 715 8592 US (Washington D.C)
+1 312 626 6799 US (Chicago)
+1 646 876 9923 US (New York)

Kenneth P. Roberts Biographical Sketch

Kenneth Roberts earned a BS in Chemistry from Southeastern Oklahoma State University, Durant, Oklahoma. He then completed his PhD in Analytical Chemistry under Gerald Small at Iowa State University in Ames, Iowa. After completing his PhD, he joined the National Center for Toxicological Research (US-FDA) under the direction of Robert Turesky in Jefferson, Arkansas. After his postdoctoral appointment, Dr. Roberts joined the faculty at the University of Tulsa as an Assistant Professor of Chemistry and Biochemistry in August 2002. Courses taught by Dr. Roberts include Analytical Chemistry I & II, Bionanotechnology, Environmental Chemistry, Analytical Separations, Analytical Spectroscopy, and a summer course on nanotechnology at the Technical University of Gdansk, Gdansk, Poland. His research has been recognized with a Zelimir Schmidt Outstanding Researcher Award. He has also served as Chair-elect, Chair, and Post-Chair of the Tulsa section of the American Chemical Society. Dr. Roberts was promoted to Associate Professor with Tenure in 2008 and to Full Professor in 2015. In 2019, he was selected to be the Chairman of the Chemistry and Biochemistry Department at TU. His research efforts include bioanalytical chemistry, nanotechnology, solar energy, and environmental chemistry. Dr. Roberts has reviewed for several journals and funding agencies, and continues to be active in graduate and undergraduate research at TU.