

Name: Chun Yi Wu, Ph.D., P.E.
Title: Principal Engineer (retired 2022)
Company: Minnesota Pollution Control Agency
City/State: Rosemount, Minnesota
Section: Upper Midwest Section
Join Date: 1996

Educational and Professional Credentials

Ph.D. degree in Environmental Health Science from the New York University
Master degree in Mechanical Engineering from the University of Minnesota
Professional engineer licensed in Minnesota

Biographical Summary

Chun Yi Wu, P.E., Ph.D., is a retiree of a principal engineer from the Minnesota Pollution Control Agency (MPCA). She has almost 29 years of advanced professional-level experience in directing, designing or developing criteria for environmental programs as a licensed Engineer. She has gained technical expertise on assessment of human health and environmental risks posed by air pollutants, especially on environmental data management and analysis. Her expertise on knowledge of federal and state laws/regulations/rules pertaining to air quality lead her perform successfully at the national-level, regional-level and state-level projects.

Dr. Wu served as a Minnesota State representative in several national and international organizations, working with representatives from other state/local/tribes (SLT), EPA, and Ontario, Canada to address and resolve issues on air emission inventories, including rules, regulations, and policies. For example, a state co-chair for several project teams under the E-Enterprise for the Environment that is jointly governed by SLT and the EPA to collaboratively modernize business processes.

As a business expert, she worked in the Minnesota state air emission inventory system design, development, and maintenance. She oversaw state emission inventory development and implementation of the quality assurance and quality control plan. She established a risk-based emission ranking system for prioritizing emission sources and pollutants. She prepared literature reviews, correspondence, written reports, and published more than 30 technical papers on various aspects of emissions inventory and modeling analyses.

She also conducted a receptor modeling to allocate volatile organic air toxics emissions in Minneapolis/St. Paul metropolitan area; conducted a risk assessment for dry clears; conducted a peer review for U.S. EPA's documents related to Dioxin-Like Compound Risk Analysis.

Dr. Wu managed 16 grants agreements between the Great Lakes Commission and MPCA, 3 technical/professional contracts, and one interagency contract among 4 parties.

Prior to join the MPCA, she was an Assistant Research Scientist, at Nelson Institute of Environmental Medicine, New York University, participated in research programs involving the application of aerosol technology to inhalation toxicology; a Lecturer at Department of Marine Engineering, Shanghai Maritime University, taught engineering courses in area of heat transfer and thermodynamics, conducted research work related to energy and energetic analysis of marine engines.

A&WMA Activities and Offices Held

- Chair of the Standing Committee for Non-ACE Programs for the Technical Council
- Atmospheric Processes and Measurements (Air) Group Coordinator for the TC Executive Committee
- Chair and Vice Chair of the Measurements, Monitoring and Controls Division
- Chair and Vice Chair of several Coordinating Committees, such as the Emission Inventory and Data Applications Technical Coordinating Committee.

As a leader, Dr. Chun Yi Wu has engaged the TC officers in developing or helping to develop Non-ACE technical programs for the A&WMA. She also developed instructions and procedures to facilitate Non-ACE Programs. She serves as TC representative in the Webinar Committee under the Education Council, reviewing webinar proposals, assisting in planning and development, and soliciting speakers and moderators. She has actively participated in ACE activities, contributing to technical program planning; organizing and presiding over sessions; reviewing manuscripts; and making numerous presentations. She enhanced the communication among Division and TCC officers in the Air Group to better connect them to the ACE and Non-ACE activities.

Goals/Vision for the Organization

Through the involvement of the A&WMA for more than two decades, Dr. Chun Yi Wu has realized the value of the association in assisting in the professional development and critical environmental decision-making. Members are benefited from the association's neutral forum for exchanging information. The association is a nonprofit, nonpartisan professional organization. Its success is built upon efforts of many volunteers. The Association needs to grow its members of motivated individuals, not only in number of members but also members' involvement and interest in providing relevant services to the membership. The association should continue to seek ways to attract new environmental professionals while keeping existing members by timely supplying information on new technologies, regulatory changes, and environmental issues.

Webinars provide an effective way to improve environmental professionals' knowledge and decision making. With a lot of information online and competing webinar offers from other organizations, the Association should use innovative ideas to renovate the association webinar fee structure. The Association can further use members' network connections to find viable topics and solicit speakers and moderators not only within the members but also non-member professionals. Most important, more volunteers should be recruited to take on champion roles for developing webinars. Those volunteers can devote time to identify underutilized content from rich information sources such as EM publications, specialty conferences, and some hot topics.

The ACE, as the premier international conference, provides the latest environmental information to meet interests of the Association's members and environmental professionals in general. The TC and International Affairs Committee (IAC) recently raised an issue on quality and citability of the ACE proceeding papers. This issue is important because it is related to efforts to enhance the enthusiasm and participation of ACE speakers and attendees. As the well-recognized organization on global environment, we need to have ACE proceedings that exhibit high technical and editorial quality, with presentations easy to access and cite. Dr. Wu has a plan to address these different issues through a combination of being involved and communicating with Tech Council, IAC, Publication Committee and the Board. She also has the experience and understanding to help the Association improve the standing of ACE presentations nationally and internationally, which in turn can increase membership and participation. The TC non-ACE programs committee is supporting a successful Association program of webinars and Specialty Conferences to deliver useful environmental content separate from

the Annual Conference, including publications and other products. Dr. Wu's current Chair role on the non-ACE committee is assisting the Association's bottom line and can continue to enhance it by being on the Board.

Communication and coordination among the various Association Councils is also important. The Association needs to seek new ways to enhance them. A Team Approach can be expanded across Councils for addressing and managing some challenging issues. Continually improving the Association's products and services is an ongoing task that Dr. Wu hopes to engage with collaboratively as an A&WMA Board member.