

WATER ENVIRONMENT ASSOCIATION OF TEXAS

WINFIELD S. MAHLIE AWARD

...to recognize a member of WEAT who has made significant contributions to the art and science of wastewater treatment and water pollution control.

Dr. Ana J. Peña-Tijerina, P.E., BCEE

Dr. Ana J. Peña-Tijerina shares the passion that Winfield S. Mahlie had for working in the wastewater field. Her passion is studying, designing and troubleshooting water and wastewater treatment processes. She possesses a great desire for collaborating with others and a profound curiosity for learning, innovating and finding engineering solutions with practical applications. She is approachable and bridges the gap between engineers and operators. Her co-workers at the Village Creek Water Reclamation Facility affectionately say she is not “a typical engineer”.

She works with the city of Fort Worth as the Technical Services Manager at VCWRF. Dr. Peña-Tijerina’s Technical Services Group monitors and evaluates treatment processes and provides support to all other groups at VCWRF. Prior to joining VCWRF, she worked as a design engineer and modeler consultant for eight years.

Dr. Peña-Tijerina obtained her Bachelor’s degree in Chemical Engineering (graduated Summa Cum Laude) and her Master of Science degree in Environmental Engineering from the Technological Institute of Monterrey. She received her Doctoral degree in Environmental Engineering from the University of Texas at Arlington.

While in graduate school, she taught several environmental engineering and science courses at the universities. She has been serving as a special guest lecturer at the University of Texas in San Antonio, Texas A&M University in College Station, San Antonio College and Southern Methodist University. Her interest on biological processes and water ignited during her last year in college when she learned the scarcity and value of water. Her dissertation topic was Enhanced Biological Phosphorus Removal using mixed

liquor from VCWRF. Her passion for operations began when she worked as Production Manager in the food processing factory in Colima, Mexico. She enjoys working with people and is a natural leader.

Her affiliations include IWA, TACWA, WEF and WEAT. She is an active member of several committees, including the Municipal Resource Recovery Design Committee, the Modeling Expert Group of the Americas and the WEF/WERF Leaders Innovation Forum for Technology. She is chair of the LIFT Digestion Enhancement group and has participated in numerous WEAT committee activities, developed conference programs, and organized monthly technical meeting luncheons, newsletters, community outreach events and seminars for young professionals. She has reviewed technical papers and abstracts for conferences and journals.

Dr. Peña-Tijerina has written technical manuals and books. She was a contributing author of the Water Environment Federation’s *Manual of Practice No. 31 – An Introduction to Process Modeling for Designers*, WEF MOP No. 8- *Design of Municipal Wastewater Treatment Plants, 5th Edition* and the U.S. Environmental Protection Agency’s *Process Design Manual for Sludge Treatment and Disposal*. She participated in the revisions to the TCEQ 30 TAC Chapters 217, 307, the Texas Surface Water Quality Standards and its guidance document – the Implementation Procedures.

Ana Julia is a passionate catholic that desires to grow in faith every day. She is also a dedicated wife, mother and daughter. Hernan, Hernan Jr., Julianna and her mom, Ana, are her number one fans and supporters.