



## FEATURED MEMBERS



### Dr. Renzun Zhao (赵仁遵)

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#### *1. My career path?*

I received my BS in Water Supply and Drainage Engineering, MS in Municipal Engineering in 2005 and 2007, both from Harbin Institute of Technology, where I started to get involved in water related research topics, such as membrane bioreactor, advanced oxidation processes, and more importantly, I cultivated my interest in water research. In 2012, I received my PhD degree in Civil and Environmental Engineering at Virginia Tech, working with Dr. John Novak. My PhD dissertation focused on the co-treatment of industrial waste and sewage. Then I worked in the industry for about three years with Veolia Water, DC Water, etc. In 2015, I came back to academia and joined Lamar University as an assistant professor. In Fall 2018, I joined North Carolina A&T State University.

#### *2. Your current research areas, interests, and projects?*

I use physical-chemical and biological methodologies to address water quality issues in natural and engineered environments. During my PhD, I studied the source, formation, and the impact of humic-like dissolved organic matter (DOM) in industrial wastewaters discharged and co-treated in publicly owned treatment works (POTWs), and I assessed the performance, mechanism, and economical effectiveness of a variety of physical/chemical treatment techniques to mitigate the impact. While working in the industry, my work was centered around a next generation short-cut biological nitrogen removal technology- “deammonification” on pilot and full scales for a variety of ammonium-rich waste liquids, such as sludge return liquor, landfill leachate, etc. Currently, sponsored by NSF, I am investigating the water quality fluctuation for drinking water and surface water after Hurricane Harvey, and developing contingency plan to address water quality impacts by natural and man-made disasters, which can be used for future natural disasters.

#### *3. Courses you normally teach?*

In the past three and half years, I have been mainly teaching environmental courses on both undergraduate and graduate levels, including Introduction to Environmental Engineering, Environmental Chemistry, Environmental Engineering Design, Solid Waste Management, etc. There was one semester that I taught Statics for sophomore year Civil Engineering students. It turned out better than I thought, which helped me to build up my confidence to step out of comfort zone and explore new challenges.



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*4. My professional activities?*

I am an active member of several environmental and civil engineering organizations, such as International Water Association (IWA), Water Environmental Federation (WEF), Association of Environmental Engineering & Science Professors (AEESP), American Society of Civil Engineering (ASCE), etc. Also, I am on Industrial Wastewater Committee and Research and Innovation Committee for WEF. I am a registered Professional Engineer.

*5. Major attractions and cultural environment of your area and/or community?*

Greensboro is the third most populous city in North Carolina. Combining with Winston Salem and High Point as the “Piedmont Triad”, it has a population of more than 1.5 million. North Carolina A&T campus is next to Greensboro downtown. The weather is pleasant with four seasons, so biking and marathon are popular because of the weather. It is in driving distance to Great Smokey Mountain National Park, Myrtle Beach, Washington DC, etc. The traditional food here in NC is pork BBQ.

*6. Key factors that lead to your career today?*

Interest is the best teacher. Persistence is the key to survive.



NC A&T campus in the morning