



FEATURED MEMBERS



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1. *My career path?*

I received my BS and MS degrees in Environmental Engineering from Beijing Normal University in 2005 and 2008, respectively. In August 2008, I joined Dr. Zhiqiang Hu's group at the University of Missouri-Columbia where I started my research in pathogen detection and biofilm control. After getting a Ph.D. in 2012, I spent four years in University of Alberta as a post-doc and had the great opportunity to gain the experience in the treatment of oil and gas industrial wastewater, before starting my job as an Assistant Professor at New Mexico State University in 2016.

2. *Current research areas, interests, and projects?*

Currently, the research of my group has focused on the following two directions: (1) investigating resistance and virulence of surviving bacteria in water after various disinfection processes. This NIH-funded project studies the characteristic variations of bacteria before and after disinfection processes by conducting systematic study to provide guidance regarding disinfection strategies. (2) exploring the feasibility of resource recovery from produced water and develop cost-effective pretreatment for membrane processes to reduce the membrane scaling in desalination. I am also collaborating with colleagues to assess the performance of algal systems in pathogen removal.

3. *Courses you normally teach?*

I have been teaching "fundamentals of Environmental Engineering" and "Environmental Engineering Design" to undergraduates. Also, I offer graduate-level courses including "Environmental Microbiology", "Unit Processes/Operation of Wastewater Treatment" and "Advanced Water Treatment and Reuse" for graduate students.

4. *My professional activities?*

I am a member of Association of Environmental Engineering and Science Professors (AEESP) and American Society for Microbiology (ASM).



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

Las Cruces, the second largest city in New Mexico, is located on the edge of the Chihuahuan Desert. Just an hour from the Mexican border, Las Cruces features a charming mix of diverse cultures. With mountain and desert views, the city is beautiful year-round. It is listed as a “Best Place to Retire” by several organizations. It is also only one-hour drive away from White Sands National Park.

6. Key factors that lead to your career today?

I am fortunate to have great mentors along my career path, who have guided me to where I am now. I also have the luck to be immersed in diverse research projects in the past, which have helped me develop the innovative research ideas.



Dr. Zhang with her graduate students and REU student