



FEATURED MEMBERS



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1. *My career path?*

I received my BS in Chemistry from Tsinghua University in July 2005. With the fear of working with organic solvents every day, I chose to switch my MS study to Environmental Engineering. After a 6-month internship on developing organic electronic materials at Sony Materials Lab in Japan, I went back to Tsinghua in May 2016 and started my Master's research in Prof. Hui Wang's Group, working on characterization and control of phosphorus in constructed lakes. In August 2008, I joined Prof. Timothy Strathmann's group at the University of Illinois at Urbana-Champaign. My PhD research focused on the development of heterogeneous catalyst for perchlorate reduction. With the continued interest in chemistry, I expanded my effort into the controlled synthesis and spectroscopic characterization of oxorhenium complexes. I also got a chance to visit King Abdullah University of Science and Technology and developed a nanostructured catalyst in Prof. Peng Wang's group in early 2012. After getting my PhD degree in July 2014, I moved with the Strathmann Lab to Colorado School of Mines, where I learned how to build a lab and started the exploration on fluorinated chemicals. I started as an Assistant Professor at UC Riverside from September 2016.

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

My research focuses on developing effective chemical solutions to the challenging water pollution issues, and developing novel directions derived from the investigation on environmental problems. Currently I am working on the destruction of per- and polyfluoroalkyl substance (PFAS) and catalytic reduction of perchlorate. My group takes effort from design and understanding at the molecular level to the construction and tests of real engineering systems. Why I am continuing the topic on perchlorate reduction? Because this problem has not been solved and I must find a practical solution.

3. *Courses you normally teach?*

I have taught four different courses at UCR: *Fundamentals of Environmental Engineering*, *Fate and Transport of Environmental Contaminants*, *Chemical Engineering Kinetics*, and *Advanced Water Treatment Technologies*. I will also teach *Water Chemistry* next quarter. I was very fortunate to get away from some courses beyond my knowledge, and all the courses I have taught are very helpful for my research.



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4. My professional activities?

I am a member of the American Chemical Society (ACS) and the Association of Environmental Engineering and Science Professors (AEESP). I have organized several ACS ENVR symposiums on water treatment technologies, and I am currently serving on the Education Committee of AEESP.

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

Riverside is close to many great places- beach, mountain, city, dining, and national park. Southern California is a super inclusive community.

6. Key factors that lead to your career today?

After enjoying my research in diverse areas of chemistry and environmental engineering, I have deeply realized the importance of learning, applying, and developing advanced chemistry to change the research and education status of Environmental Engineering. I am very enthusiastic to transform this major through researching on real problems, training next-generation scholars, and teaching young students with great potentials. At UCR, it is great to have a group of students all sharing the same opinion with me. I also have great colleagues and department leaders helping me get good courses to teach and learn.



UC Riverside on a typical winter day