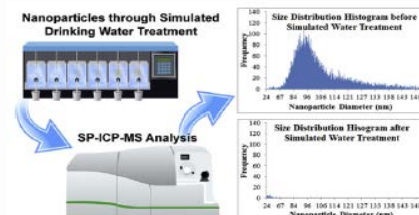
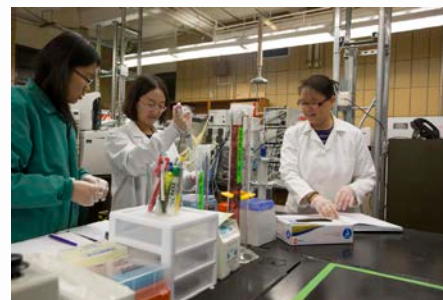


Bioanalytical and Environmental Chemistry

Research Focus

- ❖ Development of advanced analytical methods for applications in life science, biomedicine, and environmental pollutants
- ❖ Testing for new drug development
- ❖ Nanoparticle characterization and quantification by cutting edge single particle- and single cell-ICP-MS and there novel applications in life science, food safety, emerging environment, and more
- ❖ Drinking water quality monitoring and improvement
- ❖ State-of-the-art instrument development and testing for biomedicine, life science, and environment



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Research Funds

- ❖ National Institute of Health
- ❖ National Science Foundation
- ❖ Missouri Department of Natural Resources
- ❖ Environmental Protection Agency
- ❖ Water treatment facilities
- ❖ Industries

Keywords

- ❖ Bioanalysis; advanced instrumental analysis; single cell- and single particle-ICP-MS, environmental contaminants; water disinfection byproducts (DBPs); harmful algal bloom

Significant Achievements

- ❖ Faculty achievement award, Missouri S&T, 2012, 2014, 2016
- ❖ Total >60 peer reviewed journal publications in recent 5 years
- ❖ Total >90 conference presentations in recent 5 years

Potential Collaboration fields

- ❖ Broad fields that need analytical quantification and characterization; instrument development; nanoparticle analysis and toxicity study; bioglass function testing