

Qisheng Yu

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EDUCATION

Ph.D. of Civil and environmental Engineering *Jan 2024 - Present*

Department of Civil and Environmental Engineering, The George Washington University, the United States

Master of Resources and Environmental Engineering *Sep 2020 - Jun 2023*

Institute for Ocean Engineering, Tsinghua Shenzhen International Graduate School, Tsinghua University, China

- **GPA:** 3.75/4.0
- **Core Courses:** Introduction to Oceanography, Frontiers and Progress of Marine Ecology, Marine Survey, Marine Ecotoxicology, Marine Microecology and Applied Technology, etc.

Bachelor of Environmental Science *Sep 2016 - Jun 2020*

College of Resources and Environmental Sciences, Nanjing Agricultural University, China

- **GPA:** 4.07/4.50
- **Core Courses:** Practice in Basic Environmental Science, Environmental Chemistry, Environmental Economics and Environmental Management, Environmental Microbiology, Ecology, etc.

Honors and awards:

- ✦ Excellent Master's Thesis Award, Tsinghua University, 2023
- ✦ Excellent College Graduate, Nanjing Agriculture University, 2020
- ✦ National Scholarship, Ministry of Education of P. R. China, 2018

PUBLICATIONS

[1] Yu Q.S., Chuang C.-Y.*, Jiang Y.L.*, Zhong H., Cundy A, Kwong R., Min C., Zhu X.S., Ji R. (2023). Exploring environmental nanoplastics research: Networks and evolutionary trends. *Reviews of Environmental Contamination and Toxicology*. 261: 12. <https://doi.org/10.1007/s44169-023-00031-3> (SCI Q1, IF=6)

[2] Li C.H., Zhao F.C., Yu Q.S., Chen Y.Q., Zhang C.H., Ge Y.* (2019). Effects of extracellular polymeric substances on the accumulation and transformation of arsenic by *Chlamydomonas reinhardtii*. *Journal of Hunan Agricultural University*. 45(4): 384-390. (In Chinese)

RESEARCH EXPERIENCE

Research on resting cyst formation and resuscitation of dinoflagellate *Sep 2021 - Jun 2023*

- Investigated the effect of cell density on the resting cyst formation of *Scrippsiella trochoidea* under nitrogen deficiency stress.
- Studied the growth and physiological characteristics of *S. trochoidea* in the process of nitrogen-deficient vegetative cell recovery and resting cysts rejuvenation.
- Used fluorescence transient dynamics and transcriptomics techniques to investigate the mechanism of life cycle transition.

Bibliometric analysis on nanoplastic research status *Sep 2021 - Feb 2022*

- Retrieved 2055 publications related to nanoplastic from the Web of Science.
- Visualized the progress, collaboration, and trends of global nanoplastic research.

The effects of heavy metals on extracellular polymeric substances of *Chlamydomonas* *Sep 2018 - Sep 2019*

- Compared the growth of *Chlamydomonas reinhardtii* under four heavy metals (Pb, Cd, Cu, Zn) exposure.
- Investigated the changes in extracellular polymeric substances (polysaccharide, protein and DNA) of *C. reinhardtii* under heavy metal.

SKILLS AND LANGUAGE

Laboratory techniques: Freshwater and marine microalgal culturing, phytoplankton field investigation, biochemical assays (enzyme, protein, DNA, etc.), photosynthetic samples characterization with fluorescence transient, transcriptome analysis

Software: Data analysis and graphing with Origin and SPSS, bibliometric analysis with VOSviewer, Citespace and Scimago Graphica

Language: Chinese (native), English (fluent, IELTS 6.5)