

# Curriculum Vitae

## PERSONAL PROFILE

**Name:** Xiaotian Zhou

**English name:** Sherry Chou

**Gender:** Female

**Nationality:** Chinese

**Date of Birth:** 16<sup>th</sup> June 1993

**Address:** No.1 Xikang Road, Nanjing, Jiangsu, P. R. China

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**Affiliation:** State Key Laboratory of Hydrology-Water  
Resources and Hydraulic Engineering;  
College of Hydrology and Water Resources,  
Hohai University



## EDUCATION

**Ph.D Candidate** in Hydrology and Water Resources

College of Hydrology and Water Resources

Hohai University (HHU), Nanjing, P. R. China

**Sep. 2017 to Present**

**GPA:** 90.92/100

**Ranking:** 1<sup>st</sup>/41

(Take successive postgraduate and doctoral programs of study for doctoral degree since September 2017)

**M.E** in Hydrology and Water Resources

College of Hydrology and Water Resources

Hohai University (HHU), Nanjing, P. R. China

**Sep. 2015 to Jun. 2017**

**GPA:** 89.62/100

**Ranking:** 15<sup>th</sup>/102

**B.E** in Urban-Rural Planning & Resources Management

College of Hydrology and Water Resources

Hohai University (HHU), Nanjing, P. R. China

**Sep. 2011 to Jun. 2015**

**GPA:** 4.59/5.0

**Ranking:** 2<sup>nd</sup>/34

## COMPLEMENTARY EDUCATION

- [Origins of Life](#), Santa Fe Institute's Online Course, Jun 1 to Aug 18, 2022 (Course grade: 81%)
- [Quantitative biodiversity](#) (BIOL Z620), Indiana University, March 17 to May 7, 2021 (Credit hours: 25h)

## AWARDS AND HONORS

- Chinese Government Scholarship from China Scholarship Council (CSC)

2020.08

- Ph.D second grade scholarship of Hohai University, Nanjing, China. twice in 2019-2020
- Title of excellent speaker of the 7th graduate academic annual conference in Hohai University, Nanjing, China. 2019.01
- Ph.D first grade scholarship of Hohai University, Nanjing, China. twice in 2017-2018
- Master first grade scholarship of Hohai University, Nanjing, China. twice in 2015-2016
- Academic merit scholarships of Hohai University, Nanjing, China. thrice in 2011-2015
- Advanced individual by College of Hydrology and Water Resources, Hohai University, Nanjing, China 2014.07
- Excellent Student Pacesetter Title of Honor by Hohai University, Nanjing, China. 2013.11
- Spiritual scholarship of Hohai University, Nanjing, China. 2012.11

## THESIS WORK

### ● Current Ph.D. Project

Microbial ecoclines: another macroscopic dimension for exploring emergent patterns of biodiversity

Advisor: [Jiyang Wang](#), [Aidong Ruan](#)

### ● Bachelor's Degree Thesis

Population structure and succession characteristics of *Vibrio* in eutrophic lakes

Advisor: Aidong Ruan

## RESEARCH INTERESTS

- Microbial macroecology with current emphasis on species-abundance distribution (SAD) and metabolic theory of ecology (MTE)
- Scale effect in community ecology
- Microbial community assembly process
- Quantification of rare biosphere

## RESEARCH EXPERIENCE

### ● Postgraduate Research & Practice Innovation Program of Jiangsu Province (PI,

KYCX20\_0458): Response of sediment microbial community to historical damming event and lake eutrophication process, 2020-2022

### ● Program of the National Natural Science Foundation of China (participant, No.

42077221): Ecological Response Mechanism of Typical Steroid Estrogens Promoting Methane Production by Microorganisms in Sediment-water Interface, 2020-2024

### ● Program of the National Natural Science Foundation of China (participant, No.

51378175 and No.91851109): Metabolic Characteristics of Volatile Organic Sulfides by Aerobic Methane Oxidizing Bacteria and Their Role in Sulfur Cycle of Lake Water, 2018-2022

## ACADEMIC TALKS/CONFERENCES

- Talk: "Anthropogenic activities mediate stratification and stability of microbial communities in freshwater sediments", invited by Prof. Jianjun Wang, Nanjing Institute of Geography & Limnology Chinese Academy of Sciences, June 30, 2021

- Seminar presentation: “Sediment microbial coenocline: another macroscopic dimension for exploring species abundance distribution”, invited by Prof. Jay T. Lennon, Lennon Lab at Indiana University, Bloomington, February 03, 2021
- The 2018 Annual Conference and International Symposium on Microbial Ecology, Guangzhou, China, 2018
- 7<sup>th</sup> Symposium on Geological Microbiology, Shanghai, China June 8-11, 2018
- The 20<sup>th</sup> National Symposium on Environmental Microbiology, Hangzhou, China, 2017
- The 19<sup>th</sup> National Symposium on Environmental Microbiology, Chongqing, China, 2016

## PUBLICATIONS

- [1] Lu, X., **Zhou, X.**, Xu, Y., Ruan, A., & Yu, Z. (2021). The investigation of the connections among hydrogeological factors and the emissions of two greenhouse gases in lake sediment. *Water Resources Research*, 57, e2020WR029375. <https://doi.org/10.1029/2020WR029375>

## SKILLS AND QUALIFICATIONS

- Language Skills:
  - English: Excellent in reading, good at writing and communicating
  - Mandarin Chinese: Native
- Programming language: R, Python; C++
- Software: Matlab, Git, ArcGIS, AutoCAD, SPSS, Surfer, Origin, Cytoscape, Graphpad
- Experiment skills:
  - Proficient in cell culture (both aerobic and anaerobic) and basic molecular biological experiments (DNA/RNA extraction, PCR, electrophoresis and primer design, etc.). Familiar with in-lab equipment operation, such as inverted microscope, scanning electron microscope, gas chromatograph and laser particle analyser. Experienced in field sediment sampling and in situ monitoring techniques.

## SELF-ASSESSMENT

- Kind-hearted and righteous
- Always pursuing the truth
- Observant and innovative
- Diligent, dependable, responsible, and initiative
- Interdisciplinary, sound knowledge of microbiology, ecology, hydrology and limnology; self-learning bioinformatics
- Appreciating beauty in all things around