

Curriculum Vitae

Kang Mei, PhD

Contract Associate Professor at Jiangsu Ocean University

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🎓 Xiamen University, Post Doc (2024-Present)

🎓 Xiamen University, Doctor of Philosophy (2023)

🎓 University of Southern California, US, Joint PhD Program (2022)

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🔗 Academic Homepage: <https://meikang.netlify.app>

🔗 Research Gate: <https://www.researchgate.net/profile/Kang-Mei>

🏠 Google Scholar: <https://scholar.google.com/citations?user=joYHrAYAAAAJ&hl=en>



PERSONAL DATA

Birthdate: Aug. 1992 Hometown: Anhui, China

RESEARCH INTERESTS

Coastal & Wetland Ecological Restoration	Trace elements and heavy metals biogeo-cycle
Low-weight-molecular organic molecules	Environmental science and pollution ecology
Marine sciences and microbial ecology	Marine biogeochemistry and earth sciences

EDUCATION & EXPERIENCES

- 2024.1– Present** **Contract Associate Professor, Jiangsu Ocean University, Lianyungang, China**
- Associate research fellow, Jiangsu Institute of Marine Resources Development
 - Faculty, Jiangsu Key Laboratory of Marine Bioresources and Environment
- 2019.9 – 2023.12** **College of Ocean and Earth Sciences, Xiamen University, Xiamen, China**
State Key Laboratory of Marine Environmental Science, Xiamen University
(GPA: 3.56/4.0)
- **Ph.D. candidate**, Marine Environmental Biogeochemistry (Expected June, 2023)
 - **Advisor**: Professor Deli Wang (deliawang@xmu.edu.cn)
 - **Research project**: Effects of microbial pigments on the diversity and functioning of marine ecosystems.
- 2021.12 – 2023.1** **Marine Environmental Biology, Dornsife College of Letters, Arts and Sciences**
University of Southern California, United States
- **Visiting Ph.D. student** (12 months)
 - **Advisor**: Professor Sergio Sanudo-Wilhelmy (sanudo@usc.edu)
Assistant Professor Laura Gomez Consarnau (gomezcon@usc.edu)
 - **Research project**: Laboratory Analysis, Data Arrangement, and Scientific Writing.
- 2018.6 – 2019.6** **College of the Environment and Ecology, Xiamen University, Xiamen, China**
- **Research assistant**, Institute of Ecological Civilization

10. Guirong Wu, **Kang Mei**, Caimei He, Sujuan Wang, Liling Jiang (2022). Phytoextraction and Antioxidant Defense of Mangrove Seedling (*Kandelia obovata*) to Inorganic Arsenate Exposure. *Water*, <https://doi.org/10.3390/w14040643>. (IF2022 = 3.530, JCR: Q2)
9. Yitong Pan, Deli Wang, **Kang Mei**, Tian Tang (2022). Optimization modeling and mechanism discussion on specific industrial coal-washing wastewater treatment. *International Journal of Environmental Science*, <https://doi.org/10.1007/s13762-022-04738-z>. (IF2022 = 3.519, JCR: Q3)
8. Lide Gu, Xinli Yue, Haowen Zhong, **Mei Kang**, Deli Wang (2022). A new technique of quantifying protoporphyrin IX in microbial cells in seawater, *Frontiers in Marine Science*, <https://doi.org/10.3389/fmars.2022.991126>. (IF2022 = 5.247, JCR: Q1)
7. Zhenli Guo, Jingchun Liu, jiajia Wu, Dan Yang, **Kang Mei**, Hanyi Li, Haoliang Lu, Chongling Yan. (2022). Spatial heterogeneity in chemical composition and stability of glomalin-related soil protein in the coastal wetlands, *Science of the Total Environment*, <https://doi.org/10.1016/j.scitotenv.2022.155351>. (IF2022 = 10.753, JCR: Q1)
6. **Kang Mei**, Deli Wang, Yan Jiang, Mengqiu Shi, Chen-Tung Arthur Chen, Yao Zhang, Kai Tang. (2022). Transformation, Fluxes and Impacts of Dissolved Metals from Shallow Water Hydrothermal Vents on Nearby Ecosystem Offshore of Kueishantao (NE Taiwan), *Sustainability*, <https://doi.org/10.3390/su14031754>. (IF2022 = 5.247, JCR: Q2)
5. **Kang Mei**, Wu, G., Liu, J., jiajia Wu, Hong, H., Lu, H., Yan, C. (2022). Dynamics of low-molecular-weight organic acids for the extraction and sequestration of arsenic species and heavy metals using mangrove sediments, *Chemosphere*, <https://doi.org/10.1016/j.chemosphere.2021.131820>. (IF2022 = 8.943, JCR: Q1)
4. **Kang Mei**, Jingchun Liu, Jin Fan, Xin Guo, Yi Zhou, Haoliang Lu, Chongling Yan. (2021). Low-level arsenite boosts rhizospheric exudation of low-molecular-weight organic acids from mangrove seedlings (*Avicennia marina*): Arsenic phytoextraction, removal, and detoxification. *Science of the Total Environment*. 775, 145685. <https://doi.org/10.1016/j.scitotenv.2021.145685>. (IF2021 = 10.753, JCR: Q1)
3. **Kang Mei**, Jingchun Liu, Rongrong Shi, Xin Guo, Haoliang Lu, Chongling Yan. (2020). The migrated behavior and bioavailability of arsenic in mangrove sediments affected by pH and organic acids. *Marine Pollution Bulletin*, 159, 111480. <https://doi.org/10.1016/j.marpolbul.2020.111480>. (IF2021 = 7.001, JCR: Q1)
2. Laijun Zhang, Jingfen Jia, **Kang Mei**, Deli Lin. (2015). Defend effects of melatonin on protoplasts of *Gentiana Macrophylla* under UV-B irradiation. *Journal of Nuclear Agricultural Sciences*, 29(5): 0830-0835. (In Chinese with English abstract)
1. Laijun Zhang, Jingfen Jia, Fengqin Wang, **Kang Mei** (2015). Effect of exogenous melatonin on the growth of in vitro cultured *Polygonum cuspidatum* [J]. *Jiangsu Agricultural Sciences*, 43(8): 58-60. (In Chinese)

PROJECTS

- **Kang Mei**, Ecological detoxification mechanism of carbon-driven regulation of inorganic arsenic stress in wetland roots, 2025-2027, China Postdoctoral Science Foundation, project approved, PI.
- **Kang Mei**, Research on the ecological restoration mechanism of heavy metal arsenic in salt marsh sediments mediated by rhizosphere low molecular weight organic acids, 2024-2027, Jiangsu Provincial Natural Science Foundation Youth Fund, project approved, PI.
- **Kang Mei**, Research on the spatiotemporal distribution and regulation mechanism of microbial organisms in the offshore environment, 2024 to 2028, Jiangsu Ocean University, Lianyungang Haizhou Bay Talent Program, PI.

PATENT

- **Kang Mei**, Mengqiu Shi, Deli Wang. (2021). A method for detecting bioppterin in marine water body. China Patent: CN111505179B (In Chinese).
- **Kang Mei** et, al. (2024). A method for detecting 5-aminolevulinic acid in red tide seawaters. China Patent (In Chinese), Into Review Stages.
- **Kang Mei** et, al. (2024). A method for the detection of multiple microbial pterins simultaneously in marine algal blooms (In Chinese), Into Review Stages.

ONGOING PUBLICATIONS

1. **Kang Mei**, et al. Dynamics of seasonal microbial bioppterin in estuarine and coastal waters, Southeast China. Submitted to **Marine Chemistry** (*Under Review*)
2. **Kang Mei**, et al. Impact of Elevated CO₂ on Microbial Pterins as Marine Biomarkers and Trace Metal Dynamics in Offshore Mesocosms. (*In preparation*)

AWARDS & HONORS

- ☐ **Visiting Scholarship for Studying Abroad in US**. China Scholarship Council, China, 2025.
- ☐ **Outstanding Honor for the Oral Presentation, Summer School on Climate Change & Ocean Health**. Hosted by Xiamen University, Taiwan Ocean University, City University of Hong Kong, and Peking University. Xiamen, China, 2025.
- ☐ **Merit Student Honors**. Xiamen University, 2023.
- ☐ **ICBC (Industrial and Commercial Bank of China) Scholarship Awards**. Xiamen University, 2023.
- ☐ **Scholarship for Studying Abroad**. China Scholarship Council, China, 2022.
- ☐ **National Award for Distinguished Ph.D. Student**. Ministry of Education, China, 2021.

- ☐ **Mindu International Bank Scholarship Awards.** Xiamen University, 2021.
- ☐ **First Prize in Provincial College Challenge Cup Competition.** Fujian Province, 2021.
- ☐ **First-class Scholarship Awards.** Xiamen University, 2019-2023.
- ☐ **Excellence Merit Student Honors.** Xiamen University, 2020.
- ☐ **Zhongtian Ocean Scholarship Awards.** Xiamen University, 2020.
- ☐ **Provincial Excellent Summer Social Practice Team,** Fujian Province. 2020.
- ☐ **Team Runner-up of Golf tournament,** Xiamen University, 2020.

ORAL & POSTER PRESENTATION

15. Kang Mei, Microbial pterins indicating organic carbon dynamics in estuarine and coastal environments, **Summer School on Climate Change & Ocean Health**, July 2025, Xiamen, China (**Outstanding Honor** for the **Oral presentation**).
14. Kang Mei, Research on the ecological detoxification mechanism of wetland plant root activities in response to arsenic stress, **2025 Soil and Groundwater Risk Prevention and Control and Ecological Restoration Technology Exchange Conference**, July 2025, Huhhot, China (**Oral presentation**).
13. Kang Mei, Distribution regulation and ecological indication of biogenic pterin small molecules along the southeast coast of China, **The 10th China Youth Earth Science Forum**, May 2025, Hefei, China (**Oral presentation**).
12. Kang Mei, Detoxification mechanism of wetland plant root activity in response to arsenic stress, **The 10th China Conference on Ecotoxicology**, April 2025, Jiaxing, China (**Oral presentation**).
11. Kang Mei, Microbial pterins indicating organic carbon accumulation and degradability in estuarine and coastal sediments, **2025 Xiamen Symposium on Marine Environmental Sciences, International Conference**, January 2025, Xiamen, China (**Oral presentation**).
10. Kang Mei, Biochemical cycling of cellular pterins during a mesocosm phytoplankton spring bloom in an urbanized coastal bay. **The 8th China-Southeast Asian Countries Marine Cooperation Forum**, November 2024, Jakarta, Indonesia (**Poster presentation**).
9. Kang Mei, Effects of offshore CO₂ increase on the evolution and transformation of microbiogenic pterin and trace metals. **The 3rd China Fishery Ecological Environment Conference**, July 2024, Linyungang, China (**Oral presentation**).
8. Kang Mei, Spatial-temporal Distribution and Regulatory Mechanism of Novel Biomarker Microbial Pterins in Xiamen Bay, China. **The 15th UCAS Symposium**, October 2023. Hong Kong, China (**Oral presentation**).

7. Kang Mei, Spatial-temporal distribution and source of regulation of microbial pteridines in the euphotic layer of South China Sea. **The 7th Conference on Earth System Science**, July 2023. Shanghai, China. **(Poster presentation)**
6. Kang Mei, Novel indicator of biopterin to interactions and perturbations associated with trace metals in estuarine and coastal waters, Southeast China. **The 14th UCAS Symposium**, March 2022. Taiwan, China **(Online oral presentation)**.
5. Kang Mei, Mengqiu Shi, Deli Wang. Heavy metal migration, fluxes and potential impacts of submarine hydrothermal ecosystem offshore Kueishantao Islet, Taiwan. **The 6th Conference on Earth System Science**, July 2021. Shanghai, China. **(Poster presentation)**
4. Kang Mei, Mengqiu Shi, Deli Wang. Analysis of pivotal metabolic precursor-pterins in marine phytoplankton and bacteria. **The 7th Symposium on Biological and Organic Geochemistry**, October 2020. Beijing, China. **(Oral presentation)**
3. Kang Mei, Mengqiu Shi, Deli Wang. Development of analyzing pivotal metabolic precursor-pterins in the ocean. **The Fifth MEL Graduate Forum**, Xiamen University. August 2020. Zhangzhou, China. **(Oral presentation)**
2. Kang Mei, Mengqiu Shi, Deli Wang. A new method of measuring biopterin in phytoplankton and bacteria. Identification of biopterin – a key biological metabolic precursor in marine microbes. **The First Marine Biological Science and Technology Graduate Forum**, Xiamen University. November 2019. Xiamen, China. **(Oral presentation)**
1. Kang Mei, Mengqiu Shi, Deli Wang. A new method of measuring microbial biopterin in fresher water and coastal sea. **Annual Session of MEL**, Xiamen University. November 2020. Quanzhou, China. **(Poster presentation)**