

Bohyun Yeo, MSc

Department of Oceanography, Texas A&M University PhD student
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Interests

- DOM (carbon, nitrogen, phosphate) cycle
- Modeling and Data Analysis of the Geochemical Mechanism
- Environmental Impact Assessment (EIA)
- Marine Pollution

Professional Appointments

Graduate Research Assistant, Oceanography, Texas A&M University	2024-present
Researcher, Water and Land Research Group, Korea Environment Institute, South Korea	2023-2024
Researcher, Environmental Assessment Group, Korea Environment Institute, South Korea	2021-2023

Education

Texas A&M University, Texas, United States	Department of Oceanography	PhD student
• Advisor: Karl Kaiser, Professor		2024-present
Seoul National University, Seoul, South Korea	School of Earth and Environmental Sciences (SEES)	M.S. 2019-2021
<ul style="list-style-type: none">• GPA: 3.88/4.0• Focus: DON (Amino Acids) Cycle and Nutrient Distribution in the Ocean• Dissertation: Distributions and Biogeochemical Characteristics of Nutrients and Amino Acids in Coastal Seawaters of Jinhae Bay, Korea• Advisor: Guebuem Kim, Professor, Marine Geochemistry		
Inha University, Incheon, South Korea	Department of Ocean Sciences	B.S. 2014-2019
<ul style="list-style-type: none">• Major GPA: 3.59/4.0• Focus: Ocean Science• Capstone project thesis: Major Factors and Formation Mechanism of Sea Fog in Youngjong Island• Advisor: Seungbuhm Woo, Professor, Coastal-Ocean Engineering		

Academic & Research Experience

R&D	
NASA CCS project	2024 - present
Technology Development to Reduce Marine Plastic Debris (Korea Ministry of Oceans and Fisheries)	2023 (2020-2024)
Development of an AI-based Marine Search and Rescue Decision Support System (Korea Coast Guard)	2023 (2022-2026)
Development of A Marine Environmental Impact Assessment Model for HNS Released from Offshore Industrial Facilities (Korea Ministry of Oceans and Fisheries)	2021-2023 (2021-2025)
Understanding Deep-sea Water and Material Cycling in the East Sea: The cause of changes in deep water formation and dissolved oxygen in the East Sea, Carbon and nutrient cycles in the East Sea, Material transport processes from the East China Sea to the East Sea	2019-2021 (2016-2022)

Honors and Awards

Fall 2024 - Summer 2026	2-Year Merit Graduate Award	\$57,600
2024-2025	James Sharp Scholarship	\$2,000
1 st and 2 nd Semester, 2019,2020	SNU SEES BK21 Scholarship	\$12,000
1 st and 2 nd Semester, 2016 and 2018	a student representative of the department of Ocean Science	
2 nd Semester, 2018	Inha Program Scholarship	\$1,100
2 nd Semester, 2018	Development Scholarship (Ocean science)	\$1,500
1 st and 2 nd Semester, 2016 and 2018	Volunteer Scholarship	\$1,500
1 st and 2 nd Semester, 2016	Excellence Scholarship	\$4,000
1 st and 2 nd Semester, 2016	Honor Student	
2 nd Semester, 2015	Honor Student	

Publications

- Taeyun Kim, Jun-Ho Maeng, Eunhae Kim, **Bohyun Yeo**, Seongjun Si, Jihyeon Nam, Sunho Kim, Changkyum Kim, Jae-Jin Park, nand Moonjin Lee. 2024. Composite Risk Assessment of HNS Discharged from Marine Industrial Facilities: A Case Study on Incheon Port, South Korea. *Journal of Marine Science and Engineering*, 12(11), 1915.
- Hanbyul Lee, Guebuem Kim, Cheolmin Baek, **Bo Hyun Yeo**, Moonho Son, Tae Gyu Park, Hyeong Kyu Kwon. 2024. Biogeochemical conditions controlling the intensity of paralytic shellfish poisoning (PSP) outbreak caused by Alexandrium blooms: Results from 6-year field observations in Jinhae-Masan Bay, Korea. *Science of the total environment*, 950, 175236.
- Bohyun Yeo**, Jinho Kim, Taeyun Kim, Jun-Ho Maeng*, Tae-Sung Kim, and Moonjin Lee. 2023. Study on the Analysis of Overseas Cases for Continous Discharge of Hazardous and Noxious Substances (HNS) and Development of a Domestic Platform for Marine Environmental Impact Assessment. *Journal of the Korean Society of Marine Environment & Safety* 29 (128): pp 8-17.
- Bohyun Yeo**, Taeyun Kim*, Jun-Ho Maeng, Tae-Sung Kim, and Moonjin Lee. 2022. A Methodology Study for Marine Environmental Impact Assessment (EIA) of HNS Discharged from Marine Industrial Facilities. *Journal of the Korean Society for Marine Environment & Energy* 25 (4): pp 248-259. 10.7846/JKOSMEE.2022.25.4.248
- Bohyun Yeo**. 2021. Distributions and Biogeochemical Characteristics of Nutrients and Amino Acids in Coastal Seawaters of Jinhae Bay, Korea. Master's degree Graduation paper, Seoul National University <https://hdl.handle.net/10371/176080>

Abstracts and Presentations

2024

- Bohyun Yeo**, Choong-ki Kim, Gang Sun Kim, Junsung Kim. 2024. Management of Land-based Debris for Marine Debris Reduction. *Korean Society of Marine Environment & Safety conference, Incheon, Republic of Korea* (oral)
- Gang Sun Kim, Choong-Ki Kim, Hyunjung Hong, Junsung Kim, **Bohyun Yeo**. 2024. Estimating land-based marine debris inputs by basin using watershed data. *Korean Society for Marine Environment & Energy conference*, pp 197-198, *Jeju, Republic of Korea* (oral)

2023

- Taeyun Kim, Jun-Ho Maeng*, **Bohyun Yeo**. 2023. A Study on the Spatial Analysis for Environmental Impact Assessment of Hazardous and Noxious Substances (HNS). *Oceans2023 Conference, Limerick, UK*
- Bohyun Yeo**, Taeyun Kim, Jun-Ho Maeng, Tae-Sung Kim, and Moonjin Lee. 2023. Design of Real-time Application Platform for EIA Model of HNS. *IAlA23 Conference, Kuching, Malaysia*
- Taeyun Kim, **Bohyun Yeo**, Jun-Ho Maeng*, Tae-Sung Kim, and Moonjin Lee. 2023. Spatial Analysis for EIA of Hazardous and Noxious Substances (HNS). *IAlA23 Conference, Kuching, Malaysia*
- Bohyun Yeo**, Taeyun Kim, Jun-Ho Maeng*, Tae-Sung Kim, Moonjin Lee. 2023. A Study on the EIA of HNS Discharged to the Coastal Environment. *Korean Society for Marine Environment & Energy conference*, pp 107-108, *Republic of Korea* (oral)
- Bohyun Yeo**, Jun-Ho Maeng*, Taeyun Kim, Moonjin Lee, Tae-Sung Kim. 2023. A Study on Marine Environmental Impact of HNS Discharged from Marine Industrial Facilities. *Korean Society of Marine Environment & Safety conference*, p 7, *Republic of Korea* (oral)

2022

Taeyun Kim, **Bohyun Yeo**, Jun-Ho Maeng*. 2022. Study on Spatial Analysis Methods for Marine Environmental Impact Assessment. Proceedings of Korean Society for Marine Environment & Energy conference, pp 123-123, *Republic of Korea* (oral)

Bohyun Yeo, Taeyun Kim, Jun-Ho Maeng*, Tae-Sung Kim, Moonjin Lee. 2022. Study of GIS-based HNS Marine Environmental Impact Assessment (EIA). *Korean Society for Marine Environment & Energy Conference*, pp 90-9, *Republic of Korea* (oral)

2021

Jun-Ho Maeng*, Taeyun Kim, Hyeyun Ku, **Bohyun Yeo**, Moonjin Lee, Tae-Sung Kim. 2021. Design an Environmental Impact Assessment (EIA) model of HNS discharged from Marine Industrial Facilities on a real-time application platform. *Korean Society for Marine Environment & Energy Conference*, pp 96-96, *Republic of Korea* (oral)

2020

B. Yeo, H. K. Kwon, H. Han, J. H. Seo, G. Kim*. 2020. Characteristics of Amino Acid Distributions in Coastal Waters Off Korea Peninsula. *Goldschmidt2020 Conference, Virtual*, <https://doi.org/10.46427/gold2020.3027>

Skills

Computer skills	GIS tool (Arc GIS, QGIS), Sigmaplot, ODV, MATLAB, SPSS
Measurement skills	Continuous Flow Analyzer (Nutrients Conc Measuring), HPLC, DOC
Professional Qualifications	Industrial Engineer Ocean Survey, Engineer Ocean Environment (National Technical Qualification of Republic of Korea) PADI Open Water Diver, 4 th Degree Black Belt in Taekwondo

Research Cruises

ISABU Cruise, "Understanding Northwest Pacific Organic Cycling Processes and Biogeochemistry: A Focus on Pre- and Post-typhoon Comparisons"	2019.08-09
Inha Univ & Texas A&M at Galveston Marine Science of the Gulf of Mexico in 2018 Cruise	2018.07

Extracurricular Activities

Student Reporters of Korea Environment Corporation	2016-2017
Student Reporters of Korea Marine Environment Management Corporation	2015
Inha Univ. Excellent talent certification for Volunteer: Performed 100 hours of community service	2014-2019

Professional Affiliations

Member	International Association for Impact Assessment
Member	Korean Society of Environmental Impact Assessment
Member	Korean Society for Marine Environment and Energy
Member	Korean Society of Marine Environment & Safety
Member	Korean Society of Environmental Health
Member	Korean Society of Oceanography

Hobbies

Taekwondo, Yoga, Pilates, Weight Training