



YES 2019

Yellow Sea Ecosystem Symposium

The 5th Sino-Korea Symposium on
Environmental Health and Ecological Safety

DATE

July 17-20, 2019

VENUE

Shantou University
Shantou, China

Organizing Committee

Dr. Wenhua Liu Shantou University
Chairman

Dr. Jong Seong Khim Seoul National University
Co-Chairman

Dr. JongSeong Ryu Anyang University

Dr. Tieyu Wang Chinese Academy of Sciences

Dr. Xiaowei Zhang Nanjing University

Abstract Submission Deadline

1st June, 2019

Submission Email: YES2019STU@126.com

Registration Website

<http://en.hudongxuetang.com/m/QJHOU>

Scientific Committee

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Program Overview

July 17 Registration

Academic House (AH)

Shantou University Sports Park, 243 Daxue Road, Shantou, Guangdong,
P.R.China

July 18 Symposium Day

08:30-09:00	Opening Ceremony	Library Hall Ground
09:00-9:30	Keynote Lectures	Floor
9:30-10:20	Group Photo and Tea Break	
11:10-12:20	Keynote Lectures and Invited Talks	Library Hall Ground Floor
12:20-14:00	Lunch and Poster Session	
14:00-15:35	Parallel Sessions	
15:35-16:25	Tea Break and Poster Session	Library Hall Ground
16:25-17:45	Parallel Sessions	Floor and 2 nd Floor
17:45-18:30	Poster Session	
18:30-20:00	Gala Dinner	

July 19 Field Trip

July 20 Symposium Closing

Parallel Session Program at a Glance

2019/07/18 PM	Venue: Library Hall Ground Floor	Venue: Library Hall 2 nd Floor Room 30 A	Venue: Library Hall 2 nd Floor Room 30 B
Parallel Sessions	S1: Marine Ecology	S2: Marine Ecosystem and Environmental Health	S4: Marine Chemistry
	S1 Chairs: Lingfeng HUANG & Hong DU	S2 Chairs: Jongseong RYU & Ho Kyung HA	S4 Chairs: Wenyong HU & Yi WAN
14:00-14:20	Kwang Sik CHOI Effects of <i>Hebei Spirit</i> oil spill on the reproductive physiology of off bottom cultured Pacific oyster, <i>Crassostrea gigas</i> at Taean, on the west coast of Korea	Xiaowei ZHANG From Bacteria to Marine Mammals: Holistic Pelagic Biodiversity Monitoring of the Black Sea via eDNA Approach	Martin J.T. REANEY Can Authentomics Analysis Protect Consumers from Food Fraud?
14:20-14:35	Guogan PENG On mechanisms of biomanipulation for water quality improvement in freshwater ecosystem: a case from Longhu Lake, Fujian Province	Mao YE Coexistence and association between heavy metals, tetracycline and corresponding resistance genes in vermicomposts originating from different substrates	Yoon Young AN Trophic transfer of persistent toxic substances in coastal marine food webs in Ulsan Bay, Korea
14:35-14:50	Bin SHI Combining high-frequency surrogate measurements and data-driven models to early warn water quality anomalies	Weiqun LU Traits for survive: stress coping style mediate physiological defense responses in flatfish	Lu YANG Pharmaceuticals and Personal Care Products, accompanying with intensive anthropogenic activities, in the coastal waters of Yellow and Bohai Seas
14:50-15:05	Youngeun CHOI Habitat destruction and vegetation changes of islands in Incheon city	Zhen WANG Comparative Mammalian Hazards of Neonicotinoid Insecticides Among Exposure Durations	Youn Young SHIM Potential Therapeutic Applications of Linusorb
15:05-15:20	Bong-Oh KWON Preliminary results of halophyte litter decomposition and sediment carbon sequestration capability of tidal flats in Ganghwa, Korea	Hun Jun HA Biogenic effects on seasonal variation of erodibility in the intertidal flat, west coast of Korea	Sujin KANG Characteristics of particulate organic carbon transported across the Geum and Seomjin estuaries, Korea
15:20-15:35	Jianghua YANG Environmental DNA Metabarcoding Supporting Community Assessment of Environmental Stressors in a Field-Based Sediment Microcosm Study	Aslam MUHAMMAD Unravelling the diverse profile of Autoinducer-1 (AI-1) type quorum sensing signal molecules from the epiphytic bacterium <i>Oceanospirillum linum</i> isolated from <i>Gracillariopsis lemaneiformis</i>	Dan HUANG Low-molecular-weight organic acids impede the degradation of naphthol in iron oxides/persulfate systems: Implications for research experiments in pure conditions
15:35-16:25	Tea Break and Poster Session²		
Parallel Sessions	S1: Marine Ecology	S3: Marine Policy and Management	S5: Marine Toxicology & Ecology
	Chair: Jinhyung CHON & Jinsoo PARK	S3 Chair: Tieyu WANG & Yongfeng JIA	S5 Chair: Gap Soo CHANG & Seongjin HONG
16:25-16:45	Hojeong KANG The “Enzymic Latch” Mechanism in Various Mangrove Swamps and its Latitudinal Distribution	Jong Seong RYU Application of artificial neural network in hindcasting and forecasting dissolved oxygen in coastal waters of Korea	Henry HE Assessing the environmental risks of petroleum associated wastewater using fish models
16:45-17:00	Ruiqiang ZHENG Studies on the behavioral responses, habitat preferences and social strategies of Chinese white dolphins with low population sizes	Yun Eui CHOI The effects of educational experience, environmental knowledge, perceived value, sense of responsibility on pro-environmental behavior in coastal wetlands	Hui Zhen CHAO The intestinal bacteria of <i>Metaphire guillelmi</i> as a novel candidate ecotoxicological biomarker of the tetracycline stress
17:00-17:15	Moojoon LEE Growth inhibition of exotic halophyte <i>Spartina alterniflora</i> by physical treatment in the Yellow Sea, Ganghwa Island, Korea	Min KIM Key coastal landscape patterns for reducing flood vulnerability	Young Mok HEO Recovery of closed solar saltern to intertidal mudflat: a comparative case study in the Yellow Sea by fungal community analysis
17:15-17:30	Aslan Hwanhwi LEE Toward assessing remediation of microbial ecology on a mesocosm study polluted with petroleum	Lilan JIN Resilient coastal management plan for improving the quality of ecotourism resources: Using system dynamics model	Lijuan ZHANG Biological community profiles in the Han River (Seoul, South Korea) by Environmental DNA metabarcoding
17:30-17:45	Hyeong Gi KIM Meiofauna-sediment relationships: analyzing the patterns of meiofauna distribution in Yellow Sea	Miju KIM The expected impact of offshore wind turbines on the cultural ecosystem services of beaches in Korea	Jinhyun KIM Biogeochemical and Microbial Mechanism for Enhanced Methane Emission in Deep Soil Layer of Phragmites-Introduced Tidal Salt Marsh
17:45-18:30	Poster Session²		
18:30-20:00	Gala Dinner³		

Characteristics of particulate organic carbon transported across the Geum and Seomjin estuaries, Korea.

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Abstract: In this study, we investigated spatial variations in particulate organic carbon (POC) concentration and its carbon isotope to understand estuary damming impact on the transport of riverine POC. We collected the river and seawater samples in two contrasting Korean estuary systems (Geum and Seomjin), that flowing into the Yellow Sea and South Sea of Korea, across the river-sea interfaces with a salinity gradient in August 2016. The Geum River flowing into the Yellow Sea has a dam at the river mouth while the Seomjin River flowing into the South Sea of Korea has an open estuary. The POC concentrations in the Geum estuary were 0.2-12.7 mg/L, while 1.9-2.4 mg/L in Seomjin estuary. An abrupt decrease in the POC concentration occurred after the dam in the Geum estuary. In the Geum estuary, the $\delta^{13}\text{C}_{\text{POC}}$ values were -21.1 ± 2.5 ‰ before the dam and -22.4 ± 1.5 ‰ after the dam, while the $\delta^{13}\text{C}_{\text{POC}}$ values were -29.1 to -21.1 ‰ in the Seomjin estuary. The $\Delta^{14}\text{C}_{\text{POC}}$ values in the Geum estuary were -51.1 ‰ before the dam and -98.2 ‰ after the dam. In the Seomjin estuary, the $\Delta^{14}\text{C}_{\text{POC}}$ values were much lower with the value of -186.7 ± 2.2 ‰. The contribution of biogenic POC in the closed Geum estuary system was 95% of the biogenic OC contribution. The calculated $\delta^{13}\text{C}_{\text{POC}}$ of the biogenic POC end-member was -19.2 ‰, indicating that biogenic POC was mainly derived from the phytoplankton in Geum estuary system. Accordingly, our results showed that the two contrasting estuary systems are differently functioning and influencing POC concentrations and sources in the interface region from land to coastal ocean.

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Best Oral Presentation Award

Dear Mr./Ms

Sujin KANG

You are rewarded "The Best Oral Presentation" titled

Characteristics of particulate organic carbon transported across the Geum and Seomjin estuaries, Korea in the 5th Sino-Korea Symposium on Environmental Health and Ecological Safety (Yellow Sea Ecosystem Symposium 2019), which is held in Shantou, China.

This reward is for encouragement.



July 18, 2019



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