



YES 2018

Yellow Sea Ecosystem Symposium

The 4th Korea-China Symposium on Environmental Health and Ecological Safety

DATE

July 18-21, 2018

VENUE

Hoam Faculty House in Seoul Natl. Univ.
Seoul, Republic of Korea

HOST



SPONSORS



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SECRETARY Myung Gyun Na (d.ocean.seoul@gmail.com)

JULY 18-21, 2018
SEOUL, KOREA

HOAM FACULTY HOUSE
SEOUL NATL. UNIV.

Keynote

9:30~10:30

Magnolia Hall

From macro- to microplastic pollution: A paradigm shift

Won Joon Shim
(KIOST)

Trawling ban drives the recovery of benthic ecosystem and associated fisheries resources in the marine environment of Hong Kong

Kenneth M. Y. Leung
(U of HK)

Hall A : Magnolia

Part 1 Chemistry 10:40~12:10

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|----|-------------------------------------------------------------------------------------------------------------------------|-------------------------|
| C1 | Visualized Networking of Co-regulated Lipids in Human Blood Based on High-Throughput Screening Data | Yi Wan (PKU) |
| C2 | Occurrence, mass flux, and risk ranking of emerging and traditional pollutants in municipal wastewater treatment plants | Yunqiao Zhou (CAS) |
| C3 | Organic carbon transfer across the river-sea interfaces in two contrasting Geum and Sumjin river systems in South Korea | Sujin Kang (HYU) |
| C4 | Understanding impact of aquaculture on estuarine and coastal ecosystems in China: A paleoecotoxicology approach | Edmond Sanganyado (STU) |
| C5 | Tracing perfluoroalkyl substances (PFASs) in China based on life cycle analysis | Jing Meng (CAS) |
| C6 | Distribution Characteristics of Toxic Microcystins Following a Discharge in Geum River Estuary, Korea | Dokyun Kim (HYU) |

Part 2 Toxicology 13:30~15:00

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| T1 | Dynamic interplay between microbial denitrification and antibiotic resistance under enhanced anoxic denitrification condition in soil | Yuanhao Zhao (CAS) |
| T2 | How Physicists approach a problem of biotoxicity | Gap Soo Chang (UofS) |
| T3 | Dynamic interplay between microbial denitrification and antibiotic resistance under enhanced anoxic denitrification condition in soil | Mao Ye (NJU) |
| T4 | Phthalate pollution in plastic greenhouse agriculture and its human exposure in China | Biao Huang (CAS) |
| T5 | Omics advances in Ecotoxicology | Xiaowei Zhang (NJU) |
| T6 | Potential Influence of PBDEs indicates Cytokines Response Modulation: A Novel Approach on Fibroblast Cell Line | Yajing Sun (STU) |

Part 3 Policy 15:30~17:00

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|----|----------------------------------------------------------------------------------------------------------------------------|----------------------|
| P1 | China's farmland soil pollution: status, remediation and management | Wenyou Hu (CAS) |
| P2 | Ecotourism system planning for community resilience on the Yellow Sea | Yun Eui Choi (KU) |
| P3 | Seasonal and interannual variations of colored dissolved organic matter (CDOM) in coastal waters of the eastern Yellow Sea | Seunghyun Son (NOAA) |
| P4 | The selection of suitable sites for coastal green infrastructure for enhancing resilience to nuisance flooding | Min Kim (KU) |
| P5 | Establishing new Landscape on Transboundary Cooperation Mechanism for Sustainable Yellow Sea Marine Ecosystems | Jungho Nam (KMI) |
| P6 | An application of network analysis on social-ecological system for sustainable ecotourism destination | Daeyoung Jeong (KU) |

Hall B: Camellia

Part 1 Ecology 10:40~12:10

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| E1 | Monitoring and Analysis on Agro-ecological Environment in Typical Regions of the Three Gorges Reservoir area, China | Li Ma (CAS) |
| E2 | Chemical-specific benthic community responses and integrated sediment quality assessment in coastal areas of the Bohai Sea and the northern Yellow Sea | Jinsoon Park (KMOU) |
| E3 | Structural and functional responses of leaf-associated microbial communities to anthropogenic pollutants in rivers | Feilong Li (NJU) |
| E4 | Distribution of macrobenthos communities in areas dominated by <i>Ruditapes philippinarum</i> on the west coast of Korea | Sang Lyeol Kim (KMOU) |
| E5 | Environmental DNA metabarcoding reveals fish biodiversity in Lake Tai, China | Gao Xu (NJU) |
| E6 | Architecting DPSIR framework for managing impact on marine environment and ecosystem in Saemangeum Coastal Waters, Korea | Semi Jeong (KMI) |

Part 2 Ecology 13:30~15:00

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| E7 | Identifying key drivers of the magnitude and trend of Cyanobacteria blooms in Tai Lake | Yan Zhang (NJU) |
| E8 | Analysis of the Social-Ecological Trade-off System for the Resilient Ecosystem Services in Coastal Area: Focusing on the Han-River Estuary | Kihwan Song (KU) |
| E9 | Fibroblast cell an estimation model to evaluate the impact of marine pollutants on dolphin reproduction | Ying Huang (STU) |
| E10 | Landing and transport of floating plastic debris from major rivers around Korea: A Lagrangian particle model | Young-Gyu Park (KIOST) |
| E11 | DNA Metabarcoding of Zooplankton in Freshwater Ecosystem Improve the Ecological Assessment of Environmental Quality | Jianghua Yang (NJU) |

Hall C : Water lily

Part 1 BlueCarbon [special session] 10:40~12:10

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|----|---------------------------------------------------------------------------------------------------------|-----------------------|
| B1 | Forty years long changes in coastal land use and ecosystem services in the Yellow Sea | Bong-Oh Kwon (SNU) |
| B2 | Seeing the Yellow Sea tidal flats from an Anthropocene perspective | Young Rae Choi (FIU) |
| B3 | Study on the National Greenhouse Gas Removal by Blue Carbon -In The Western Coast of the South Korea | Jong Seok Song (KOEM) |
| B4 | Seagrass blue carbon estimation in the coastal waters of Korea | Seung Hyeon Kim (PNU) |
| B5 | The grass is greener on the other side – Effects of invasive plants on CH4 emission in coastal wetlands | Hojeong Kang (YU) |
| B6 | Carbon storage in estuarine tidal flat and salt marsh of the west and south coasts of Korea | Junsung Noh (SNU) |

Part 2 Estuary [special session] 13:30~15:00

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|----|------------------------------------------------------------------------------------------------------------|----------------------|
| S1 | An integrated approach to facilitate the conflicts on the Keum River Estuary Restoration Project | Chang-Hee Lee (MJU) |
| S2 | Toward a DPSIR-based Scenario Analysis | Daehwan Kim (KU) |
| S3 | Assessment of ecosystem integrity status in the Keum River estuary | Sang Jun Park (MMU) |
| S4 | Designing Decision-support System for Facilitating Stakeholder Dialogue on Geun Rever Estuarine Management | Young Ho Shin (MJU) |
| S5 | Designing an optimized estuarine monitoring system | Nam-Hoon Kim (SNU) |
| S6 | Changes in estuarine sediment flux mechanisms during the transition from the Holocene to the Anthropocene | Steven Figueroa (IU) |

Part 3 Estuary [special session] 15:30~15:00

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| S7 | Weekly variations of phytoplankton community outside Saemankeum area, located west coast of Korea | Jae Seong Kim (WEB) |
| S8 | Application of satellite remote sensing in monitoring dissolved oxygen variabilities: A case study for Saemangeum coast and Geum River estuary, South Korea | Yong Hoon Kim (WCU) |
| S9 | A case study for Saemangeum coast and Geum River estuary, South Korea | Young Sik Kim (KNU) |
| S10 | State of Water Quality and Scenario Projection in the Geum River Estuary | Jeagab Cho (Geo) |
| S11 | Estimation of pollution loads to the Geum-River Estuary for precipitation conditions using a semi-distributed watershed model STREAM | Eui-sang Jeong (Hydro) |

Poster Session

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|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Po-1 | Dioxin-like and endocrine disrupting potencies of fractions of sediment determined by use of microalgae and cell-based assays | Junghyun Lee (SNU) |
| Po-2 | Effective bioremediation techniques of oil contaminated sediments for the PAHs degrading bacterial community: An outdoor mesocosm experiment | Changkeun Lee (SNU) |
| Po-3 | Convergence cluster for human and environmental safety research of microplastics | Yunwi Heo (KIT) |
| Po-4 | PAHs-bioremediation potential of indigenous halophilic/halotolerant bacteria from tidal flats | Yeonjae Yoo (KU) |
| Po-5 | Desorption and solubilization of anthracene by a rhamnolipid biosurfactant from Rhodococcus fascians | Dong Wan Lee (KU) |
| Po-6 | Bacterial community structures and their predicted functions on PAHs degradation in Sinduri sediments, Korea | Hanbyul Lee (KU) |
| Po-7 | Landscape planning for improving coastal ecosystem service : Focused on Seaside Park on Yeongjong Island | Heeyoung Roh (KU) |
| Po-8 | Response of phytoplankton community to seasonal variation of tidal mixing front in the eastern Yellow Sea from numerical simulation | Jae-Sung Choi (KNU) |
| Po-9 | Variations in sediment resuspension and water quality controlled by hydrodynamics in a micro-tidal estuary | Jun Young Seo (IU) |
| Po-10 | Isotopic determination of dietary sources for marine invertebrate in tidal flats of West Coast, Korea | Seo Joon Yoon (SNU) |
| Po-11 | Comparison of microphytobenthic primary productivity between vegetated and unvegetated tidal flat | Hosang Kim (SNU) |
| Po-12 | Influence of temperature on reproduction, and growth of the brown shrimp, Crangon hakodatei (Caridea, Crangonidae) in the East Sea of Korea | In Ok Lee (SNU) |
| Po-13 | Reducing Cd As Concentration in Grains Cultivated in Contaminated Paddy Soil Using Combined Rice Variety Screening, Water Management, and Stabilizer Application | Xiulan Yan (CAS) |
| Po-14 | Spectral characteristics and prediction of soil moisture in coastal saline soil with a controlled salt gradient | Xiaoguang Zhang (QAU) |
| Po-15 | Study on different microorganism compound combinations on high efficient decomposition effect of spent mushroom compost | Zhikun Chen (IBSP) |
| Po-16 | Soil nitrate transfer characteristics and environmental risk of typical greenhouse vegetable production in north west China | Zhikun Chen (IBSP) |
| Po-17 | Risk assessment of heavy metals in rapidly urbanized area of Zhongshan City, China | Bo He (CAS) |
| Po-18 | Impacts of different industries on the distribution of heavy metals in Zhongshan City, China | Hui Zhao (CAS) |
| Po-19 | Identification of Oxygen Source for the Photo-Oxidation of Spilled Oils using Water-18O and Ultrahigh Resolution Mass Spectrometry | Donghwi Kim (KNU) |
| Po-20 | Effect-directed analysis for identification of major AhR and ER agonists in sediments of Ulsan Bay, Korea | Jaeseong Kim (CNU) |
| Po-21 | Distributions and characteristics of polycyclic aromatic hydrocarbons, styrene oligomers, and alkylphenols in sediments of Ulsan Bay, Korea | Yoon Young An (CNU) |
| Po-22 | Development of rare earth elements and neodymium isotope analysis of organic materials in sediments | Hyeongseok Song (CNU) |
| Po-23 | Stabilization Performance on Arsenic Contaminated Soils of a Novel Starch-modified Fe-Mn Binary Oxide Colloid | Yang Fei (CAS) |
| Po-24 | Coastal Landscape Planning for Improving Resilience using System Dynamics: Focused on Shinduri, Korea | Soojin You (KU) |



July 18 REGISTRATION & WELCOME DINNER

July 19 CONFERENCE DAY

| | | |
|---------------|------------------------|-----------------------------------------------------------------------------------|
| 09:00 – 09:15 | Opening | Opening Remarks Welcoming Address Congratulatory Address |
| 09:15 – 09:30 | Group Photo & Break | |
| 09:30 – 10:00 | Keynote Speech 1 | Dr. Won Joon Shim Director General, South Sea Research Institute, KIOST |
| 10:00 – 10:30 | Keynote Speech 2 | Dr. Kenneth Mei Yee Leung Professor, University of Hong Kong |
| 10:30 – 10:40 | Break | |
| 10:40 – 12:10 | Session Part 1 | |
| 12:10 – 13:30 | Lunch | |
| 13:30 – 15:00 | Session Part 2 | |
| 15:00 – 15:30 | Break & Poster Session | |
| 15:30 – 17:00 | Session Part 3 | |
| 17:00 – 17:15 | Break & Poster Session | |
| 17:15 – 17:30 | Closing | Award Ceremony Closing Remarks |
| 18:00 – 19:30 | Dinner | |

July 20 FIELD TRIP (GangHwa Island)

July 21 MEETING & FAREWELL LUNCH

SYMPOSIUM VENUE

Hoam Faculty House

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REGISTRATION FEE

Registration fees include the expense of symposium and field trip. The transporter fees, accommodation fees and other fees will be paid by participants themselves.

Regular 400,000 KRW / Student 350,000 KRW