



The 6th International Conference on Advances in Civil and Ecological Engineering Research (ACEER 2024)

July 23-26, 2024

Beijing, China

Conference Program



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Part I Conference Schedule Summary

Tuesday, July 23, 2024

14:00-20:00 On-Site Registration (Location: Lobby of Beijing Xijiao Hotel)

15:00-17:00 Microsoft Teams Online Testing
(MS Teams <http://www.academicconf.com/teamslink?confname=aceer2024>)

Notice:

For Offline Participants:

1. Please show us your name or paper ID for registration;
2. Please take the name card during the conference, meal tickets for meals, and tour ticket while joining the tour.

For Online Participants:

MS Teams Link: <http://www.academicconf.com/teamslink?confname=aceer2024>

Wednesday (Morning), July 24, 2024

Location: Room 6, 2F of Building 1

Chaired by: *Prof. Chih-Huang Weng, I-Shou University*

Welcome Speech

09:00-09:10 **Dr. Zhimin Qiang**, Distinguished Professor, School of Environmental Science and Engineering, Shanghai Jiao Tong University

Plenary Speech 1: Sustainable Management of Dumping Sediment at the Ocean to Ensure Ecological and Human Health

09:10-09:45 **Prof. Ming Hung Wong**, The Education University of Hong Kong

Plenary Speech 2: Inactivation of Bacteria by Heated Oyster-Shell Powder

09:45-10:20 **Prof. Chih-Huang Weng**, I-Shou University

10:20-10:50 **Group Photo & Coffee Break**

Invited Guest Lecture 1: Microplastic Abundance and Distribution in a Central Asian Desert

10:50-11:10 **Prof. Zhongping Lai**, Shantou University

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| 11:10-11:30 | Invited Guest Lecture 2: Economic and Ecological Optimization for Thermal Insulation Investment Depending on the Base Temperature <i>Assoc. Prof. Robert Dylewski, University of Zielona Góra</i> |
| 11:30-12:00 | Poster Presentations |
| Wednesday (Afternoon), July 24, 2024 | |
| 12:00-13:00 | Lunch Break (Location: Shang Yuan Self-Service Restaurant, 2F of Building 5) |
| 13:30-18:00 | Special Session on Water Treatment (Location: Room 8, 2F of Building 1) |
| 14:00-17:20 | Series of Invited Guest Lectures (Location: Room HuiYuan, 2F of Building 5) |
| 18:00-20:00 | Welcome Banquet (Location: JingYuan Restaurant, 1F of Building 5) |

Thursday, July 25, 2024
Location: Room HuiYuan, 2F of Building 5

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| 09:00-12:10 | Oral Session 1: Environmental Engineering and Energy |
| 12:10-13:00 | Lunch Break (Location: Shang Yuan Self-Service Restaurant, 2F of Building 5) |
| 14:00-17:35 | Oral Session 2: Structural Engineering, Geological Engineering, and Ocean Engineering |

Friday, July 26, 2024

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|-------------|--|
| 08:15-08:30 | Gather at the Lobby of Beijing Xijiao Hotel (set off on time at 8:30) |
| 08:30-16:00 | One-Day Technical Tour at Badaling Great Wall (with tour ticket) |
| 12:00-13:00 | Lunch |
| 16:00-17:00 | Back to Beijing Xijiao Hotel |

Part II Plenary Speeches

Plenary Speech 1: Sustainable Management of Dumping Sediment at the Ocean to Ensure Ecological and Human Health



Prof. Ming Hung Wong

Advisor/Research Chair Professor (Environmental Science), The Education University of Hong Kong

Biography: Professor Wong is a Member of the European Academy of Sciences and Arts, and Chang Jiang Chair Professor of the Ministry of Education, China. He served as the Editor-in-Chief of ‘Environmental Geochemistry and Health’ (Springer Nature) for 20 years (2002-2023). Professor Wong was the Coordinator of Central and North-East Asia of ‘Regionally Based Assessment of Persistent Toxic Substances’ and a Panel Member (of 3 experts) of ‘Chemicals Management Issues of Developing Countries and Countries with Economies in Transition’, sponsored by UNEP/GEF, during 2001-2003 and 2010-2012, respectively. His research areas included ‘Environmental toxicology’, ‘Ecological restoration’, and ‘Resource reuse’. He has published over 840 SCI papers. In addition to his PhD (Durham), he was awarded two higher Doctoral Degrees: DSc (Durham) and DSc (Strathclyde) based on published papers in 1992 and 2004. Professor Wong is ranked 6th for 3 years and 8th for 1 year (career-long ranking) and is listed as the top Chinese scientist in Environmental Science according to the World’s Top 2% Scientists (Stanford University, 2020-2023). According to Research.com's Best Researchers in Various Disciplines (2nd Ed, 2023), he ranked No. 1 in China under Environmental Science.

Abstract: Dumping dredged sediment into the ocean has become controversial due to its potential environmental implications and threats to human health. Dredged sediment often contains various contaminants which significantly impact marine ecosystems. This presentation highlights the need for more stringent regulations and innovative sediment management strategies to mitigate these impacts by citing two case studies the author involved: (1) Mass fish-kill at fish culture zones due to dumping dredged sediment without safeguarding the environment, and (2) Stringent environmental regulations were enforced for dumping sediment at the ocean. Before the construction of the contained aquatic disposal (CAD) facility to the South of The Brothers Contaminated Mud Pits (SB CMPs) (near the Hong Kong Airport), the Civil Engineering and Development Department (CEDD) conducted a detailed review and update of EIA findings for the facility in 2009/2010. An Environmental Monitoring and Audit (EM&A) program was subsequently implemented, covering the dredging, disposal, and capping operations of the CMPs. Stringent procedures were followed concerning the construction of disposal pits, disposal of contaminated mud, capping pits, and an extensive environmental monitoring program. The EM&A procedures (from July 2013 to June 2017) included the baseline surveys, monitoring of water and sediment quality, bioassays of sediment toxicity, recolonization of benthic organisms, and loading of major contaminants: heavy metals (Cr, Cd, Cu, Hg, Ni, Zn, Pb, Ag), metalloid (As), organic pollutants (PAH, DDT, PCB, TBT), and total organic carbon. The overall results indicated no drastic water and sediment quality changes due to the operations. The potential impacts were monitored on the Ma Wan mariculture site (the most sensitive receiver) and other mariculture sites. The EM&A data obtained under the Project for these four years were compared against the corresponding key Water Quality Objectives. No unusual changes in water quality (especially DO and *E. coli*), which may threaten fish health, were noted. Based on the results, it can be concluded that there is no need to conduct additional monitoring/mitigation measures or studies to examine the Project’s impact on mariculture zones.

Plenary Speech 2: Inactivation of Bacteria by Heated Oyster-Shell Powder



Prof. Chih-Huang Weng

Department of Civil Engineering, I-Shou University

Biography: Distinguished Professor Chih-Huang Weng is currently the Chairman of the Department of Civil Engineering at I-Shou University, Taiwan. He also served as Vice-President of North Kaohsiung Community University, Taiwan. He is serving as the Editor of *Water* (MDPI), *Environmental Geochemistry and Health* (Springer), and on the Editorial Board Panel Member of *Coloration Technology* (Wiley). He has also served as a Guest Editor of SCI journals, such as *Agricultural Water Management* (Elsevier), *Environmental Science and Pollution Research* (Springer), and *Lecture Notes in Civil Engineering*. He has also organized and chaired several international conferences. Professor Weng was listed in the World's Top 2% of Scientists (Stanford University, 2021-2023). His main research interests focus on using advanced oxidation processes and adsorption to treat wastewater and bacteria inactivation, groundwater modeling, and application of electrokinetic technologies to soil remediation/sludge treatment/activated carbon regeneration.

Abstract: With the escalating yield, oyster shell waste has become a greater environmental problem impacting shorelines and fisheries worldwide. The oyster shell is a residue composed of more than 95% calcium carbonate, which can be reused as a raw material for creating multiple values, such as blended cement, concrete ingredients, anti-mold paint, soil conditioner, functional fabrics, and pharmaceutical excipients. Turning the oyster shells into a valuable biomass disinfectant material would be a win-win strategy, providing a cost-effective material source and alleviating the environmental issue. Bacterial infection and subsequent disinfection of microorganisms are ongoing issues around the world. Bio-calcium oxide derived from heated oyster shell (HOS) waste products has been shown to be an effective disinfectant. It has the advantage of marketing waste materials that would otherwise contribute to environmental problems. This speech will briefly review the circular use of oyster shells and then concentrate more on the mode of inactivation of bacteria by HOS. Specifically, the use of fluorescence microscopy (FM), transmission electron microscopy (TEM), atomic force microscopy (AFM), and electron spin resonance (ESR) spectrometer techniques in characterizing the mode of inactivation of bacteria via HOS, exemplified by *S. aureus* (gram-positive) and *E. coli* (gram-negative), one of the primary pathogens involved in nosocomial infections in medical institutions worldwide. This is the first work to provide insight into the three-dimensional morphology and biophysical properties of the inactivated *S. aureus* and *E. coli* cells via HOS. Therefore, this study provides a template for the early assessment of altered bacterial cell structure and cell membrane permeability using FM, TEM, and quantification of K^+ that leaks from bacterial cells. The biophysical properties showing the damage to bacterial height, surface roughness, Derjaguin-Muller-Toporov (DMT) elastic modulus, and adhesion following HOS treatment are also elaborate. Noteworthy, the presence of singlet oxygen in HOS suspension altered bacterial cell permeability, leading to sustained inactivation. The HOS exhibited excellent disinfection capacity and achieved a 5-log-inactivation *E. coli* within 60 min with a dose of 0.2 g/L, superior to other shell-derived disinfectants. Overall, the cost-effective HOS disinfectant, derived from natural resources, has a high potential to be applied as a universal disinfectant and alleviate an aquaculture waste pollution problem.

Part III Poster Presentations

Materials Provided by the Conference Organizer:

- ✧ X Racks & Base Fabric Canvases (60cm×160cm, see the figure)
- ✧ Adhesive Tapes or Clamps

Materials Provided by the Presenters:

- ✧ Home-made Posters
- ✧ Posters printed by the ACEER 2024 Committee

Requirements for the Posters:

- ✧ Materials: not limited, can be posted on the Canvases
- ✧ Size: 60cm×160cm
- ✧ Horizontal Head: please make the conference name ‘ACEER 2024’ and the paper number ‘CEE****’ on the head of the poster to make all the posters unified.



List of Posters

Time: 11:30-12:00, July 24, 2024

Location: Room 6, 2F of Building 1

| | |
|---------|--|
| CEE1753 | A Novel Cleaning Robot for Urban Expressway Applications: Design and Evaluation <i>Dr. Wael A. Altabey, Alexandria University</i> |
| CEE1754 | A Novel Structural Health Monitoring Technology Based on Lightweight Wireless Self-Powered Sensors <i>Dr. Wael A. Altabey, Alexandria University</i> |
| CEE1761 | Lightweight Technology for Transportation Infrastructure Monitoring Based on Wireless Low-Power Sensors <i>Dr. Wael A. Altabey, Alexandria University</i> |
| CEE1765 | Synergistic Removal of Organic Dye by Underwater Bubbling Plasma Coupled with Rose-Like FeS <i>Dr. Shuai Liu, Tianjin University</i> |
| CEE1773 | Study on the Influence of MIBA by Different Incineration Plants on the Engineering Properties of Low-Density Recycled Permeable Concrete <i>Prof. Deng-Fong Lin, I-Shou University</i> |

Part IV Oral Presentations

General Guidelines

- ✚ All presentation time is shown in China Standard Time (GMT+8:00);
- ✚ Duration for Invited Oral Presentation: 20 Minutes of Presentation, including 3-5 Minutes of Q&A;
- ✚ Duration for Regular Oral Presentation: 15 Minutes of Presentation, including 2-3 Minutes of Q&A;
- ✚ All presenters are requested to reach the Session Room before the scheduled time and complete their presentations on time;
- ✚ Presenters should prepare Power Pointer or PDF Files for Presentation with Paper ID (CEE****) marked on the last page;
- ✚ A signed and stamped presentation certificate will be issued after the presentation.

Offline Oral Presentation Guidelines

Devices Provided by the Conference Organizer:

- ✚ Laptops (with MS-Office & Adobe Reader) & Projectors & Screen
- ✚ Laser Sticks
- ✚ Microphones
- ✚ Please send us the PowerPoint once ready and have the PPT backup on a U-disk. For presenters who do not send the PowerPoint, please save it on the laptop of the corresponding session 15 min in advance. Kindly tell the Session Chair (before the start of your session) that you are present.

Online Oral Presentation Guidelines

- ✚ Online Oral Presentation will be conducted via Microsoft Teams Meeting.
- ✚ If a presenter is not able to show up via Teams, the session chair/conference secretary will play the pre-recorded video presentation during his/her scheduled presentation time. If listeners have questions about the presentation, please contact the conference secretary to forward the questions.
- ✚ If a presenter cannot show up on time or has a problem with the internet connection, the session chair has the right to rearrange his/her presentation and let the next presentation start.

Best Oral Presentation Selection Procedure

ONE best presentation will be selected from EACH session based on the following criteria:

- | | | |
|---------------------|----------------------------|-------------------------|
| ✓ Research Quality | ✓ Presentation Performance | ✓ Presentation Language |
| ✓ PowerPoint Design | ✓ Effective Communications | |

Selection Procedure

- An assessment sheet (see picture) will be delivered to listeners before the session starts;
- When the session finishes, each listener is required to fill out the sheet (he/she can vote for two excellent presentations) and give it to the Session Chair;
- For the online presenters, the assessment sheet would be sent in advance via e-mail. Kindly send us the filled form in electronic version within ONE HOUR after the session is completed;

- The Session Chair will count the votes and select the best oral presentation with the most votes. If there is a tie, the Session Chair will make the final decision.

Best Oral Presentations Award

The Best Oral Presenter from each session will receive an official certificate and complimentary registration to the ACEER 2025.

Sample of Assessment Sheet

ACEER 2024 Oral Presentation Assessment

Dear participants,

After carefully listening to the presentations of this session, please kindly recommend two excellent Oral Presentations with reference to the following evaluation criteria.

The Session Chair will count the votes from each presentation and select ONE Best Oral Presentation in this session. If there is a tie, the Session Chair will make the final decision.

The winner will be announced at the official website after the conference.

You can refer to the following Criteria:

| Items | Assessment |
|-------------|---|
| Content | Right, Logical, Original, Well-Structured |
| Language | Standard, Clear, Fluent, Natural |
| Performance | Spirited Appearance, Dress Appropriately, Behaves Naturally |
| PPT | Layout, Structure, Typeset, Animation, Multimedia |
| Reaction | Build a Good Atmosphere, Speech Time Control Properly |

Please write down paper ID and give reasons for your recommendation:

| Paper ID | Reasons |
|----------|---------|
| | |
| | |

Evaluated by: _____ (Paper ID: _____)

Note: When the session finished, please fill it out and give it to the Session Chair so that the Best Oral Presentation in this session can be selected.

Special Session on Water Treatment

Time: 13:30-18:00, July 24, 2024

Location: Room 8, 2F of Building 1

Session Chairs:

Prof. Zhimin Qiang, Shanghai Jiao Tong University

Prof. Mengkai Li, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

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|-------------|---------------------|---|
| 13:30-13:35 | / | Opening <i>Prof. Chih-Huang Weng, I-Shou University</i> |
| 13:35-13:55 | CEE1740 | Sustainable Photocatalytic Disinfection Using Visible Light-Responsive NTiO₂/ PMMA Composite: Performance Enhancement and Kinetic Analysis <i>Prof. Yao-Tung Lin, National Chung Hsiung University</i> |
| 13:55-14:15 | CEE1824 | Unveiling the Toxicological Effects Induced by Tire-Derived Chemicals in Water Disinfection <i>Prof. Chao Liu, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences</i> |
| 14:15-14:35 | CEE1825 | Disinfection by Using Merging Light Source UV-LED: Innovation and Breakthrough <i>Prof. Mengkai Li, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences</i> |
| 14:35-14:55 | CEE1795 | Constructing Boron and Oxygen Dual Coordination in g-C₃N₄ for Robust Catalytic Ozonation and Iopamidol Degradation <i>Assoc. Prof. Xiangjuan Yuan, Wuhan Textile University</i> |
| 14:55-15:15 | CEE1826 | Study on UV/Chlorine Degradation Kinetics Coupled with Micro-Mixer and Capillary Flow UV Reactor: Significant Influence of Solution pH <i>Assoc. Prof. Junfeng Lian, Jiangxi University of Science and Technology</i> |
| 15:15-15:35 | CEE1827 | Investigation on Some Issues of Drinking Water Safety in the Karst Region of Guangxi, Southwest China <i>Prof. Shaogang Liu, Guangxi Minzu University</i> |
| 15:35-15:55 | Coffee Break | |
| 15:55-16:15 | CEE1828 | Investigation and Control of Pseudomonas Aeruginosa in Short-Distance Rural Water Supply <i>Dr. Ting Xie, Guangxi Minzu University</i> |
| 16:15-16:35 | CEE1829 | Research on Denitrification Mechanism in Coupled Anaerobic Methane Oxidation and Anaerobic Ammonium Oxidation Systems for Treating High-Salinity Nitrogen-Containing Wastewater <i>Prof. Jin Li, Qingdao University</i> |

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| 16:35-16:55 | CEE1830 | Design and Desalination Mechanism Study of Double-Sided Solar Evaporation Device Based on Specular Reflection <i>Assoc. Prof. Pin Hou, China University of Mining & Technology</i> |
| 16:55-17:15 | CEE1831 | Recent Advances and Practices in Green and Low-Carbon New Technologies for Wastewater Treatment <i>Dr. Yanwei Shi, Science and Technology Research Institute, China State Construction Engineering Green Industry Investment Corporation</i> |
| 17:15-17:35 | CEE1832 | In-Situ Water Remediation Practice Based on Algal Inhibiting Microbials and Submerged Plant Ecosystem <i>Dr. Bing Zhu, SUEZ Asia Innovation Department</i> |
| 17:35-17:55 | CEE1833 | Reactivity of Halogen Radicals with Dissolved Organic Matter and Halogenated Byproduct Formation <i>Dr. Yu Lei, Shanghai Jiao Tong University</i> |
| 17:55-18:00 | / | Summary <i>Prof. Zhimin Qiang, Shanghai Jiao Tong University</i> |

Series of Invited Guest Lectures

Time: 14:00-17:20, July 24, 2024

Location: Room HuiYuan, 2F of Building 5

Session Chair: Dr. Gunalaan Vasudevan, Tunku Abdul Rahman University of Management and Technology

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|-------------|---------------------|--|
| 14:00-14:20 | CEE1748 | Phytotoxicity of Ionic Liquids on Maize (<i>Zea Mays</i> L.) <i>Assoc. Prof. Yajun Li, Northwest A&F University</i> |
| 14:20-14:40 | CEE1745 | Application of NMR Spectroscopy on Characterization of Phosphorus Speciation in Sewage Sludge <i>Assoc. Prof. Qian Wang, Guangdong Technion - Israel Institute of Technology</i> |
| 14:40-15:00 | CEE1746 | Research on the Application of Smart Restaurant System <i>Prof. Panzao Wang, Sichuan Tourism University</i> |
| 15:00-15:20 | CEE1783 | Design and Construction of Hybrid Solar Farm Cooler for Preservation of Farm Perishables <i>Dr. Nethaji N, Government Polytechnic College</i> |
| 15:20-15:40 | Coffee Break | |
| 15:40-16:00 | CEE1733 | Environmental Impact of Nuclear Plant: Exemplified in the Anti-Nuclear Movement in Taiwan <i>Dr. Kuo-Wei Lan, I-Shou University</i> |

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| 16:00-16:20 | CEE1735 | Durability Assessment of the Concrete Mixtures Incorporated with Silica Fume, Ground Granulated Blast-Furnace Slag and Glass Powder Through Rapid Chloride Permeability Test and Water Absorption <i>Dr. Gunalaan Vasudevan, Tunku Abdul Rahman University of Management and Technology</i> |
| 16:20-16:40 | CEE1800 | Climate Factors Could Be a Key Driver of the Abundance and Morphometry of <i>Palpares libelluloides</i> (Linnaeus, 1764) (Neuroptera: Planipennia)? <i>Assoc. Prof. Hakan Bozdoğan, Kırşehir Ahi Evran University</i> |
| 16:40-17:00 | CEE1819 | The Impact of Sand Mining on River Bank Stability: A Case Study of the Tail of the Xiangjiang River <i>Assoc. Prof. Bin Liu, Changsha University of Science & Technology</i> |
| 17:00-17:20 | CEE1772 | Removal of PPCPs and Changes in Resistance Genes in Electric-Integrated Vertical Flow-Constructed Wetlands under Salinity Conditions <i>Assoc. Prof. Ailijiang Nuerla, Xinjiang University</i> |

Oral Session 1_ Environmental Engineering and Energy

Time: 09:00-12:10, July 25, 2024

Location: Room HuiYuan, 2F of Building 5

Session Chair: Dr. Yoshihiro Hamaguchi, Kyoto University of Advanced Science

Online Room Link: <http://www.academicconf.com/teamslink?confname=aceer2024>

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| 09:00-09:15 | CEE1801 | Enhanced Visible-Light-Driven Reduction of Cr(VI) by rGO/CuOx Composites: Synergistic Effects and Mechanistic Insights <i>Ms. Haixie He, Wuhan Textile University</i> |
| 09:15-09:30 | CEE1752 | Advances in Gas Breakthrough of Buffer/Backfill Materials in High-Level Radioactive Waste Geological Repository <i>Mr. Sai Li, Tongji University</i> |
| 09:30-09:50 | CEE1758 | Relationship Between Population Structure and Sustainable Development in an R&D-Based Overlapping Generations Model <i>Dr. Yoshihiro Hamaguchi, Kyoto University of Advanced Science</i> |
| 09:50-10:05 | CEE1810 | Impact of Typhoon Events on Microplastic Distribution in Offshore Sediments in Leizhou Peninsula of the South China Sea <i>Mr. Yuexin Liu, Shantou University</i> |
| 10:05-10:20 | CEE1768 | High-Quality Development of Ecological Environment Protection in Henan Section of the Yellow River Basin in China <i>Dr. Lijuan Li, Henan Polytechnic University</i> |
| 10:20-10:40 | Coffee Break | |

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| 10:40-10:55 | CEE1807 | Coincidental Values of Responding to Climate in Chinese Vernacular Residences <i>Ms. Biying Zuo, Wuhan University of Science and Technology; Nagoya Institute of Technology</i> |
| 10:55-11:10 | CEE1820 | Study on the Application of Bacterial Algal Symbiotic System in the Treatment of Anaerobic Digestion Waste Liquid <i>Ms. Chenxi Liu, Shenyang Aerospace University</i> |
| 11:10-11:25 | CEE1821 | Study on the Lipid Accumulation Characteristics of Chlorella Vulgaris and Its Pyrolysis for the Preparation of Low Nitrogen Bio Oil <i>Ms. Chuyan Wang, Shenyang Aerospace University</i> |
| 11:25-11:40 | CEE1771 | Intelligent Packaging Films Produced from Fishery Waste Chitosan Conjugate Discarded Jaboticaba Extract: Fabrication, Characterization, and Shelf-life Extension of Fresh Pork Loins <i>Ms. Ying-Chen Chen, National Chung Hsing University</i> |
| 11:40-11:55 | CEE1821 | Poly (Ionic Liquid) Anchored Granular Activated Carbon for Efficient and Selective Removal of Perchlorate: Performance, DFT Calculations and Mechanism <i>Dr. Xinyu Sun, China University of Mining and Technology</i> |
| 11:55-12:10 | CEE1822 Online | Plants Significantly Increase Negative Air Ion Concentration: Results from a Phytotron Experiment <i>Dr. Benzhi Zhou, Chinese Academy of Forestry</i> |

Oral Session 2_ Structural Engineering, Geological Engineering, and Ocean Engineering

Time: 14:00-17:35, July 25, 2024

Location: Room HuiYuan, 2F of Building 5

Session Chair: Prof. Xuande Chen, University of Quebec at Rimouski

Online Room Link: <http://www.academicconf.com/teamslink?confname=aceer2024>

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| 14:00-14:15 | CEE1797 | Penetration Characteristics of Modified Suction Caisson under Seepage Effect in Sand <i>Dr. Jipeng Zhao, China University of Petroleum (East China)</i> |
| 14:15-14:30 | CEE1799 | Multi-Objective Optimization Study of Base-Isolated Reactor Plant <i>Dr. Rencong Dai, Chinese Academy of Sciences</i> |
| 14:30-14:45 | CEE1744 | Measuring Chloride-Induced Structure Corrosion in Marine Environment: A Characterization Study of Fluorescence-Based Optical Sensor <i>Prof. Xuande Chen, University of Quebec at Rimouski</i> |

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|-------------|--------------------------|---|
| 14:45-15:00 | CEE1796 | A Mesoscale Eddy Reconstruction Method Based on Deep Learning <i>Mr. Xiaodong Ma, Dalian Naval Academy</i> |
| 15:00-15:15 | CEE1802 | Predictability Study of the Kuroshio Front in the East China Sea Based on In-Situ Observational Data: Analysis and Prediction Using Mann-Kendall Test and CNN-LSTM-Attention <i>Mr. Weishuai Xu, Dalian Naval Academy</i> |
| 15:15-15:30 | CEE1798 | Study for Service Performance of the Scale Suction Caisson <i>Dr. Hao Liang, China University of Petroleum (East China)</i> |
| 15:30-15:45 | CEE1811 | Evaluation of Transportation Development Projects Across the Asia-Pacific Region Using Satellite-Based Nighttime Lights <i>Dr. Homer Pagkalinawan, Asian Development Bank</i> |
| 15:45-16:05 | Coffee Break | |
| 16:05-16:20 | CEE1835 | Effect of Water Salinity on the Shear Strength of a Compacted Saline Soil <i>Prof. Belkacem Moussai, University of Science and Technology Houari Boumediene</i> |
| 16:20-16:35 | CEE1731 Online | Causes and Possible Solutions to Road Failure in Nigeria <i>Assoc. Prof. Theophilus Aanuoluwa Adagunodo, Covenant University</i> |
| 16:35-16:50 | CEE1792 Online | Project Cost Prognostication for Government Buildings Using Feed-Forward Backpropagation Neural Network <i>Mr. Jean Adrian O. Maravilla, Mapua University</i> |
| 16:50-17:05 | CEE1793 Online | Neuro-Particle Swarm Optimization Modeling for Construction Cost Prediction of Flood Control Projects <i>Mr. Eon Meraña, Mapua University</i> |
| 17:05-17:20 | CEE1794 Online | Adapting Biomimetic Design as Wind Force Resisting System for Residential Houses <i>Prof. Donna Ville L. Gante, Mapua Malayan Colleges Mindanao</i> |
| 17:20-17:35 | CEE1781 Online | Resilient Lightweight Structural Systems: Application of Sustainable Design in a Small Island in the Philippines <i>Dr. Dante L. Silva, Mapua University</i> |

Part V Conference Venue

Beijing Xijiao Hotel

北京西郊宾馆

Website: <http://www.xijiao-hotel.com.cn/>

Address: No.18 Wangzhuang Road, HaiDian District, Beijing, China

Tel.: (8610)-62322288



Access to Beijing Xijiao Hotel

1. Beijing Capital International Airport-- Beijing Xijiao Hotel (31km)

Route a) Taxi: about 40 min drive, 80 RMB

Route b) public transportation:

★Airport Bus Line 3 (*Get off at Beijing International Exhibition Center Subway Station, and then transfer at Guozhan (China Int'l Exhibition Center) Subway Station*) → Beijing Subway Line 15 (*Get off at Qinghua Donglu Xikou Station*) (90 min, 8 RMB)

★Airport Express (*Get off at Sanyuanqiao Station, and then transfer at Sanyuanqiao Subway Station*) → Beijing Subway Line 10 Outer Ring (*Transfer at Zhichunlu Station*) → Beijing Subway Line 13 (*Get off at Wudaokou Station*) (80min, 30 RMB)

★Airport Bus Line 10 (*Transfer at Guozhan (China Int'l Exhibition Center) Station*) → Beijing Subway Line 15 (*Get off at Qinghua Donglu Xikou Station*) (115 min, 9 RMB)

2. Beijing Daxing International Airport-- Beijing Xijiao Hotel (61km)

Route a) Taxi: about 75 min drive, 200 RMB

Route b) public transportation:

★Daxing Airport Express Line (*Transfer at Caoqiao Station*) → Beijing Subway Line 19 (*Transfer at Mudanyuan Station*) → Beijing Subway Line 10 Outer Ring (*Transfer at Zhichunlu Station*) → Beijing Subway Line 13 (*Get off at Wudaokou Station*) (75 min, 40 RMB)

★Daxing Airport Express Line (*Transfer at Caoqiao Station*) → Beijing Subway Line 19 (*Transfer at Mudanyuan Station*) → Bus 508 (*Get off at Beijing Language and University Station*) (120 min, 42 RMB)

★Daxing Airport Express Line (*Transfer at Caoqiao Station*)→ Beijing Subway Line 19 (*Get off at Beitaipingzhuang Station, and then transfer at Beitaipingqiaoxi Station*)→ Bus 331 (*Get off at Beijing Language and University Station*) (110 min, 42 RMB)

3. Beijing Railway Station-- Beijing Xijiao Hotel (20km)

Route a) Taxi: about 45 min drive, 60 RMB

Route b) public transportation:

★Beijing Subway Line 2 Inner/Outer Ring (*Transfer at Xizhimen Station*)→ Beijing Subway Line 13 (*Get off at Wudaokou Station*) (60 min, 5 RMB)

★Beijing Subway Line 2 Inner Ring (*Get off at Xizhimen Station, and then transfer at Beijingbei Railway Station*) → Bus 375 (*Get off at Wudaokou Station*) (90 min, 6 RMB)

★Beijing Subway Line 2 Inner Ring (get off at Xizhimen Station, and then transfer at Beijingbei Railway Station) → Bus 438 (Get off at Beijing Forestry University Station) (90 min, 6 RMB)

4. Beijing West Railway Station -- Beijing Xijiao Hotel (16km)

Route a) Taxi: about 40 min drive, 45 RMB

Route b) public transportation:

★Beijing Subway Line 9 (*Transfer at Guojia Tushuguan Station*) → Beijing Subway Line 4 (*Transfer at Xizhimen Station*) → Beijing Subway Line 13 (*Get off at Wudaokou Station*) (55 min, 5 RMB)

★Beijing Subway Line 9 (*Transfer at Guojia Tushuguan Station*) → Beijing Subway Line 4 (*Transfer at Haidianhuangzhuang Station*)→ Beijing Subway Line 10 Inner Ring (*Transfer at Zhichunlu Station*) → Beijing Subway Line 13 (*Get off at Wudaokou Station*) (55 min, 5 RMB)

★Beijing Subway Line 9 (*Transfer at Guojia Tushuguan Station*) → Beijing Subway Line 4 (*Transfer at Haidianhuangzhuang Station*) → Bus 630 (*Get off at Zhanchunyuanyanxilubeikou Station*) (65 min, 6 RMB)

5. Beijingbei Railway Station -- Beijing Xijiao Hotel (9km)

Route a) Taxi: about 25 min drive, 30 RMB

Route b) public transportation:

★Beijing Subway Line 13 (*Get on from Xizhimen Station, and get off at Wudaokou Station*) (30 min, 3 RMB)

★Bus 375 (*Get on from Beijingbei Zhan, and get off at Wudaokou Station*) (65 min, 2 RMB)

★Bus 438 (*Get on from Beijingbei Zhan, and get off at Beijing Forestry University Station*) (65 min, 2 RMB)

★Bus 331 (*Get on from Suojiafen Zhan, and get off at Beijing Language and University Station*) (75 min, 2 RMB)

6. Beijingnan Railway Station -- Beijing Xijiao Hotel (20km)

Route a) Taxi: about 60 min drive, 60 RMB

Route b) public transportation:

★Beijing Subway Line 4 (*Transfer at Xizhimen Station*) → Beijing Subway Line 13 (*Get off at Wudaokou Station*) (55 min, 5 RMB)

★Beijing Subway Line 4 (*Transfer at Haidianhuangzhuang Station*) → Beijing Subway Line 10 Inner Ring (*Transfer at Zhichunlu Station*) → Beijing Subway Line 13 (*Get off at Wudaokou Station*) (65 min, 5 RMB)

★Beijing Subway Line 4 (*Transfer at Haidianhuangzhuang Station*) → Bus 630 (*Get off at Zhanchun-yuanxilubeikou Station*) (80 min, 7 RMB)

Download the following picture if you need to take a taxi:



Part VI Acknowledgements

On behalf of the ACEER 2024 Organizing Committee, we would like to take this opportunity to express our sincere gratitude to our participants. We would also like to acknowledge the Technical Program Committee members who have given their professional guidance and valuable advice as reviewers. For those who contribute to the success of the conference organization without listing the names below, we would love to say thanks as well.

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