The 4th International Conference on Advances in Civil and Ecological Engineering Research (ACEER 2022)

CONFERENCE PROGRAM

July 4-7, 2022
Online by Microsoft Teams
China Standard Time (GMT+8)

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Tuesday, July 5, 2022 ***MS Teams Link: http://www.academicconf.com/teamslink?confname=aceer2022***	
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09:10-09:55	**Keynote Speech 1:** Dumping waste at sea as a waste management option: the case of dumping contaminated sediment in Hong Kong *Prof. Ming-Hung Wong, Advisor/Research Chair Professor of Environmental Science, The Education University of Hong Kong*
09:55-10:40	**Keynote Speech 2:** Adsorption characteristics of Ni(II), Zn(II), and Cu(II) ions onto pineapple leaf biochar *Prof. Chih-Huang Weng, Chairman of Department of Civil Engineering, I-Shou University*
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10:50-11:10	**Invited Speech:** Feasibility of recycled spent mushroom substrates for sustainable masonry materials *Dr. Yap Soon Poh, Department of Civil Engineering, Faculty of Engineering, University of Malaya, Malaysia*
11:10-11:30	**Invited Speech:** Water crisis, climate change, impact, and solution from the perspective of paleolimnology *Prof. Tri Retnaningsih Soeprobowati, Department of Biology, Faculty Science and Mathematics, Diponegoro University, Indonesia*
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14:45-18:00	**Oral Session_1: Civil Engineering, Geological Engineering and Earthquake Engineering**
Wednesday, July 6, 2022 ***MS Teams Link: http://www.academicconf.com/teamslink?confname=aceer2022***	
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Thursday, July 7, 2022 ***MS Teams Link: http://www.academicconf.com/teamslink?confname=aceer2022***	
09:00-12:05	**Oral Session 4: Water Resources Engineering and Sustainable Energy-Part A**
12:05-14:00	**BREAK**
14:00-17:15	**Oral Session 5: Water Resources Engineering and Sustainable Energy-Part B**

Part II Keynote Speeches

Keynote Speech 1: Dumping waste at sea as a waste management option: the case of dumping contaminated sediment in Hong Kong

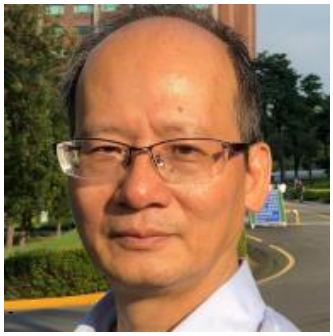
Prof. Ming-Hung Wong

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

Biography: Prof. Wong is currently Advisor/Research Chair Professor (Environmental Science) of The Education University of Hong Kong, Member of the European Academy of Sciences and Arts, Chang Jiang Chair Professor of Ministry of Education, China, and Editor-in-Chief of Environmental Geochemistry and Health (Springer Nature). His research areas include environmental toxicology of persistent toxic substances, ecological restoration of contaminated sites, and resource reuse. Professor Wong has published more than 800 SCI papers. According to the World's Top 2% Scientists List (Stanford University, 2019 and 2021), he ranked No. 6 (career-long) globally under Environmental Sciences, based on citation impact. Prof. Wong served as the Coordinator of Central and North-East Asia of the project "Regionally based assessment of Persistent Toxic Substances", and as a Panel Member (of three experts) of another project, "Chemicals Management Issues of developing countries and countries with economies in transition", both sponsored by UNEP/GEF, during 2001-2003, and 2010-2012, respectively.

Abstract: From about 1850 to World War II, dredged sediment, municipal solid waste, and ship wreckage were dumped at sea. Sewage sludge was shipped to the North Sea and dumped at sea from Britain to reduce the pollution of municipal solid waste to the Thames in 1887. From World War II to 1972, discarded munitions, chemical warfare agents, and low-level waste were dumped at sea. The London Dumping Convention (1972) came to force to control the dumping of industrial waste, construction waste, etc. In the early days, sewage sludge and contaminated sediment were dumped at designated sites (coastal marine areas) in Hong Kong. The higher contents of heavy metals and organic pollutants caused environmental problems. This presentation focuses on two projects related to dumping contaminated sediments, one before and one after adopting the Environmental Impact Assessment in waste management in Hong Kong. For the 1st project, there were massive fish kills in fish culture zones due to contaminated sediment. The former shipyard was transformed into the Disney Land, and contaminated sediment was spread into fish culture zones during transportation to the dumped sites, causing massive fish kills, with a considerable compensation provided for the fish farmers. For the 2nd project, scientific inputs were used for monitoring and assessing the potential impacts of the dumped sediment at the designated dumping sites, with stringent requirements of constructing the facilities for containing the dumped sediment during the construction, pitching, and closing of the facilities when the deposit is complete. Detailed information is provided on the use of scientific inputs in ensuring the ecological and human health safety of the dumping sites and the surrounding areas, especially the nearby mariculture sites.

Keynote Speech 2: Adsorption characteristics of Ni(II), Zn(II), and Cu(II) ions onto pineapple leaf biochar



Prof. Chih-Huang Weng

Chairman of Department of Civil Engineering, I-Shou University

Biography: Professor Chih-Huang Weng, is the Chairman of Department of Civil Engineering at I-Shou University, Taiwan. He also served as vice-president of North Kaohsiung Community University, Taiwan. He received his MS and Ph.D. degrees in 1990 and 1994, respectively, from the Department of Civil Engineering of The University of Delaware, USA. He has published over 100 journal articles with 7000 citations, 43 h-index and 80 i10-index in google scholar database. Based on the 2020 updated science-wide author databases of standardized citation indicators (https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918), his publication citation was listed on the top 1% and ranked at 263rd among 42482 authors in the category of Engineering, Environmental. He has earned number of awards and honors, including the National Innovation Award by the Research Center for Biotechnology and Medicine Policy, Taiwan. He is serving as the Associate Editor of Environmental Geochemistry and Health (Springer, since 2020) and on the Editorial Board Panel Member of Coloration Technology (Wiley, since 2013). He has also served as a Guest Editor of SCI journals, such as Agricultural Water Management (Vol. 174, 2016, Elsevier (https://doi.org/10.1016/j.agwat.2016.06.012)) and Environmental Science and Pollution Research (Vol. 26, issue 30, 2019 (https://doi.org/10.1007/s11356-019-06281-w); Vol. 27, issue 31, 2020 (https://doi.org/10.1007/s11356-020-09994-5), Vol. 28, issue 34, 2021 (https://doi.org/10.1007/s11356-021-15004-z), Vol. 29, issue 9, 2022 (https://doi.org/10.1007/s11356-021-17392-8, Springer). He has also organized and chaired several international conferences. His main research interests focus on using advanced oxidation processes and adsorption for the treatment of wastewater and bacteria inactivation, ground water modeling, and application of electrokinetic technologies to soil remediation/sludge treatment/activated carbon regeneration.

Abstract: Although research on metal adsorption via biochar has gained intensive attention over the last decade, the reaction mechanisms responsible for metal adsorption remain uncertain. This is the first work that provides direct evidence on the identification of Ni(II), Zn(II), and Cu(II) adsorption mechanisms on pineapple leaf biochar (PLB) using surface characteristics analyses, including X-ray photoelectron spectroscope (XPS), Fourier transform infrared spectroscope (FTIR), and scanning electron microscope with energy-dispersive X-ray spectroscope (SEM-EDS). Indispensable parameters, including temperature, ionic strength, and pH, affect much on adsorption. From Langmuir isotherm fitting, the maximum adsorption capacity of PLB for Ni(II), Zn(II), and Cu(II) are 44.88, 46.00, and 53.14 mg g-1, respectively, surpassing all biochars reported in the literature. Findings of surface characterization techniques coupled with cation released during adsorption, cation exchange, and surface complexation mechanisms were proposed. PLB is reusable and remains sufficient adsorption capacity even six consecutive cycles via pressure cooker regeneration. With high regenerability and ultrahigh adsorption capacity, PLB defines itself as a promising cost-effective adsorbent for future applications in metal-laden wastewater. This study also provides framework for understanding how metal ions react with biochar.

Keynote Speech 3: Innovative and CO_2-minimized foundation technology for high-rise buildings

Prof. Rolf Katzenbach
IK & Technical University of Darmstadt/CEO of Consulting Office "Ingenieursozietät Professor Dr.-Ing. Katzenbach GmbH", Germany

Biography: Professor Dr.-Ing. Rolf Katzenbach is since 1993 Full-Professor of the Technical University of Darmstadt, Germany, and is CEO of his Consulting Office "Ingenieursozietät Professor Dr.-Ing. Katzenbach GmbH". He is Past-Chairman of TC 212 Deep Foundations and of TC 215 Environmental Geotechnics of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and Board Member of several other international and national organizations.

He is member of the Chamber of Engineers and publicly certified official Expert of Geotechnics and Independent Checking Engineer working with his expertise for national and international courts of justice, the International Chamber of Commerce (ICC, Paris) arbitration committees, insurance companies, state ministries, building authorities and big national and international financial institutions and investors.

Professor Katzenbach is involved in a lot of national and international projects, regarding value engineering and the safety and serviceability of buildings and structures.

Due to his outstanding expertise and knowledge Professor Katzenbach was for example appointed by the Building and Construction Authority (BCA) Singapore to carry out the independent Peer Review for the new Metro Line DTL3 in Singapore.

The Kingdom of Saudi Arabia appointed Professor Katzenbach as an internationally recognized expert to check the safety of the foundation of the 1,007 m high Jeddah Tower (former name: Kingdom Tower) in Jeddah which will become the highest high-rise building of the world.

Abstract: The reduction of CO_2 emissions is from the technical and ecological perspective currently all over the world one of the major challenges. In that context the question arises, what we can do from the civil engineering side, to reduce the CO_2 emissions during construction and during operation of our buildings. There are - for example - the following possibilities, especially in the area of the foundation of high-rise buildings:

i) intelligent and optimized application of deep foundations (pile groups) by taking into account the interaction between raft (pile cap) and piles and designing a Combined Pile-Raft Foundation (CPRF).
ii) science-based and thorough analysis, evaluation and interpretation of large scale pile-load tests.
iii) using piles as energy-piles, which means, that the piles of a deep foundation are used twice: as construction element, carrying the load into the ground, and as heat exchanger, using the thermal capacity of the soil.

All these aspects are described in the Keynote Lecture, starting with the description of the environmentally friendly Combined Pile-Raft Foundation (CPRF) as innovative and CO_2-minimized foundation technology.

By application of the CPRF it is possible to reduce the CO_2 emission of the construction of the deep foundation significantly; in addition, we save a lot of money and a lot of time by using the CPRF technology and can use the piles as energy piles.

For practitioners the essentials of "ISSMGE Combined Pile-Raft Foundation Guideline" are presented.

Part III Oral Presentations

Online Oral Presentation Guidelines

- Online Oral Presentation will be conducted via **Microsoft Teams Meeting**.
- All presenters are requested to reach the Online Session Room prior to the schedule time and complete their presentation on time.
- All presentation times are shown in China Standard Time (GMT+8:00).
- If a presenter is not able to show up via Teams, the session chair / conference secretary will download and 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 have problem with internet connect, the session chair has the right to rearrange his/her presentation, and let the next presentation start.
- Signed and stamped electronic presentation certificate would be issued via e-mail after conference.

Best Oral Presentations Selection

The session chair will select one best oral presentation from his/her session based on the following criteria:

- ✓ Research Quality
- ✓ Presentation Performance
- ✓ Presentation Language
- ✓ PowerPoint Design

Best Oral Presentations Award

The Best Presenter will receive an official certificate and a free registration to the ACEER2023.

Oral Session 1_ Civil Engineering, Geological Engineering and Earthquake Engineering

Time: 14:00-18:00, July 5, 2022
Session Chair: ***Dr. Ali Murtaza Rasool, Structural Engineering Division, National Engineering Services Pakistan (NESPAK), Pakistan***
Session Room Link: http://www.academicconf.com/teamslink?confname=aceer2022

14:00-14:45	**Keynote Speech 3**	Innovative and CO2-minimized foundation technology for high-rise buildings *Prof. Rolf Katzenbach, IK & Technical University of Darmstadt/CEO of Consulting Office "Ingenieursozietät Professor Dr.-Ing. Katzenbach GmbH", Germany*
14:45-15:00	CEE1522	Particle breakage and deformation behaviour of recycled concrete aggregates *Dr. Syed Kamran Hussain Shah, Department of Civil and Environmental Engineering, Saitama University, Japan*
15:00-15:15	CEE1630	Public participation, innovation capability and green growth: a pilot study in Beijing *Ms. Yu Han, University of Science and Technology Beijing, China*
15:15-15:35	CEE1535	Experiments on tunnel lining concrete thermal crack control with the application of a soft interlayer *Dr. Jianqin Ma, School of Highway, Chang'an University, China*
15:35-15:55	CEE1598	Effect of chemical and pozzolanic additives on microstructural behaviour of expansive clays *Mr. T. Vamsi Nagaraju, S.R.K.R. Engineering College, India*
15:55-16:05		**BREAK**
16:05-16:20	CEE1618	Analysis on driving factors of environmental pressure and decoupling effect in Beijing-Tianjin-Hebei *Ms. Lu Chang, University of Science & Technology Beijing, China*
16:20-16:35	CEE1571	Applications of ground penetrating radar – a comprehensive case study *Mr. Senthil P, Central Soil and Materials Research Station, India*
16:35-16:50	CEE1575	Appraising small scale Landslides in the urban hubs of Darjeeling Sikkim Himalaya using SAR Interferometry technique *Mr. Saurabh Singh, Department of Geology, Banaras Hindu University, India*
16:50-17:10	CEE1552	Role of unsaturated soils in engineering practice *Dr. Ali Murtaza Rasool, Structural Engineering Division, National Engineering Services Pakistan (NESPAK), Pakistan*
17:10-17:25	CEE1546	Develop a health monitoring technique for analysis a big data of bridges *Dr. Ahmed Silik, Nanjing Zhixing Information Technology Co., Ltd., Nanjing, China*
17:25-17:40	CEE1547	Machine vision-based structural diagnosis application *Dr. Wael A. Altabey, Department of Mechanical Engineering, Faculty of Engineering, Alexandria University, Egypt*
17:40-18:00	CEE1554	An overview of structural health monitoring of high-rise buildings in the Middle East *Dr. Anil Cherian, Sr. Technical Manager Strainstall Middle East Dubai, United Arab Emirates*

Oral Session 2_ Ecological Engineering and Environmental Engineering-Part A

Time: 08:30-11:50, July 6, 2022
Session Chair: Dr. Amal Najihah Muhamad Nor, Faculty of Earth Science, Universiti Malaysia Kelantan, Malaysia
Session Room Link: http://www.academicconf.com/teamslink?confname=aceer2022

08:30-08:50	CEE1572	Opportunities on selecting eucalyptus genotypes for growth efficiency under climate change *Dr. Rafael Rubilar, Cooperativa de Productividad Forestal, Departamento de Silvicultura, Fac. Ciencias Forestales, Universidad de Concepción, Chile*
08:50-09:05	CEE1577	A production approach to analyze wood traits of Pinus radiata (D. Don) to produce structural lumber *Dr. Rosa Alzamora, Departamento de Manejo de Bosques y Medio Ambiente, Universidad de Concepción, Chile*
09:05-09:20	CEE1578	Valuing agro-industrial waste through the development of non-structural eco-boards *Dr. Juan Pedro Elissetche, Departamento de Manejo de Bosques y Medio Ambiente, Universidad de Concepción, Chile*
09:20-09:35	CEE1597	Electrobioremediation of petroleum hydrocarbon impregnated drill cuttings *Prof. Yolanda Córdova Bautista, Laboratorio de Biotecnología, Universidad Juárez Autónoma de Tabasco, México*
09:35-09:50	CEE1568	Impact of rapid urban expansion on green space structure *Dr. Amal Najihah Muhamad Nor, Faculty of Earth Science, Universiti Malaysia Kelantan, Malaysia*
09:50-10:10	CEE1614	Effects of chloropicrin fumigation combined with biochar on soil bacterial and fungal communities and Fusarium oxysporum *Dr. Yuan Li, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China*
10:10-10:20		**BREAK**
10:20-10:40	CEE1595	An interdisciplinary approach to improve farmers' resilience to climate change: potential and challenges *Dr. Yunita T Winarto, Faculty of Social and Political Sciences, Universitas Indonesia, Indonesia*
10:40-10:55	CEE1613	Analysis of pollutant transport behaviour of reactive species with variable dependent migration parameters in semi-infinite groundwater formations *Dr. Manish Chaudhary, Department of Mathematics, Indian Institute of Technology, India*
10:55-11:10	CEE1584	Arsenic toxicity: health exposure and perception of risk assessment on a populace from an exposed area in West Bengal, India *Dr. Madhurima Joardar, School of Environmental Studies, Jadavpur University, India*
11:10-11:30	CEE1524	Real world emission and impact of three wheeler electric auto-rickshaw in India *Dr. Tushar Rajendra Bagul, D.Y. Patil College of Engineering, India*
11:30-11:50	CEE1596	Study on the effects of irrigation intervals and drought stress on yield and yield components of four maize cultivars in Iran *Dr. Behzad Sani, Department of Agrotechnology, Shahre Qods Branch, Islamic Azad University, Iran*

Oral Session 3_ Ecological Engineering and Environmental Engineering-Part B

Time: 14:00-17:25, July 6, 2022
Session Chair: Dr. Oluwaseun Uzoma Oyesanya, Department of Geology, University of Nigeria, Nigeria
Session Room Link: http://www.academicconf.com/teamslink?confname=aceer2022

14:00-14:15	CEE1610	Soil CO_2 emission from the natural and disturbed pine forests in Central Siberia *Dr. Anastasia Makhnykina, V. N. Sukachev Institute of Forest, Russia*
14:15-14:30	CEE1606	Fishing techniques of valiant shark fishers of Thoothoor village in Tamil Nadu, India *Dr. E. Hino Fernando, ICAR- Krishi Vigyan Kendra, India*
14:30-14:50	CEE1600	Design and development of vertical garden integrated with automated irrigation based on internet of things *Dr. R Senthilkumar, University of Technology and Applied Sciences-Suhar, India*
14:50-15:05	CEE1556	Irrigation requirement for eucalyptus pellita during initial growth *Dr. Dwinata Aprialdi, Research and Development Department, PT. Arara Abadi, Sinarmas Forestry, Indonesia*
15:05-15:25	CEE1587	Impacts of polluted water discharged by the fishing-related industry on fisheries resources and economic development in an R&D-based growth model *Dr. Yoshihiro Hamaguchi, Department of Management Information, Kyoto College of Economics, Japan*
15:25-15:40	CEE1619	Impact of the first induced covid-19 lockdown on air quality in Israel *Dr. Sarit Agami, Department of Economics, The Hebrew University, Israel*
15:40-15:50		**BREAK**
15:50-16:10	CEE1536	Immobilizing arsenic in a contaminated anoxic aquifer using zerovalent iron: insights from As and Fe K-edge XAS *Dr. Thiago Augusto Formentini, Department of Soil and Environment, SLU, Uppsala, Sweden*
16:10-16:30	CEE1555	Transport and the environment: a green partnership *Dr. Wendy Collinson, School of Mathematical and Natural Sciences, University of Venda, South Africa*
16:30-16:45	CEE1625	Phytoremediation of toxic metal polluted soil: screening for new indigenous accumulator and translocator plant species, northern Anambra Basin, Nigeria *Dr. Ameh Eneojo Godwin, Federal University Gusau Nigeria, Nigeria*
16:45-17:05	CEE1607	Effects produced water discharge on the flora and fauna Community Structure of the Forcados River, Niger Delta *Dr. Oluwaseun Uzoma Oyesanya, Department of Geology, University of Nigeria, Nigeria*
17:05-17:25	CEE1611	Establishing marine protected areas to conserve aquatic biodiversity and ecosystems: case of greater cape three points in the Western Region of Ghana Protected Areas *Dr. Alberta Ama Sagoe, Centre for Coastal Management, University of Cape Coast, Ghana*

Oral Session 4_ Water Resources Engineering and Sustainable Energy-Part A

Time: 09:00-12:05, July 7, 2022
Session Chair: Dr. Ming Fai Chow, Discipline of Civil Engineering, School of Engineering, Monash University Malaysia, Malaysia
Session Room Link: http://www.academicconf.com/teamslink?confname=aceer2022

09:00-09:15	CEE1612	Assessing and predicting groundwater uranium contamination using GIS and machine learning *Dr. Sushant K. Singh, Takeda Pharmaceuticals Inc, USA*
09:15-09:35	CEE1561	Prediction performance of dissolved oxygen (DO) in a drinking water supply reservoir using artificial neural network (ANN) *Dr. Ming Fai Chow, Discipline of Civil Engineering, School of Engineering, Monash University Malaysia, Malaysia*
09:35-09:55	CEE1519	An iron-air fuel cell system towards concurrent phosphorus removal and resource recovery in the form of vivianite and energy generation in wastewater treatment: a sustainable technology regarding phosphorus *Dr. Ru Wang, Shaanxi Key Laboratory of Environmental Engineering, Xi'an University of Architecture and Technology, China*
09:55-10:15	CEE1586	Applications of hybrid artificial intelligence models in hydrology *Dr. Md. Munir Hayet Khan, Faculty of Engineering and Quantity Surveying, INTI International University, Malaysia*
10:15-10:30	CEE1581	Enhanced solar still evaporation rate using optical modification *Dr. Wahid Dianbudiyanto, Department of Biology, Faculty of Science and Technology, Airlangga University, Indonesia*
10:30-10:40		**BREAK**
10:40-10:55	CEE1579	Modelling of hybrid energy systems for renewable energy conservation and pollution control *Mr. Arulanantha Samy Santhiyagu, School of Mechanical Sciences, Hindustan Institute of Technology and Science, India*
10:55-11:15	CEE1543	Water yield and water quality variability in Upper Ganga Basin (UGB), Uttarakhand, India *Dr. Anoop Kumar Shukla, Manipal School of Architecture and Planning, Manipal Academy of Higher Education, India*
11:15-11:30	CEE1621	Groundwater extraction triggered land subsidence investigated using space-borne GRACE gravity anomaly and DInSAR in adjoining states of Punjab and Haryana, India *Dr. Pranshu Pranjal, Remote Sensing & GIS Laboratory, Department of Mining Engineering, India*
11:30-11:50	CEE1602	Groundwater recharge potential assessment for sustainable water resource management in urban environment *Dr. Prafull Singh, Department of Geology, Central University of South Bihar, Gaya, India*
11:50-12:05	CEE1576	Water safety plan: a novel approach to evaluate the efficiency of the water supply system in Garmsar *Dr. Samaneh Abolli, Department of Environmental Health Engineering, School of Public Health, Tehran University of Medical Sciences, Iran*

Oral Session 5_ Water Resources Engineering and Sustainable Energy-Part B

Time: 14:00-17:15, July 7, 2022
Session Chair: Dr. Shakeel Mahmood, Department of Geography, Government College University Lahore, Pakistan
Session Room Link: http://www.academicconf.com/teamslink?confname=aceer2022

14:00-14:15	CEE1608	Assessment of aquifer susceptibility to land subsidence due to groundwater over-exploitation in Yogyakarta-Sleman Groundwater Basin *Dr. Muhamad Ilham, Department of Geological Engineering, Universitas Gadjah Mada, Indonesia*
14:15-14:35	CEE1615	Fluvial response to active tectonics: analysis of DEM-Derived longitudinal profiles in the Rangit River Basin, Eastern Himalayas, India *Dr. Sayantan Das, Department of Geography, Dum Dum Motijheel College, India*
14:35-14:55	CEE1563	Explicit assessment of vertical flow for groundwater flow modelling *Dr. Pradeep K. Majumdar, C. U, Shah University, India*
14:55-15:15	CEE1605	Flash flood susceptibility modelling using integrated fluvio-morphological and geo- hydrological approaches: a study of highland river system in Hindu Kush Region *Dr. Shakeel Mahmood, Department of Geography, Government College University Lahore, Pakistan*
15:15-15:30	CEE1588	Aquatic drones for water quality and ecology mapping in water systems *Dr. Rui Lima, INDYMO BV, the Netherlands*
15:30-15:40		**BREAK**
15:40-16:00	CEE1601	Theory of principal component analysis within the context of multivariate statistics and its application for hydrogeochemical analysis *Dr. Saadu Umar Wali, Department of Geography, Federal University Birnin kebbi, Nigeria*
16:00-16:20	CEE1540	Environmental and ecological effects due to extraction of renewable energy from estuaries *Dr. Soufiane Haddout, Department of Physics, Faculty of Science, Ibn Tofail University, Morocco*
16:20-16:40	CEE1573	Challenges of renewable energy resources in Arabian Gulf Region *Dr. Tariq Umar, Architecture and the Built Environment Faculty of Environment and Technology (FET), UK*
16:40-17:00	CEE1604	Combination of photovoltaics with wastewater treatment plants to reduce energy consumption in aeration tanks and produce sustainable energy *Dr. Enrico Zacchei, University of Coimbra, CERIS, Coimbra, Portugal*
17:00-17:15	CEE1567	Urban territories floods resilience: preliminary study case of post-flood wastes management in Algeria *Assoc. Prof. F. Boulaghmen, Civil Engineering Department, University of Amar Telidji, Algeria*

Part IV Poster Presentations

Online Poster Guidelines

Online Poster Presentations will consist of two parts:

- **Poster Presentations:** A collection of posters in PDF format (with/without audio) will be available at conference website for attendees to view starting on July 5, 2022.
- **Poster Q&As:** Live poster Q&A sessions will be held via Microsoft Teams Meeting for attendees to meet virtually with presenters and ask questions or give feedbacks.
- Signed and stamped electronic presentation certificate would be issued via e-mail after conference.

List of Posters

CEE1431	Hydrodynamic effects of aquatic plants growth and propagation in plain river network *Dr. Lei Fu, Zhejiang Institute of Hydraulics & Estuary, China*
CEE1530	Stability analysis of tower foundation slope of power transmission and transformation project under strong typhoon environment: a case study at Fujian *Chen Yao, Electric Power Research Institute of State Grid Fujian Electric Power Co., Ltd, China*
CEE1531	Practice of ecological restoration of slope in power transmission and transformation project *Chen Yao, Electric Power Research Institute of State Grid Fujian Electric Power Co., Ltd, China*
CEE1541	Modelling of the pharmaceuticals adsorption by applicability of a novel approach of Redlich-Peterson isotherm equation *Dr. Aloui Amel, Laboratory of Physical Chemistry and Biology of Materials, Department of Physics and Chemistry, Higher Normal School of Technological Education of Skikda, Algeria*
CEE1544	Operational performance simulation and feasibility analysis for a solar assisted ground source heat pump system in heating-dominated areas *Mr. Long He, Chongqing University, China*
CEE1549	The guiding role of the green clauses in the civil code of the people's republic of China upon vessel-induced oil pollution compensation *Dr. Zhipeng Zhang, Key Laboratory of Environmental Protection Technology on Water Transport, Tianjin Research Institute for Water Transport Engineering, Ministry of Transport, China*
CEE1559	Multi-Object optimization of flood limited water levels by stages for multipurpose reservoir in sediment-laden rivers *Dr. Chaoqun Li, Yellow River Engineering Consulting Co., Ltd., China*
CEE1560	Morphological changes and dynamic equilibrium analysis of phosphorus in mobile bed biofilm reactor *Miss. Lei Tian, School of Water Resources and Hydropower, Xi'an University of Technology, China*
CEE1562	Identification of drought prone zone using analytic hierarchy process tool and weighted overlay method in a low lying area *Dr. Thiyam Tamphasana Devi, Department of Civil Engineering, National Institute of Technology, India*
CEE1570	Hydraulic characteristics of fishways using a fully three-dimensional non-hydrostatic pressure mathematical model *Dr. Biao Lv, Key Laboratory of Engineering Sediment, Ministry of Transport, Tianjin*

	Research Institute for Water Transport Engineering, China
CEE1582	NO ROAD CITIES- Study on the effects of road infrastructure on land use, environmental quality and human life - a case of Sarovaram Bypass, Calicut, Kerala *Dr. Arun Baby M Wilson, National Institute of Technology, Calicut, India*
CEE1589	Conceptual design and structural analysis of floating prestressed reinforced concrete foundation for offshore wind power *Mr. Dai Yiyan, Department of Bridge Engineering, Southwest Jiaotong University, China*
CEE1590	Review on optimal configuration of energy micro-net in industrial parks in severe cold area in China *Dr. Chuan Tian, School of Municipal and Environmental Engineering, Shenyang Jianzhu University, China*
CEE1591	Examination of arsenic elution characteristics from blasted rock in a reducing environment by elution test using a reducing agent *Mr. Yuya Shimizu, Okumra Corporation, Japan*
CEE1592	Development and prospect of key technologies of energy internet *Dr. Chuan Tian, School of Municipal and Environmental Engineering, Shenyang Jianzhu University, China*
CEE1593	Optimization of thermal insulation thickness based on economic *Dr. Robert Dylewski, Institute of Mathematics, Faculty of Mathematics, Computer Science and Econometrics, University of Zielona Góra, Poland*
CEE1599	Research on cementing technology of the anti-gas-migration for the gas reservoir of the fractures in Shunnan well regions *Dr. Xiangyang Zhao, Research Institute of Petroleum Engineering, China*
CEE1616	Simulation study on combined system and diversion transformation in Jinfeng district, Yinchuan city *Dr. Zhao Tang, State Key Laboratory of Eco-hydraulics in Northwest Arid Region, Xi'an University of Technology, China*
CEE1623	Simulation of water pollution in the Songbaishan reservoir, China *Dr. Jun Ran, Administrative Office of Songbaishan Reservoir, China*
CEE1624	Performance assessment of thermal bridges in the connecting regions between existing buildings and external steel dissipative structures *Dr. Mariangela De Vita, ITC-CNR, Construction Technologies Institute, L'Aquila Branch, National Research Council, Italy*
CEE4603	Influencing factors of water resources carrying capacity: a case study of Henan province, China *Ms. Qiyue Zhang, School of Safety Science and Emergency Management, Wuhan University of Technology, China*

Part V Acknowledgements

On behalf of the ACEER2022 Organizing Committee, we would like to take this opportunity to express our sincere gratitude to our participants. We would also like to express our acknowledgements to 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 name below, we would love to say thanks as well.

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