## 2nd International Symposium on Humanitarian Engineering Challenges and Approaches

The University of West Attica, Athens, Greece will host the 2nd International Symposium on Humanitarian Engineering Challenges and Approaches

12<sup>th</sup> - 16<sup>th</sup> September 2022 | 09:30 - 15:00 (GMT + 3h)

## **Registration Free**

Presented in collaboration with the **ENHANCE Project** - *ENabling Humanitarian*Attributes for Nurturing Community-based Engineering, the event will comprise four sessions of talks and discussions on Humanitarian Engineering, the challenges faced by engineers globally, and approaches that offer sustainable solutions.

It will feature speakers from each of our partner institutions in Indonesia,

Bangladesh and Vietnam.

Programme committee: Yiannis Koumpouros, Angelos Georgoulas,

Panos Yannakopoulos, Vasilis Ioakimidis

Organising committee: Yiannis Koumpouros, Angelos Georgoulas







## The agenda will include the following talks:

Adaptation Actions to Sea Level Rise in Ho Chi Minh City, Prof. Nguyen Danh Thao, Ho Chi Minh City University of Technology, Vietnam

Sustainable structure for coastal protection with community service-based participation, Dr. Widyaningtias, Institut Technologi Bandung, Indonesia

**Bioengineering Interventions for Disaster Management in Coastal Bangladesh,** Prof. G M Tarekul Islam, Bangladesh University of Engineering and Technology, Bangladesh

Chemical and Biological Diversity of Medicinal Plants of Bangladesh, Dr. Mohammad Shoeb, Dhaka University, Bangladesh

Flash Flood Study and Its Disaster Mitigation on Merapi Volcano West and South Slope, Dr. Adam Pamudji Rahardjo, Universitas Gadjah Mada, Indonesia

Climate Change Scenarios for Heatwave, Landslides, Flash Flood and Cyclone Risks Preparedness in the Rohingya Refugee camps of Cox's Bazar and Bhasan Char in Bangladesh, Prof. A.K.M. Saiful Islam, Bangladesh University of Engineering and Technology, Bangladesh

Earthquake safer houses in Indonesia: An overview from structural engineering point of view, Dr. Patria Kusumaningrum, Institut Technologi Bandung, Indonesia

Urban Rooftop Agriculture as a green approach to Climate Change Adaptation, Prof. Sujit Kumar Bala, Bangladesh University of Engineering and Technology, Bangladesh

Development and application of Moving Element Method (MEM) for dynamic problems of Very Large Floating Structures (VLFS), Prof. Luong Van Hai, Ho Chi Minh City University of Technology, Vietnam

**Global E-Waste: An Environmental Problem Exported to Developing Countries,** Dr. Christia Meidiana, Universitas Brawijaya, Indonesia

Coastal Hazard Management in the Taiwanese and Vietnamese Coastline: Unintended Consequences and Future Humanitarian Engineering Implications, Prof. Vo Le Phu, Ho Chi Minh City University of Technology, Vietnam

**Management of Pesticides in Developing Countries,** Dr. Mohammad Shoeb, Dhaka University, Bangladesh

Performance Analysis of Constructed Wetland to Treat Leachate at Galuga Landfill, Dr. Intan Supraba, Universitas Gadjah Mada, Indonesia

The Stability of Seawall Against Tsunami Attack, Prof. Radianta Triatmadja, Universitas Gadjah Mada, Indonesia

HCMUT's Engagement and management of CBHE projects under the framework of Erasmus+, Ms. Nguyen Thi Nhan, Ho Chi Minh City University of Technology, Vietnam

**Project-based learning for understanding rural challenges,** Arini Murwindarti, Institut Technologi Bandung, Indonesia

**Designing a Post Graduate Program on Humanitarian Engineering for a Floodplain Country,** Prof. G M Tarekul Islam, Bangladesh University of Engineering and Technology, Bangladesh

Learning from past earthquake disasters: The need for knowledge management system to enhance infrastructure resilient in Indonesia, Dr. Eliza Rosmaya Puri, Institut Technologi Bandung, Indonesia

Humanitarian Engineering approach for re-designing pedestrian traffic inside lecture building during a new normal higher education learning process of Covid-19 pandemic, Dr. Adipandang Yudono, Universitas Brawijaya, Indonesia

Dr. Mohammed Abdul Aziz, Dhaka University, Bangladesh









**Recycled material for construction,** Dr. Nguyen Tien Thuy, Ho Chi Minh City University of Transport, Vietnam

Assessment of moisture content in wood using electrical resistivity-based method, Dr. Nguyen Tuan Anh, Ho Chi Minh City University of Transport, Vietnam

Collaborative Online International Teaching: Case Study CEE of NTU-UGM, Dr. Intan Supraba, Universitas Gadjah Mada, Indonesia

Impacts of Plastic Pollution in Human Health and the Environment, Dr. Mohammad Shoeb, Dhaka University, Bangladesh

Learning from past disasters: Improving engineering intervention in humanitarian response, Prof. Khrisna Suryanto Pribadi, Institut Technologi Bandung, Indonesia

Risk and Resilience Assessment of Urban Village in the Framework of Sustainable Development, Dr. Surjono, Universitas Brawijaya, Indonesia

**ENHANCE Training Event in UGM,** Dr. Intan Supraba, Universitas Gadjah Mada, Indonesia

Impact of Land Use Change on Ecosystem Services in a Coastal Town of Bangladesh, Prof. G M Tarekul Islam, Bangladesh University of Engineering and Technology, Bangladesh

Development of an Assessment Model for Sustainable Supply Chain Management in Batik Industry, Ghaida Fatcha Mubiena, Institut Technologi Bandung, Indonesia

Toxic Metals in Food Chain in Bangladesh and their implication to human health, Dr. Mohammad Shoeb, Dhaka University, Bangladesh

Temperature-based structural assessment of buildings using satellite imagery, Ass. Prof. Irwanda Laory, University of Warwick, United Kingdom

**Community-based Activities of BCSIR,** Dr. Md. Aftab Ali Shaikh, Dhaka University, Bangladesh

Strengthening Student Competency in Food Safety Through the Curriculum in Bachelor of Food Technology, Dr. Erryana Martati, Universitas Brawijaya, Indonesia

Developing electric buses in Ho Chi Minh City: chance and challenges, Prof. Pham Thi Anh, Ho Chi Minh City University of Transport, Vietnam

Research on smart caching and effective content distribution applied in different networks, Dr. Doan Van Dong, Ho Chi Minh City University of Transport, Vietnam

Characterization and Thermal Treatment of Clay Material for The Improvement of Traditional Ceramic Home Industry, Dr. Indra Perdana, Universitas Gadjah Mada, Indonesia

Antibiotics Resistence: A Great Global Threat to humanity, Dr. Mohammad Shoeb, Dhaka University, Bangladesh

**Tsunami Preparedness and Evacuation, A Case Study in Indonesia,** Prof. Radianta Triatmadja, Universitas Gadjah Mada, Indonesia

Oasis Platform for Co-developing Open Source-based Risk Model for Cyclone and Storm Surge in Bangladesh, Prof. A K M Saiful Islam, Bangladesh University of Engineering and Technology, Bangladesh

Capacity Building in Sustainable Infrastructure through Student's Community Engagement Projects – Indonesia, A/P Muhammad Abduh, Institut Technologi Bandung, Indonesia

Performance Analysis of Bioswale to Filter NPK Fertilizer, Dr. Intan Supraba, Universitas Gadjah Mada, Indonesia

Contributing to SDGs through Community's Engagement Programs, Prof. Reini Wirahadikusumah, Institut Technologi Bandung, Indonesia









**TungstenElectrocatalysts for the production of Hydrogen and Oxygen from Water,** Dr. Tapas Debnath,
Dhaka University, Bangladesh

Prof. Panos Yannakopoulos, University of West Attica, Greece

**Social aspects in Humanitarian Challenges,** Prof. Vasilis loakeimidis, University of West Attica, Greece

The role of digital technologies in humanitarian assistance, Dr. Angelos Georgoulas, University of West Attica, Greece

m-health apps for tackling public health humanitarian challenges, Dr. Yiannis Koumpouros, University of West Attica, Greece







