#### **CONFERENCE PROGRAM**

The 7th EnvironmentAsia International Conference

#### "Integrating Efforts to Tackle the Triple Planetary Crisis"

4-6 September 2025

The Landmark Hotel, Bangkok, Thailand

4 September 2	2025		
08:00-08:45	Registration		
08:45-09:00	Welcome remarks		
00.12 09.00	Assoc.Prof.Dr. Ratcha Chaichana		
	President of the Thai Society of Higher Education Institutes on Environment		
09:00-09:15	Opening remarks		
	Prof.Dr. Wilert Puriwat		
	The President of Chulalongkorn University		
09:15-09:45	Keynote speech		
	Marie Jurisoo,		
	Asia Centre Director, Stockholm Environment Institute (SEI) Asia		
	Title: Three Crises, One Planet: Insights on Global and Asian Pathways Forward		
09:45-10:15	Keynote speech		
	Assoc.Prof.Dr. Sanjay Swarup		
	Director of NUS Environmental Research Institute (NERI),		
	National University of Singapore		
	Title: Ecology-inspired Solutions for Healthier Environment and Climate-resiliency in		
	Agricultural Production		
	MC: Dr. Puntita Tanwattana and Asst.Prof.Dr. Peerapong Pornwongthong		
10:15-10:30	Refreshment		
10:30-12:00	Panel Discussion:		
	"Challenges and opportunities to tackle the triple planetary crisis"		
	1. Assoc.Prof.Dr. Steve Kardinal Jusuf		
	Faculty of Engineering, Singapore Institute of Technology		
	Title: Sustainable Urban Design Strategies for Managing Climate Risk – Singapore Case		
	2. Assoc.Prof.Dr. Savitri Garivait		
	The Joint Graduate School of Energy and Environment (JGSEE)		
	Title: Clearing the Air: Leveraging National Emission Inventories to Confront the		
	Triple Planetary Crisis?		
	3. Dr. Michael Roy		
	Conservation Director, WWF Thailand		
	Title: Rewilding Southeast Asia: A Vision for the Next Half Century		
	Moderator: Dr. Sujitra Vassanadumrongdee		
12:00-13:00	Lunch		
12 00 11 00	Poster Presentation (7)		
13:00-14:00	ENV0303-0001 / ENV0303-0002 / ENV0304-0005 / ENV0304-0009 /		
ĺ	ENV0304-0014 / ENV0409-0006 / ENV0410-0003		

14:00-16:30	Oral Presentation			
Session	Climate Risks	CE&ESG	Pollution	Others Related Topic
Room	Conservatory	Landmark 1	Ballroom	Landmark 2-3
Chair	Dr. Nantamol Limphitakphong, CU	Dr. Kallaya Suntornvongsagul, CU	Dr. Bualuang Faiyue, CU	Dr. Ratchanon Piemjaiswang, CU
Co-chair	Dr. Kullapon Kesonkan, KMUTNB	Dr. Thong Anh Tran, Australian National University, Australia	Assoc.Prof.Dr. Chuleemas Boonthai Iwai, KKU	Assoc.Prof.Dr. Uma Langkulsen, TU
14:00-14:15	ENV0106-0004	ENV0201-0001	ENV0301-0004	ENV0401-0001
14:15-14:30	ENV0101-0001	ENV0201-0002	ENV0303-0004	ENV0402-0002
14:30-14:45	ENV0101-0002	ENV0202-0003	ENV0303-0005	ENV0402-0003
14:45-15:00	ENV0101-0005	ENV0202-0006	ENV0304-0011	ENV0404-0002
15:00-15:30	Refreshment			
Session	Climate Risks	CE&ESG	Pollution	Others Related Topic
Room	Conservatory	Landmark 1	Ballroom	Landmark 2-3
Chair	Dr. Kullapon Kesonkan, KMUTNB	Dr. Thong Anh Tran, Australian National University, Australia	Assoc.Prof.Dr. Chuleemas Boonthai Iwai, KKU	Assoc.Prof.Dr. Uma Langkulsen, TU
Co-chair	Dr. Nantamol Limphitakphong, CU	Dr. Kallaya Suntornvongsagul, CU	Dr. Bualuang Faiyue, CU	Dr. Ratchanon Piemjaiswang, CU
15:30-15:45	ENV0101-0006	ENV0202-0007	ENV0303-0006	ENV0406-0001
15:45-16:00	ENV0102-0001	ENV0202-0008	ENV0303-0007	ENV0409-0001
16:00-16:15	ENV0102-0002	ENV0202-0009	ENV0303-0008	ENV0409-0002
16:15-16:30	ENV0103-0001			ENV0409-0003

5 September 2	025
08:00-09:00	Registration
09:00-09:30	Keynote speech
	Dr. Wijarn Simachaya
	Director of Thailand Environment Institute
	Title: Environmental Challenges and Crises in the Next Decade: What's Coming and
	What must be Done?
09:30-10:00	Keynote speech
	Prof.Dr. Shabbir H.Gheewala
	Head of the Life Cycle Sustainability Assessment Laboratory,
	King Mongkut's University of Technology Thonburi (KMUTT)
	Title: From Nexus to Solutions: Tackling the Planetary Crisis via Water–Food–Energy–
	Land-Climate Linkages
	MC: Asst.Prof.Dr. Ornprapa Phummakanjana Robert and Dr. Nattapong Tuntiwiwattanapun
10:00-10:30	Refreshment
10:30-12:00	Invited speakers
	· Assoc.Prof.Dr. Yusuke Toyoda
	Associate Professor, College of Policy Science
	Director, Research and Development Institute of Regional Information
	Deputy Director, Institute of Disaster Mitigation for Urban Cultural Heritage
	Ritsumeikan University
	Title: Disaster Risk Management: Harmonization of Top-Down and Bottom-Up
	Decision-Making Approaches
	· Dr. Michelle Miller
	Asia Research Institute, National University of Singapore
	Title: Transboundary Agenda for Nature-Based Solutions: Crossing the Urban- Rural Divide in Southeast Asia
	· Prof.Dr. Sandhya Babel
	Distinguished Professor in Science and Technology, Thammasat University
	School of Biochemical Engineering and Technology
	Sirindhorn International Institute of Technology (SIIT)
	Title: Unraveling Microplastics Contamination in Bangkok Metropolitan Area:
	Challenges and Way Forward
	Moderator: Asst.Prof.Dr. Peerapong Pornwongthong
12:00-13:00	Lunch

13:00-14:30	Oral Presentation			
Session	Climate Risks	CE&ESG	Pollution	Others Related Topic
Room	Conservatory	Landmark 1	Ballroom	Landmark 2-3
Chair	Dr.Atima Dubsok, CU	Dr. Vacharaporn Soonsin, CU	Assoc.Prof.Dr. Penradee Chanpiwat, CU	Dr.Kittiwoot Chaloeytoy, CU
Co-chair	Assoc.Prof.Dr. Patthra Pengthamkeerati, KU	Assoc.Prof.Dr. Natapol Thongplew, UBU	Assoc.Prof.Dr. Sumeth Wongkiew, CU	Asst.Prof.Dr. Peerapong Pornwongthong, KMUTNB
13:00-13:15	ENV0106-0003	ENV0202-0010	ENV0303-0010	ENV0106-0010
13:15-13:30	ENV0106-0005	ENV0203-0001	ENV0303-0012	ENV0409-0004
13:30-13:45	ENV0106-0006	ENV0304-0007	ENV0303-0013	ENV0409-0005
13:45-14:00	ENV0106-0008	8 ENV0304-0010 ENV0303-0014 EN		ENV0410-0004
14:00-14:15	ENV0304-0002	ENV0304-0015	ENV0303-0015	ENV0304-0013
14:15-14:30		ENV0304-0004	ENV0304-0001	
14:30-15:00	Refreshment			
15:00-15:15	Announcement of Best Oral Presentation and Best Poster Presentation Awards			
15:15-15:30	Closing Ceremony Assoc.Prof.Dr. Ratcha Chaichana President of the Thai Society of Higher Education Institutes on Environment			

## 6 September 2025 Excursion Agenda

Trip to Ayutthaya

08.00 A.M. – 09.30 A.M.

Depart from Landmark Hotel to Ayutthaya

13.30 P.M. – 15.00 P.M.

Depart from Ayutthaya to Landmark Hotel

#### **ORAL PRESENTATION SESSIONS**

#### **Session I : Climate Risks**

Code	Abstract Title	Presenter
ENV0101-0001	Biowaste Materials as Protein-amino Based Adsorbents for CO <sub>2</sub> Capture Technologies	Suthita Nueangkaew
ENV0101-0002	Gummy Jelly Development from Amla Residue and Its Bioactive Compound Content	Thapakorn Chumphon
ENV0101-0005	Assessment of Sustainable Urban Green Area for Thailand's Carbon Neutrality	Montathip Sommeechai
ENV0101-0006	Strategic CO <sub>2</sub> Storage Site Prioritization in Thailand Using AHP: Linking National Policy with Subsurface Salinity Data	Paul Benjamin
ENV0102-0001	Greenhouse Gas Emissions from Waste and Wastewater: A Case Study of High-Rise Buildings in Bangkok	Wirine Supapornchaisin
ENV0102-0002	The Perspective of Stakeholders in Situation of Illegal Construction on Urban Sprawling Area on Agriculture Land, in Nan Oo Lwin, Mandalay, Myanmar	Lin Aung Oo
ENV0103-0001	Advanced Modelling of Plant Tolerance to Air Pollution by Combining Biochemical, Physiological, and Remotely Sensed Environmental Data	Chamila Priyankara Hetti Arachchige
ENV0106-0003	How Ammonia (NH <sub>3</sub> ) Can Play a Role in Climate Change and Air Quality by Being a Carbon-free Fuel?	Thanapat Jansakoo
ENV0106-0004	Ecological Grief and Livelihood Precarity in the Mekong Floodplains: Unravelling the Dark Sides of Place-based Adaptation	Thong Tran
ENV0106-0005	Integrated Hydrological and Hydraulic Modeling of an Extreme Flood Event in the Lower Mekong Basin	Hnin Aye Lin
ENV0106-0006	Carbon Footprint Assessment of Koh Sichang Sub- District Municipality, Chonburi Province	Visaruth Rojritthikrai
ENV0106-0008	Effect of Tidal Frequency on Soil Carbon Storage in Mangrove Forest at The King's Royally Initiated Laem Phak Bia Environmental Research and Development Project, Thailand	Sunaree Wangluk
ENV0106-0010	Determination of Methane Emissions from Eutrophic Reservoir	Sinlaphop Pongdet

# **Session II : Circular Economy and ESG**

Code	Abstract Title	Presenter
ENV0201-0001	Vermicompost Application as a Bio-Circular Solutions for Saline Soil Rehabilitation and Sustainable Chili Production	Wichien Aengwanich
ENV0201-0002	Evaluating Bio-based Carbon in Single-use Beverage Cups in Thailand Using Radiocarbon Analysis	Nichtima Uapoonphol
ENV0202-0003	Reducing Zinc Contamination in Bioponic Lettuce with MIL-88A: Impacts on Plant Yield and Microbial Dynamics	Suchana Amnuaychaichana
ENV0202-0006	Informal Sector Integration for Safer and Inclusive Portable Battery Waste Management in Thailand	Humm Kham Zan Zan Aung
ENV0202-0007	A Systematic Review of Sustainability Assessment Methodologies, Indicators, and Decision-Making Tools for Municipal Solid Waste Management	Apirak Bumyut
ENV0202-0008	Development of Biodegradable Films from Durian Rind and Shrimp Shells for Sustainable Packaging Applications	Cindy Agriningsih Haruna
ENV0202-0009	A Design Review of Black Soldier Fly (BSF) Rearing Systems: from Lab Insights to Farm-level Applications for Organic Waste Treatment	Abu Towab Md Shahriar
ENV0202-0010	Environmental Performance Comparison of End-of-Life Air Conditioner Management in Thailand and Japan.	Viveha Sriskandaraja
ENV0203-0001	Forecast for Currency Pairs USD/THB using the Box- Jenkins Model of ARIMA for Time Series	Ringyaomi Shimray

#### **Session III: Pollution**

Code	Abstract Title	Presenter
ENV0301-0004	Nutrient Neutralization and Carbon Capture for Canal Water Treatment Through Continuous Cultivation of Azolla microphylla	Aye Myint Thu
ENV0303-0004	Application of Thai Probiotic Strains to Improve Water Quality in White Shrimp ( <i>Litopenaeus vannamei</i> ) Aquaculture	Prapa Sohsalam
ENV0303-0005	Evaluation of Microalgae Electron Activity for Bioelectricity Production	Siraporn Potivichayanon
ENV0303-0006	Developing electro-Fenton for Grease Trap Wastewater Treatment: Magnetized Biochar Cathode Production and Process Optimization	Amina Khatun
ENV0303-0007	The Study on Application of Hemp Biomass-Derived Biochar for Dye Treatment in Dawmang Hemp Textile Community in Ban Mae Sa Noi, Chiang Mai Province	Phoomphet Panphetchara
ENV0303-0008	Removal of Chromium and Colorant from Synthetic Dyeing Factory Wastewater by Biochar Derived from Water Hyacinth	Wanida Muangtong
ENV0303-0010	Removal of Organic Substances and Nitrogen from Wash Water Using Tender Coconut-Derived Biochar in a Small-Scale Pig Farm	Pabhornchanok Chalermsub
ENV0303-0012	Two Site Models Predicted Fate and Transport of Atrazine in Three Distinct Soils under Temperature- Dependent Conditions in Suphan Buri, Thailand	Nanchaphorn Udomsri
ENV0303-0013	Removal Performance of Nitrogen and Emerging Contaminants in Full-Scale Constructed Wetlands: Case study from Thailand Japan, and the USA	Pongsak Noophan
ENV0303-0014	Calcium Foliar Application Enhances Growth and Nitrogen Uptake of Canna indica under Simulated Hypoxic Conditions	Tanapong Suriyakaew
ENV0303-0015	Effect of Plant Presence and Species on the Treatment of Freshwater Aquaculture Effluent in Constructed Wetland	Harry Lye Hin Chong
ENV0304-0001	Assessment of Heavy Metal Levels in the Freshwater Resources of Island Communities in Surigao City, Philippines	Jerry Cuadrado
ENV0304-0002	Improved Determination of Small Microplastics in the Municipal Solid Waste Leachates	Atsamon Limsakul
ENV0304-0004	Using Organic Amendments to Remediate Cadmium- Contaminated Soils and Boosting Nutrient Content	Yoseph Junedi Nuwa Dhuge Poa
ENV0304-0007	Association of Temperature Inversions on Vertical PM2.5 Distribution in Bangkok During the Dry Season	Arisara Nakburee

Code	Abstract Title	Presenter
ENV0304-0010	Microplastics in the Corals of the Upper Gulf of Thailand	Udomsak Darumas
ENV0304-0011	Extraction and Application of Cellulose from Water Hyacinth Petioles ( <i>Eichhornia crassipes</i> ) and Pineapple Crown Leaves ( <i>Ananas comosus</i> ) for Bioplastic Production	Arya Krishna
ENV0304-0013	Enhanced Electrochemical Degradation of Per- and Polyfluoroalkyl Substances (PFAS) in Water using Gold Nanoparticles Electrodeposited on a Boron-Doped Diamond (BDD) Electrode	Warissara Nintasin
ENV0304-0015	Chromosome Abnormalities Assessment of Hybrid Catfish in the Reservoir Contaminated with Heavy Metal from Municipal Landfill	Tanadol Savigun

## **Session IV: Other Related Topics**

Code	Abstract Title	Presenter
ENV0401-0001	Mitigating Urban Heat Island Effects through a Large Urban Oasis of Bangkok: A Google Earth Engine Approach	Chayanit Homsin
ENV0402-0002	Evaluation of Treated Wastewater Use in Hydroponic System: Nitrogen Transformation, Lettuce Growth and Root Microbial Communities	Pachara Pakwang
ENV0402-0003	Potential of GSHP Application under Tropical Climate: A Case Study in Thailand	Sorranat Ratchawang
ENV0404-0002	Green Extraction of Cocoa Butter and Antioxidants by Natural Deep Eutectic Solvent	Darya Makhotkina
ENV0406-0001	Rediscovering Challenges in Nigeria's Social Housing System: Identifying Archetypes Towards Just Transition.	Michael Ojo
ENV0409-0001	Spider webs: The Potential to be Environmental Monitoring Tool	Thanakron Into
ENV0409-0002	Coastal Ecosystem Influence on Phytoremediation of Water Quality: Case Study of the Bangpakong River Estuary	Suchanad Boonyachai
ENV0409-0003	Adsorptive Removal of Fluoride from Water Using Composite Adsorbents Derived from Water Treatment Residues	Natthapong Proysurin
ENV0409-0004	Reptile Diversity in Human Modified Habitats: Case Study of Suranaree University of Technology Campus	Soe Thandar Aung
ENV0409-0005	Conservation, Caste/ethnicity, and Livelihoods: A Political Ecology of Buffer Zone Governance in Langtang National Park, Nepal	Sharmila Shyangtan
ENV0410-0004	Environmental and Public Health Implications of Inappropriate Antibiotic Prescribing for Upper Respiratory Tract Infections: Evidence from Primary Care in Bangkok, Thailand	Pattiya Wichayapong

## POSTER PRESENTATION SESSION

Code	Abstract Title	Presenter
ENV0303-0001	The Impact of Waterbody Size on Water Quality and Its Implications for Environmental Management in Thailand's Freshwater Bodies	Chuti Rakasachat
ENV0303-0002	Comparative Analysis of Phytoplankton Diversity and Abundance in Relation to Water Body Sizes Across Thailand: Implications for Freshwater Ecosystem Monitoring and Management	Peangtawan Phonmat
ENV0304-0005	Assessment of Methane Emissions from Local Paddy Field by AERMOD Model in Surin Province	Sutthicha Nilrit
ENV0304-0009	Characterization of Microplastics in Soil, Leachate and Groundwater at a Municipal Landfill in Rayong Province, Thailand	Wanlapa Wisitthammasri
ENV0304-0014	Occurrence and Characteristics of Microplastics in the Zoanthid Zoanthus kuroshio from the Eastern Gulf of Thailand	Charernmee Chamchoy
ENV0409-0006	Filling GRACE/GRACE-FO Terrestrial Water Storage Anomaly Gaps Using a Hybrid CNN-LSTM and XGBoost Residual Framework	Quoc Non Duong
ENV0410-0003	Local Innovations in Climate Action: A case study of Sheep Transhumant Pastoralism from Barkpak, Gorkha	Nirmal Aryal