

VIRTUAL EVENT

FINAL PROGRAM

# INTERNATIONAL SYMPOSIUM ON ENVIRONMENT AND CHEMICAL ENGINEERING 2024

*THEME:*

*Establishing a Secure Environment to Elevate  
Quality of Life*

19 DECEMBER 2024

WEBSITE <https://tecnoscientifica.com/conference/isece/>

# FINAL PROGRAM

THURSDAY 19<sup>TH</sup> DECEMBER 2024

Time (UTC+8)	Activities	
8:30-8:45	Opening Ceremony & Welcoming Speech by ISECE 2024 <b>Dr. Risky Ayu Kristanti, BRIN, Indonesia</b>	 <a href="#">Meeting link</a>
<b>Keynote Presentations 1</b> Moderator: <b>Prof. Dr Tony Hadibarata, Curtin University Malaysia</b>		
8:50-9:10	Title: Persistent Halogenated Organic Compounds: Legacy and Emerging Issues in Japan and the Asia-Pacific Region. <b>Prof. Dr. Shin Takahashi, Ehime University, Japan</b>	
9:10-9:30	Title: Mitigation of GHG emissions and nutrient conservation process during waste management strategies to achieve food security. <b>Dr. Ravindran Balasubramani, Kyonggi University, Republic of Korea</b>	
9:30-9:50	Title: Understanding hydroclimatic extremes and their spatial patterns in the U.S. Great Plains. <b>Dr. Gaurav Talukdar, University of Kansas, United States</b>	
9:50-10:10	Title: Bio - mitigation Studies for flue gases via Chemolithotrophs: Insights into Reactor studies and Mechanism Findings. <b>Prof. Dr. Smita Raghuvanshi, Birla Institute of Technology and Science, India</b>	
10:10-10:20	Transition Break (10 minutes)	
<b>Keynote Presentations 2</b> Moderator:		 <a href="#">Meeting link</a>
10:20-10:40	Title: Alternative Energy for Ukraine: Experience of Closest European Partners and Prospects. <b>Prof. Dr. Sergij Vambol, National Technical University Kharkiv Polytechnic Institute, Kharkiv, Ukraine</b>	
10:40-11:00	Title: Impact of iodide ion concentration and temperature on the enhancement of corrosion inhibition of copper by Ulva lactuca extract in multistage flash distillation systems. <b>Dr. Murat Yılmaz, Osmaniye Korkut Ata University, Turkiye</b>	
11:00-11:20	<b>Title:</b> <b>Dr. Muhammad Bilal, Gdansk University of Technology, Poland</b>	
11:20-11:30	Transition break (5 minutes)	

<b>Presentation: Session 1</b> Moderator: <b>Dr. Rubiyatno</b>		 <a href="#">Meeting link</a>
11:30-11:45	Title: Enhancing Stormwater Management in Urban Areas Through the Integration of Low-Impact Development Strategies.  <b>Assoc. Prof. Dr. Kuok King Kuok, Swinburne University of Technology, Malaysia</b>	
11:45-12:00	Title: Low-cast and biodegradable hydrogel for the selective adsorption of dyes from wastewater.  <b>Dr. Sabarish Radoor, Myongji University, Republic of Korea</b>	
12:00-12:15	Title: Design of Rotary Kiln for a Cement Industry Processing 280 tph of Limestone.  <b>Dr. Sivamani Selvaraju, University of Technology and Applied Science, Oman</b>	
12:15-12:30	Title: Annual Variability of Chlorophyll-a and Total Suspended Solid as an Indicator of Aquatic Fertility in the Lagoon Waters of the Mangrove Information Center (PIM), Pekalongan.  <b>Prof. Dr. Muhammad Zainuri, Universitas Diponegoro, Indonesia</b>	
12:30-13:30	Lunch Break (1 hour)	

<b>Session 2: Parallel A</b> Moderator: <b>Dr. Paran Gani</b> <b>Dr. Setyo Budi Kurniawan</b>		
13:30-13:45	An innovative electrothermal-solar driven interfacial evaporation hybrid system for desalination of high salinity brackish groundwater?  <b>Prof. Dr. Abudukeremu Kadier, Xinjiang Technical Institute of Physics and Chemistry, China</b>	
13:45-14:00	Study of A Novel Dropping Nitrification–Cotton-based Denitrification Reactor for Nitrogen Removal from Ammonium-contaminated Groundwater.  <b>Dr. Abiyot Kelecha Geletu, College of Natural and Computational Sciences, Ethiopia</b>	
14:00-14:15	Enhancement of biomass and paramylon production of <i>Euglena gracilis</i> under mixotrophic culture using both promoting bacteria and food industrial wastes.  <b>Dr. Rubiyatno, University of Yamanashi, Japan</b>	
14:15-14:30	Analysis of Geothermal Powerplant Waste Disposal System in Bedugul Bali  <b>Prof. Dr. I Gusti Bagus Wijaya Kusuma, Udayana University, Indonesia</b>	

14:30-14:45	Valorization of the Agroindustrial Waste Against Compressive Strength Test and Flexural Strength Test in Concrete Manufacturing. <b>Dr. Agus M.H. Putranto, Universitas Bengkulu, Indonesia</b>
14:45-15:00	Capillary Water Absorption Performance of Geopolymer Concrete with Aging for Marine Infrastructure Applications. <b>Noor Fifinatasha Binti Shahedan, Curtin University Malaysia</b>
15:00-15:15	A Hybrid Approach to Urban Stormwater Management: Integrating Green Infrastructure and Smart Drainage Systems in Denpasar, Bali. <b>Dr. Ngakan Ketut Acwin Dwijendra, Udayana University, Indonesia</b>
15:15-15:30	Influence of the Reactivity of Rice Husk Ash Geopolymer Microstructure Particles on the Bonding of Alkaline Solutions in Determining the Strength of Geopolymer Concrete. <b>Cut Yusnar, Politeknik Negeri Lhokseumawe, Indonesia</b>
15:30-15:45	Environmental Monitoring of Shallow Marine Waters Using AI and Remote Sensing: A Systematic Literature Review <b>Arief Sartono, National Research and Innovation Agency (BRIN), Bandung Institute of Technology (ITB), Indonesia</b>
Closing ceremony	
 <a href="#">Meeting link</a>	

<b>Session 2 Parallel B</b>	
Moderator: <b>Dr. Aris Ismanto</b>	
13:30-13:45	Time Series Analysis 2021 – 2024 of Oceanographic Parameters in Coastal Pekalongan Waters, Central Java <b>Prof. Dr. Denny Nugroho Sugiarto, Universitas Diponegoro, Indonesia</b>
13:45-14:00	Reproductive Characteristics and Population Parameters of Octopus cyanea in Tojo Una-una Waters <b>Tegoeh Noegrogo, National Research and Innovation Agency, Indonesia</b>
14:00-14:15	Analysis of Organic Carbon Stock in the Sediment of Mangrove Ecosystems in the Malaka Region at the Indonesia–Timor Leste Border <b>Wanri Sitanggung, Universitas Diponegoro, Indonesia</b>
14:15-14:30	Coastal Vulnerability Index Analysis in The Mangrove Rehabilitation Area, Mojo, Pematang <b>Dr. Agus Indarjo, Universitas Diponegoro, Indonesia</b>

14:30-14:45	Time Series Analysis on Chlorophyll-a as Eutrophication Indicator Using A Geospatial Approach in Pekalongan Coastal Area <b>Baskoro Rochaddi, Universitas Diponegoro, Indonesia</b>
14:45-15.00	The Variability of the Oceanographic Parameters Post Embankment Construction in Pekalongan Waters, Central Java <b>Afidhah Puspita Widyani, Universitas Diponegoro, Indonesia</b>
15:00-15:15	Distribution of Nitrate and Chlorophyll-a as an Indicator of Aquatic Fertility with 2dimensional hydrodynamic modelling approach in the Lagoon Waters of the Mangrove Information Center (PIM), Pekalongan <b>Gentur Handoyo, Universitas Diponegoro, Indonesia</b>
15:15-15:30	Mapping Coastal Eutrophication Potential (CEP) based on Aqua-MODIS Chlorophyll-a Data in Semarang Bay, Indonesia <b>Heru Nur Krisna, Universitas Diponegoro, Indonesia</b>
15:30-15:45	Antiviral Activities of Marine Sulfated Polysaccharides from Seaweeds: An In-Silico Screening and Molecular Dynamics Approach <b>Azalia Puspa Herida, Universitas Diponegoro, Indonesia</b>
Closing ceremony	
 <a href="#">Meeting link</a>	

<b>Session 2 Parallel C</b>	
Moderator: <b>Dr. Edza Aria Wikurendra</b> Dr. Josfirin Udang	
13:30-13:45	Aquatic Dissolved Heavy Metal (Hg, Pb, Cu, Cd) and the Pollution Index at the Karangantu Coastal Water, Banten Bay <b>Prof. Dr. Ir. Sulistiono, IPB University Indonesia</b>
13:45-14:00	Evaluation of the Implementation of The Zero Waste City Program as A Support For Waste Management Efforts in Lebih Village, Gianyar Regency <b>Kadek Diana Harmayani, PhD., Udayana University, Indonesia</b>
14:00-14:15	Environmental Risk Assessment of Bengkala Waste Final Processing Site (Tpa), Buleleng Regency <b>Ida Ayu Rai Widhiawati, Udayana University, Indonesia</b>
14:15-14:30	Microplastic, an Emerging Threat to the Global Seagrass Ecosystems: A Review <b>Audrey Primus Gonsilou, Curtin University Malaysia</b>
14:30-14:45	Microplastics Contents and Distribution in the Sediment of Kaliratu Coastal Waters, Kebumen

	<b>Annisa Dianti Cahyaningtyas, Universitas Diponegoro, Indonesia</b>
14:45-15:00	Bioprospecting Evidence of Polyethylene Degrading Bacteria in the Mojo Pemalang Mangrove Rehabilitation Area <b>Candra Wahyuningsih, Universitas Diponegoro, Indonesia</b>
15:00-15:15	Biodiversity and community structure of phytoplankton in Domas coastal waters, Banten Bay, Indonesia <b>Prof. Dr. Ir. Sulistiono, IPB University Indonesia</b>
15:15-15:30	Changes in Microplastics Accumulation of Water and Sediment in Pekalongan Waters: Insight From 2023-2024 <b>Novia Safinatunnajah, Universitas Diponegoro, Indonesia</b>
15:30-15:45	Pollution Index Mapping based on Total Suspended Solids Concentration Extracted from Sentinel-2 MSI Imagegry in Teluk Awur Coastal Waters, Jepara Indonesia <b>Anis Yasmin Sabila, Universitas Diponegoro, Indonesia</b>
<p>Closing ceremony</p>  <p><a href="#">Meeting link</a></p>	

<b>Session 2 Parallel D</b> Moderator: <b>Artnice Mega Fathima, PhD</b> <b>Dr. Annisa Ratnasari</b>		 <p><a href="#">Meeting link</a></p>
13:30-13:45	Bio-based Synthesis of Nanoparticles for Heavy Metal Optical Sensing Applications <b>Dr. Swagatha Patra, Indian Institute of Technology Guwahati, India</b>	
13:45-14:00	Microalgae-based CuO nanomaterials for photocatalytic degradation of Ciprofloxacin antibiotic residue <b>Kadupitige Shashikala Dilrukshi Premarathna, Curtin University, Malaysia</b>	
14:00-14:15	Investigation of Congo Red Photodegradation Catalyzed by MOFs ZIF-67@SiO <sub>2</sub> Composite Under Sunlight <b>Evi Maryanti, University of Bengkulu, Indonesia</b>	
14:15-14:30	Carbon quantum dots surface decorated molybdenum disulfide nanocomposites as fluorescence probes for levofloxacin sensing <b>Yuni Aldriani Lubis, Universitas Sumatera Utara, Indonesia</b>	

14:30-14:45	Pharmaceutical Persistent Pollutants in the Aquatic Environment of Malaysia: Sources, Impacts, and Mitigation Strategies <b>Upeksha Gayangani Jayasekara, Curtin University, Malaysia</b>
14:45-15:00	Effect of Flux and Coke Amount on the Smelting Process of Low-Grade Local Chromite Sand into Ferrochrome <b>Ulin Herlina, Universitas Indonesia and BRIN, Indonesia</b>
15:00-15:15	Entomopathogenic Enzymes as Biocontrol Agents Against Ant Infestations: Mechanisms, Potential, and Application Strategies. <b>Aina Maisarah binti Mohammad Mahathir, Curtin University Malaysia</b>
15:15-15:30	Reduction of Ciprofloxacin Concentration in Water Bodies Using nZVI/MXene Nanocomposites <b>Intania Ika Fairuzi, Institut Teknologi Sepuluh Nopember, Indonesia</b>
15:30-15:45	The effect of Sapindus rarak soapnuts extract on Structural and Morphological of $Zn_2SnO_4$ <b>Eka Angasa, Universitas Bengkulu, Indonesia</b>
<p>Closing ceremony</p>  <p><a href="#">Meeting link</a></p>	