Proposed Agenda (Tentative)

PPC AND PERTOMAT SYMPOSIUM 2025

At Mandarin Hotel, Bangkok

Thursday, June 26, 2025

Session 7: Workshop on Water

Time	Plan
7:45 – 8:20	Registration (room: Mandarin AB)
8:20 – 8:40	Introduction and welcome remarks (PPC dean and PETROMAT director, TIChE, MMRI)
8:40 – 9:00	Opening remarks (Chulalongkorn University president) and group photo
9:00 – 9:10	Sponsorship recognition
9:10 – 9:40	Plenary speaker (Chairman of Petrochemical Industry Club, The Federation of Thai Industries)
9:40 – 10:00	Break/booth advertisements
Only Session 7: Workshop on Water	
10:10 – 11:50	Oral presentation
12:00 – 13:00	Lunch
13:00 – 15:00	Oral presentation
15:00 – 15:10	Break
15:10 – 16:00	Oral presentation
16:00 – 16:10	Break
16:10 – 17:00	Poster presentation and evaluation
After symposium	All teachers will attend dinner with PPC members

Oral presentation schedule

Number	Time	Presenter	Title

O1	10:10 – 10:30	Prof. Norifumi Isu Shinshu University	Serial Creation of Material Unicorns Based on Flux-Grown Crystals - Toward an Earth-positive World Starting from Water Purification
O2	10:30 – 10:50	Prof. Madoka Takai University of Tokyo	Biofilm Formation and Detachment Evaluation by Microfluidic Device Modified with Anti-Fouling Polymer
O3	10:50 – 11:05	Prof. Atsushi Tanaka Shinshu University	Impedance-Based Evaluation of Polyamide RO Membrane Degradation Induced by Chlorine Exposure
O4	11:05 – 11:20	Prof. Chiaki Terashima Tokyo University of Science	Plasma in Aqueous Solution for Synthesizing Functional Materials
O5	11:20 – 11:35	Assoc. Prof. Oratai Jongorateep Kasetsart University	Multifunctional 3D-Printed Scaffolds for Efficient Removal of Organic Contaminants from Water
O6	11:35 – 11:50	Assoc.Prof. Anyarat Watthanaphanit Mahidol University	Bifunctional ZnO–Activated Hydrochar Nanocomposites from Mangosteen Peel via Solution Plasma for Rapid and Sustainable Dye Removal
Lunch			
O7	13:00 – 13:15	Prof. Takeshi Hagio Shinshu University	Circulation in Agriculture: Conversion of Agricultural Waste into Remediation Materials for Agricultural Pollutants in Water
O8	13:15 – 13:30	Assoc. Prof. Chayanaphat Chokradjaroen Shinshu University	Flux-Grown Layered Double Hydroxide Crystals for Adsorption of Per- and Polyfluoroalkyl Substances
O9	13:30 – 13:45	Assist. Prof. Sangwoo Chae Nagoya University	Pt–M@Graphene Core–Shell Nanoparticles as Efficient Electrocatalysts for the Oxygen Reduction Reaction
O10	13:45 – 14:00	Dr. Supinya Nijpanich Synchrotron Light Research Institute	Synthesis and Characterization of Magnetic Adsorbent/photocatalyst for Dyes and Antibiotics-Contaminated Wastewater Treatment under 15-W LED Irradiation
O11	14:00 – 14:15	Dr. Piyatida Thaveemas Chulabhorn Research Institute	Turning Acidic Waste into Gold: Ti_3AlC_2 MAX Phase for Sustainable Metal Recovery and Circular Water Management
O12	14:15 – 14:30	Assist. Prof. Mongkol Tipplook	Flux Growth Development of Next-Generation Core–Shell Crystal Adsorbents for Dual-Ion Removal in Water

		Shinshu University	Treatment
O13	14:30 – 14:45	Assist. Prof. Nutthira Pakkang Nagoya University	Solution Plasma Process
O14	14:45 – 15:00	Dr. Subramanian Ramanathan Chulalongkorn University	Synergistic photocatalytic degradation of crystal violet dye using novel medical waste-derived carbon/ZnO composite: A study on toxicological assessment
Break			
O15	15:10 – 15:20	Dr. Andres Eduardo Romero Valenzuela Shinshu University	Controlling the Reaction Pathway for the Formation of Magnesium-Iron Layered Double Hydroxides by Assembly Method
O16	15:20 – 15:30	Dr. Seulgee Lee Shinshu University	PFOS/PFOA Adsorption Performance and Mechanism of $MgTiO_3$ Crystals in Low-pH Environments
O17	15:30 – 15:40	Dr. Jidapa Chantaramethakul Kasetsart University	Electrochemical Detection of Nitrite Ions Using AuNPs/MWCNTs/rGO Nanocomposites Synthesized by Solution Plasma Sputtering
O18	15:40 – 15:50	Mr. Kasidit Janbooranapinij Kasetsart University	Role of Carbon Nanotubes in Enhancing Oxygen Reduction Reaction Performance of Nitrogen-Doped Carbon Composites
O19	15:00 – 16:00	Rei Sakoda Tokyo University of Science	Introducing Oxygen Vacancies to Ni/CeO_2-TiO_2 by In-liquid Plasma Processing and Evaluation of Their Activity

(O1 and O2 = Plenary talk (20 min); O3 - O14 = Invited Speaker (15 min); O14 - O19 = Speaker (10 min))

Chair Person

Period 1; 10:10 – 11:55 Prof. Takeshi Hagio (O1 – O6)

Period 2; 13:00 – 15:00 Prof. Norifumi Isu (O7 – O14)

Period 3; 15:10 – 16:00 Assoc. Prof. Chayanaphat Chokradjaroen (O15 – O19)

Poster presentation schedule

Number	Time	Presenter	Title
P1	16:10 – 17:00	Assoc. Prof. Tetsuya Yamada Shinshu University	Model-Based Analysis of the Correlation between Crystallographic Properties and Hydrogen Evolution Activity in Flux grown $BaTaO_2N$ Crystals as a Photocatalysts
P2	16:10 – 17:00	Hiroaki Sugitani Shinshu University	Selective Ion Exchange Governed by Confined Two-Dimensional Interlayers in Layered Double Hydroxides
P3	16:10 – 17:00	Yusuke Suzuki Shinshu University	Flux-Grown CaAl Layered Double Hydroxide Crystal from Recycled Waste for Fluoride Ion Removal
P4	16:10 – 17:00	Ai Asakura Shinshu University	Flux Growth of BiOCl Crystals for Efficient Molybdate Ion Removal
P5	16:10 – 17:00	Kaede Honda Tokyo University of Science	Research of Plant Growth in a Plant Factory Using Plasma-activated Water
P6	16:10 – 17:00	Ms. Jiyeon Kim Nagoya University	Carbon-Encapsulated RuCo Alloy Nanoparticles via Solution Plasma for High-Activity Acidic Oxygen Evolution
P7	16:10 – 17:00	Mr. Seonjae Baek Nagoya University	Advanced Pt–Co Alloy Catalysts Protected by Defective Carbon Shells for High-Performance and Durable Oxygen Reduction
P8	16:10 – 17:00	Mr. Pengfei Wang Nagoya University	Strain-Regulated Fabrication of Small-Sized Ordered Pt_2CoCu Ternary Intermetallic Compounds for Efficient Oxygen Reduction and Hydrogen Evolution Reactions
P9	16:10 – 17:00	Mr. Hojung Yun Nagoya University	Toward Sustainable Anode Materials for Li-ion batteries: Surface Engineering of Recycled Graphite from Spent Zn–C Batteries
P10	16:10 – 17:00	Dr. Sasimaporn Treepet Mahidol University	Mangosteen Peel-derived Carbon Decorated with N-doped ZnO and g-C_3N_4 via In-liquid Plasma for Efficient Dye and Antibiotic Removal
P11	16:10 – 17:00	Ms. Punyanuch Anukittirat Mahidol University	Sustainable Synthesis of Silver-Modified Hydrochar via Solution Plasma for Wastewater Treatment
P12	16:10 – 17:00	Dr. Wasupon Wongvitvichot Chulalongkorn University	Development of Biomass-Based Adsorbents for Metal Ion Removal from Agricultural Water Source