



PYROASIA 2025

10 - 12 DECEMBER, 2025
PATTAYA, CHONBURI, THAILAND



PYROASIA2025 Program Overview

10 December 2025

10 December 2025	
Time	Program
15:00 - 18:00	Registration at Lobby Pullman Pattaya Hotel G
18:00 - onward	Committee dinner (Invitation only) 18.00 at Meeting point (Lobby of Pullman Pattaya Hotel G)

11 December 2025

11 December 2025			
Time	Infinity ballroom	Time	Gemini I
08:45 - 09:15	PYROASIA2025 Opening Ceremony 8.45 a.m. - Arrival of all delegates 8.50 a.m. - VDO presentation of Thammasat University and Faculty of Science and Technology 9.00 a.m. - Welcome address by Assoc. Prof. Chanatip Samart, Head of Chemistry Department, Thammasat University & Chairman of PYROASIA 2025 9.05 a.m. - Opening speech by Dr. Sathrugnan Karthikeyan, Frontier Laboratories, Japan 9.10 a.m. - Award announcement / Group photo - The Distinguished researcher in pyrolysis award - Young researcher award - Best thesis award		
09:15 - 10:00	Plenary Speaker (PL1) - Professor Toshiaki Yoshioka Topic: The value of pyrolysis in resource circulation <i>Chair: Assoc. Prof. Chanatip Samart</i>		
10.00 - 10.30	Keynote Speaker (KL1) - Professor Guoqing Guan Topic: Catalytic upgrading of bio-oil over hydrophobically modified zeolite catalysts with hollow structure <i>Chair: Assoc. Prof. Chanatip Samart</i>		
10.30 - 10.45	Coffee Break/Poster session		



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10.45 – 12.20 Parallel session 1		10.45 – 12.20 Parallel session 2	
Chair: Dr. Sonil Nanda		Chair: Prof. Guoqing Guan	
10.45 - 11.05	Invited speaker (INV1) – Prof. Kalpit Shah Topic: Pilot-Scale Pyrolysis of Biosolids, Biosolids–Canola Straw Blends, and FOGO Using PYROCO™ technology	10.45 - 11.05	Invited speaker (INV6) - Dr. Patchiya Phanthong Topic: Py-GC/MS and UV/Py-GC/MS for evaluation of EVA degradation behavior via UV-accelerated deterioration test under various environmental factors
11.05 - 11.35	KL sponsor 1 - Dr. Sathrugnan Karthikeyan (Frontier Laboratories) Topic: Benefits of Analytical Pyrolysis system in advancing Applied Pyrolysis Research	11.05 - 11.35	KL sponsor 2 - Dr. Takaya Satoh (JEOL) Topic: Comprehensive characterization of pyrolysis oil using GCxGC-TOFMS, FD-TOFMS, and blank tube FI-TOFMS
11.35-11.50	OC1 - Dr. Deepak Kumar Ojha Topic: Methane Pyrolysis for Co-Production of Hydrogen and Graphitic Carbon	11.35-11.50	OC4 - Dr. Zhuze Shao Topic: Comparative pyrolytic upcycling of PBAT over CaO, MgO, and ZnO under fast and slow pyrolysis
11.50-12.05	OC2 - Shivani Agnihotri Topic: Enhancing pyrolysis efficiency: Investigating bubble dynamics in fluidised Beds with vertical tubes	11.50-12.05	OC5 - Professor Sungyup Jung Topic: Role of Carbon Dioxide in the Conversion of Hydrocarbon during Plastic Pyrolysis over Supported Ni catalyst
12.05-12.20	OC3 - Awosu Emmanuel Ikechukwu Topic : Enhancement of Isoprene Yield through Rapid Pyrolysis of Liquid Isoprene Rubber	12.05-12.20	OC6 - Sumin Pyo Topic: Catalytic Pyrolysis of Superabsorbent Polymer from Gel Ice Packs into High-Value Chemicals
12.20-13.15	Lunch Break		



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13.15-14.00	<p align="center"><u>Plenary Speaker (PL2)</u> - Prof. Dr. Tharapong Vitidsant Topic: Selective raw materials for prospective products via pyrolysis <i>Chair: Assoc. Prof. Suwadee Kongparakul</i></p>		
14.00 – 15.40	Parallel session 3 <i>Chair: Prof. Arshad Salema</i>	14.00 – 15.40	Parallel session 4 <i>Chair: Dr. Suchithra Thangalazhy Gopakumar</i>
14:00-14:20	<p><u>Invited speaker (INV2)</u> - Dr. Sonil Nanda Topic: Pyrolytic Valorization of Hydrolyzed Fermentation Residues to Produce High-Value Bio-oil and Biochar</p>	14:00-14:20	<p><u>Invited speaker (INV3)</u> – Dr. Sathrugnan Karthikeyan Topic: Development of low and ultra trace range calibration standards for micro and nano gram levels microplastics analysis using Py-GCMS</p>
14:20-14:40	<p><u>Invited speaker (INV5)</u> – Dr. Hendrix Yulis Setyawan Topic: Advancing Biogas Technology with Biochar-Based Additives: A Sustainable Approach</p>	14:20-14:40	<p><u>Invited speaker (INV9)</u> – Prof. Young-Min Kim Topic: Analytical Advances and Challenges in Microplastic Detection in Food: Emphasis on Py-GC/MS</p>
14:40-14:55	<p><u>OC7</u> - Pikesh Kumar Topic: Bifunctional Metal–Biochar Catalysts Enabling 5-HMF Production from <i>Melocanna baccifera</i> in a Biphasic Solvent System</p>	14:40-14:55	<p><u>OC11</u> - Suchetna Kushwah Topic: Unraveling the Effect of Temperature on Marine Macroalgae Pyrolysates via Py-GC/MS Analysis for Bio-Valorization</p>
14:55-15:10	<p><u>OC8</u> - Miss Pattareeya Panpian Topic: Catalytic upgrading of bio-oils from biomass using copper-doped modified hybrid meso-microporous HZSM-5@ALKIT-6 catalyst.</p>	14:55-15:10	<p><u>OC12</u> - Abubakar Muhammad Hammari Topic: Fixed-Bed Column Adsorption with ANN Modeling for Antibiotic Removal from Wastewater on Modified Cellulose Nano-crystals Derived from Waste Paper</p>



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15:10-15:25	OC9 - Savankumar Patel Topic: Role of Carbon Dioxide on Biogas Pyrolysis over Biosolids-Derived Biochar Catalyst	15:10-15:25	OC 13 - Ranjeet Kumar Mishra Topic: Thermo-Catalytic Co-Pyrolysis of waste Pista Nut Shells and Polystyrene: Effect of Temperature and catalyst loading on pyrolysis products yield and its properties
15:25-15:40	OC10 - Ms. Devy Ulandari Topic: Unveiling the Biochar Potential of Chicken Manure through Differential Thermal Gravimetric Analysis	15:25-15:40	OC14 - Jihyeon Seo Topic: Sustainable Valorization of Waste Wet Wipes via Catalytic Pyrolysis
15:40-15:55	Coffee Break/poster session		
15:55-16:25	Keynote Speaker (KL2) – Professor Shogo Kumagai Topic: Co-Pyrolysis of Plastics, Biomass, and Petroleum: Recent Advances and Current Developments <i>Chair: Dr. Janejira Ratthiwal</i>		
16.25 – 18.20 Parallel session 5 <i>Chair: Prof. Kaustubha Mohanty</i>		16.25 – 18.20 Parallel session 6 <i>Chair: Professor Dr. Songbo He</i>	
16:25-16:45	Invited speaker (INV4) – Prof. Arshad Salema Topic: Ranking of biomass based on physicochemical and thermogravimetric analysis in a CO ₂ environment	16:25-16:45	Invited speaker (INV8) - Dr. Ichi Watanabe Topic: Understanding and Mitigation of Abnormal Peak Shapes Appearing for Pyrolyzates with Mid-Boiling Points in Pyrolysis-GC/MS
16:45-17:05	Invited speaker (INV7) – Dr. Suchithra Thangalazhy Gopakumar Topic: Prediction of Biochar Properties and the Role of Biochar in the Co-Digestion of Palm Oil Mill Effluent	16:45-17:05	Invited speaker (INV10) - Professor Jechan Lee (<i>VDO presentation</i>) Topic: Monomer Recovery from Plastic Wastes via Pyrolysis on MSW Incinerator Bottom Ash Catalyst under Reactive Greenhouse Gas Atmosphere



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17:05-17:20	OC15 - Professor Sanjeev Yadav Topic: FAAE-rich bio-oil production via fast co-pyrolysis of extractive rich waste biomass	17:05-17:20	OC20 - Dr. Masahiro Hashimoto Topic: Non-Targeted Analysis of Air Pollutants Using Thermal Desorption GC-HRTOFMS with Machine Learning Structural Analysis
17:20-17:35	OC16 - Professor Shushil Kumar Topic: Direct thermal liquefaction of agro-biomass residues to produce bio-crude	17:20-17:35	OC21 - Dr. Vaishakh Nair Topic: Application of Machine Learning and RSM Studies of Aeracanut Husk Biochar for Wastewater Remediation
17:35-17:50	OC17 - Dr. Busigari Rajasekhar Reddy Topic: Effect of Coal Rank and Biomass Torrefaction on the Preparation of Carbon Nanomaterials through Microwave-Assisted Pyrolysis	17:35-17:50	OC22 - Shreya G Prasad Topic: Exploring the Role of Catalyst Characteristics in Co-Pyrolysis of Biomass and Plastics Using Machine Learning Techniques
17:50-18:05	OC18 - Haneul Shim Topic: Catalytic pyrolysis of Ginkgo biloba fruit for the production of valuable hydrocarbons using ZSM-5 catalysts	17:50-18:05	OC23 - Dr. Chinta Sankar Rao Topic: Integrating Thermogravimetric Analysis and Machine Learning for Kinetic and Thermodynamic Evaluation of Bio-Sludge Pyrolysis
18:05-18:20	OC19 - Hoesuk Yim Topic: Catalytic copyrolysis of woody biomass and waste plastics: mechanistic insights into selective BTX production	18:05-18:20	OC24 - Sirivibha S P Topic: Exploring the Influence of Clay-Based Catalyst Characteristics on Plastic Pyrolysis Oil Yield Using Machine Learning Approaches
18:20-19:00	Poster Session/evaluation		
19:00-21:30	Conference Dinner		

12 December 2025

12 December 2025			
Time	Infinity ballroom	Time	Gemini I
08:30-9:15	<p align="center">Plenary Speaker (PL3) - Professor Charles Chunbao XU Topic: Microwave-assisted Pyrolysis of Waste Plastics for Liquid Fuel Production <i>Chair: Dr. Sopon Butcha</i></p>		
9:15-9:45	<p align="center">Keynote Speaker (KL3) – Professor Vinu Ravikrishnan Topic: A Holistic Approach to Wind Turbine Blade Recycling & Wastes from Wind Turbine Blade Manufacturing via Thermochemical and Solvothermal Processes <i>Chair: Dr. Sopon Butcha</i></p>		
<p>9.45 – 10.50 Parallel session 7 <i>Chair: Dr. Patchiya Phanthong</i></p>		<p>9.45 – 10.50 Parallel session 8 <i>Chair: Prof. Shogo Kumagai</i></p>	
9:45-10:05	<p>Invited speaker (INV12) – Prof. Vaibhav V. Goud Topic: Process optimization of hydrothermal conversion of defatted algal slurry for integrated co-production of sugars and biocrude oil</p>	9:45-10:05	<p>Invited speaker (INV11) – Professor Pankaj Tiwari Topic: Thermal recycling of glass fiber-reinforced polymer composites</p>
10:05-10:20	<p>OC25 - Dr. N. Siva Mohan Reddy Topic: Fe-Catalyzed Hydrothermal Valorization of Tetra Pak Waste for Biofuel and Value-Added Products</p>	10:05-10:20	<p>OC28 - Kuntalika Das Topic: CFD-based model development for entrained flow reactors for coal gasification</p>
10:20-10:35	<p>OC26 - Mr. Muhammed Anzil P. K. Topic: Sustainable management of invasive Mucuna bracteata through thermochemical conversion: Kinetic and Thermodynamic Analysis</p>	10:20-10:35	<p>OC29 - Mr. Manikandan P M Topic: Exploring the Thermochemical Potential of Cashew Agro-Residues: Non-Isothermal Kinetics, Analytical Pyrolysis, and Hydrothermal Liquefaction</p>
10:35-10:50	<p>OC27 - Dr. Md. Kamrul Islam <i>(VDO presentation)</i> Topic: One-pot oxidative conversion of lignocellulosic biomass over bimetallic catalyst in a mixed solvent system</p>	10:35-10:50	<p>OC30 - Ms. Avita Agarwal Topic: Performance Study of Nano-structured Orange Peel derived Porous Carbon Electrode for Energy Storage Applications</p>
10:50-11:05	<p align="center">Coffee Break</p>		

11.05 – 12.10 Parallel session 9		11.05 – 12.10 Parallel session 10	
Chair: Prof. Young Kwon Park		Chair: Dr Sathrugnan Karthikeyan	
11:05-11:25	Invited speaker (INV13) – Prof. Songbo He Topic: Ex-situ catalytic pyrolysis of glycerol to bio-based benzene, toluene, and xylenes	11:05-11:25	OC34 - Dr. Mahendra Chinthala Topic: Co-pyrolysis of bituminous coal (BC) with different agro-residues: kinetics and pretreatment effects
11:25-11:40	OC31 - Miranti Budi Kusumawati Topic: Influence of Heating Methods on the Synergistic Effect of Vacuum Residue and Tall Oil Co-Pyrolysis	11:25-11:40	OC35 - Abhishek Kumar Topic: Thermal Pyrolysis-Assisted Synthesis of Hierarchical Porous Carbon from Bamboo Waste for Enhanced Supercapacitors
11:40-11:55	OC32 - Dr. Le Kim Hoang Pham Topic: One-pot synthesis of NiCo/Zeolite derived from rice husk for catalytic pyrolysis of coconut coir to aromatic hydrocarbon	11:40-11:55	OC36 - Dr. Mohammad Forrukh Hossain Khan Topic: Prospects of Rare Earth Element Recovery from Coal Fly Ash Generated by thermal power-plants of Bangladesh
11:55-12:10	OC33 - Prof. Manish Vashishtha Topic: Multi-Objective Optimization of Mustard Straw Biochar Production via Integrated Response Surface Methodology and NSGA-II	11:55-12:10	OC37 - Dr. Dipaloy Datta Topic: Removal of Triarylmethane Dyes from Wastewater using Marble Waste Modified Biochar
12:10-12:40	Keynote Speaker (KL4) – Professor Kaustubha Mohanty Topic: Bio-oil Production via Co-Hydrothermal Liquefaction of Dairy Wastewater Grown Microalgae and Dairy Sludge: Synergistic effect and Sustainable Energy Generation Chair: Dr. Jaturon Kumchompoo		
12:40-12:55	Closing Ceremony Award		



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PYROASIA2025 – Poster Session

Poster code	Registration code	Presenter Name	Topic
PT1	PT-AN-001	Mr. Deepraj Sarkar	Fabrication and Characterization of Starch-Based Bioplastics with Waste Flower Extract for Food Packaging Applications
PT2	PT-AP-001	Amit Tiwari	Synthesis of biochar from microwave assisted co-pyrolysis of tea waste and coal for supercapacitor application
PT3	PT-AN-002	Ms. Nawaporn Permsombut	Optimization and Kinetic Study of Used Lubricant Oil Pyrolysis for Diesel-like Fuel Production Using a Semi-Batch Reactor
PT4	PT-AP-002	Ms. Tanushka Florence Panicker	Thermo-catalytic co-pyrolysis of waste biomass and plastic: Process parameter optimization and characterization of liquid fuel
PT5	PT-AP-004	Anuradha K	Production and characterisation of biochar derived from co-pyrolysis of waste biomass and plastic for material application
PT6	PT-AN-005	Dr. Sachin Kuriachan E	Kinetic Analysis of Glass Fiber Reinforced Polymer Composite Pyrolysis Using the Distributed Activation Energy Model
PT7	PT-AP-005	Sonal Vithoba Tarkar	Potential of green adsorbent derived from waste lignin for pollutant removal
PT8	PT-AN-006	Miss Chutikarn Pradit	Enhancement of microplastic analysis through PY-GCMS using SBA-15 adsorbent
PT9	PT-AP-008	Minchul Shin	Machine Learning Study for Prediction of Oil and Gas Yields from Pyrolysis of Mixed Plastic Waste



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Poster code	Registration code	Presenter Name	Topic
PT10	PT-AP-009	Beomseok Son	Pyrolysis-Electrochemical Upgrading of Lignocellulosic Biomass Waste
PT11	PT-AP-010	Mr. Ilyass Belrhazi	Catalytic Pyrolysis of HDPE over Metal-Impregnated Zeolites for the Production of Aromatic Hydrocarbons
PT12	PT-AP-011	Natacha Phetyim	Chlorine Reduction Approaches for Cleaner Pyrolytic Fuels from Waste Engine Oil and Mixed Plastics
PT13	PT-AP-012	Rinlada Sirisangsawang	Upgrading Waste Tyre Pyrolysis Oil via Metal Oxide Catalysts for Cleaner Fuel Production
PT14	PT-AP-013	BINAY KUMAR TRIPATHY	Production and characterisation of biochar from waste lignocellulosic biomass for wastewater treatment
PT15	PT-AP-014	Mr. Naveen Kumar Karri	Simultaneous Syngas Production Enhancement and Carbon dioxide Reduction in Microwave-Assisted Co-Pyrolysis of CaCO ₃ and Rice Husk
PT16	PT-AP-015	Dr. Hemanth Kumar Tanneru	Microwave-assisted Pyrolysis of Mixed Plastic Waste: Role of Interactions on liquid Yields and Quality
PT17	PT-AP-017	Dr Anurita Selvarajoo	Graphene-Enhanced Biochar Produced via Pyrolysis for Water Treatment: A Systematic Review of Adsorption Mechanisms and Performance
PT18	PT-AP-003	Ms. Bich-Ngoc Duong	Adsorption of The Antibiotic Ciprofloxacin from Aqueous Solution on ETS-10 Zeolite