## PYROASIA 2024

🛗 28-29, November, 2024

28-Nov-2024	DAY 1			
8.00-8.55 AM	Breakfast and Registration			
9.00-9.25 AM	Welcome and Inaugural			
9.30-11.00 AM	Session-1: Analytical & Applied Pyrolysis of Polymers & Microplastics			
	Session Chairs: Abhishek Sharma and Kalpit Shah			
9.30-9.50 AM	Keynote 1	Shogo Kumagai, Tohoku University, Japan		
		Combined UV-irradiation and pyrolysis-GC/MS approach for evaluating the deterioration		
		behavior of PV module encapsulant materials		
9.50-9.55 AM	Questions a	Questions & Answers		
9.55-10.10 AM	Invited 1	Atsushi Watanabe, Frontier Laboratories		
		Application of F-Splitless Pyrolysis-GC/MS to the Analysis of Polymeric Materials		
10.10-10.15 AM	Questions & Answers			
10.15-10.30 AM	Invited 2	Rajkumar Kasilingam, Indian Rubber Materials Research Institute, Maharashtra		
		Commercial utilization of end of life tyres to produce high value Chemicals and fuel using		
40.00 40.05 404	integrated technology			
10.30-10.35 AM	Questions & Answers			
10.35-10.50 AM	Invited 3	Young-Min Kim, Daegu University, South Korea New filtration system for microplastic analysis using Py-GC/MS and its application in		
		environmental and food sample analysis		
10.50-10.55 AM	Questions			
11.00-11.30 AM	Questions & Answers Tea & Coffee			
11.30-1.00 PM	Session-2A (Parallel Session): Microwave Pyrolysis & Product Characterization			
11.50 1.00 1 11	Session-2A (Parallel Session): Microwave Pyrolysis & Product Characterization Session Chairs: Suchithra Thangalazhy Gopakumar and Ejaz Ahmad			
11.30-11.45 AM	Invited 4	Arshad Adam Salema, Monash University, Malaysia		
		Microwave processing of biomass: Temperature measurement, energy consumption and		
		syngas characteristics		
11.45-11.50 AM	Questions & Answers			
11.50-12.05 PM	Invited 5	B. Rajasekhar Reddy, IIT-ISM Dhanbad		
		Microwave-assisted Pyrolysis of Mixed Plastic Waste: Role of Interactions on liquid Yields		
		and Quality		
12.05-12.10 PM	Questions a	& Answers		
12.10-12.25 PM	Invited 6	Manoj Tripathi, Jaypee Institute of Information Technology, Noida		
		RSM Optimization of process parameters in microwave pyrolysis of mustard (Brassica		
		Nigra) husk (MSH) for the development of biomass-derived supercapacitor electrode		
12.25-12.30 PM	Questions			
12.30-12.40 PM	Short	Priyanka Katiyar, Shiv Nadar Institute of Eminence, Noida		
42.40.42.42.014	Oral 1	Reimagining Aroma Extraction Waste: Catalytic Pyrolysis for Hydrocarbon Production		
12.40-12.42 PM	Questions a			
12.42-12.52 PM	Short Oral 2	Miranti Budi Kusumawati, Tohoku University, Japan Co-pyrolysis of vacuum residue and bio-oil: A detailed liquid product characterization		
12.52-12.54 PM	Questions a			
12.52-12.54 PM	Short	Mukul Agrawal, Shiv Nadar Institute of Eminence, Noida		
12.34-1.04 FIVI	Oral 3	Comparative distribution and characterization of products from fast pyrolysis of cooked		
		food waste, eucalyptus (wood), and bamboo (non-wood)		
1.04-1.06 PM	Questions & Answers			
11.30-1.00 PM	Session-2B (Parallel session): Analytical Pyrolysis			
	Session Chairs: Prasenjit Mondal and Sankar Chakma			
11.30-11.45 AM	Invited 7	R. Vinu, IIT Madras		
		Analytical Pyrolysis of common polymers using different pyrolysis systems: Effect of		
		heating rate and timescale on product distribution		

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11.45-11.50 AM	Questions & Answers		
11.50-12.05 PM	Invited 8	Pratik N. Sheth, BITS-PILANI, Rajasthan	
		Chemical analysis of Refuse Derived Fuel (RDF)	
12.05-12.10 PM	Questions & Answers		
12.10-12.20 PM	Short	Takaya Satoh, JEOL Ltd., Japan	
	Oral 4	Development of a quantitative method for a trace amount of microplastics by pyrolysis	
		GC/MS/MS	
12.20-12.22 PM	Questions &		
12.22-12.32 PM	Short	Takao Fukudome, JEOL Ltd., Japan	
	Oral 5	Rapid analysis of pyrolysis oil using blank tube-FI method and GC-EI/FI method	
12.32-12.34 PM	Questions &		
12.34-12.44 PM	Short	Janejira Ratthiwal, Thammasat University, Thailand	
	Oral 6	HDPE bottle cap waste upgrading through two-stage catalytic pyrolysis using Tandem	
		Microreactor-GCMS	
12.44-12.46 PM	Questions &		
12.46-12.56 PM	Short	Swati Sharma, IIT Mandi	
	Oral 7	In-situ Transmission Electron Microscopy for understanding pyrolysis of polymers for	
43 FC 43 F0 DM	0	device fabrication	
12.56-12.58 PM	Questions & Answers		
1.00-2.00 PM			
2.00-4.00 PM	Session-3: Biochar and Advances in Analytical Instrumentation		
2 00 2 20 DM	Session Chairs: Arshad Salema and S. Murugavelh		
2.00-2.20 PM	Keynote 2	Suchithra Thangalazhy Gopakumar, University of Nottingham, Malaysia Effect of torrefaction of biomass for co-digestion of palm oil mill effluent	
2.20-2.25 PM	Questions 8		
2.25-2.40 PM	Invited 9	Hendrix Yulis Setyawan, Universitas Brawijaya, Malang, Indonesia	
2.25 2.40 1 10	invited 5	Experimental study of pyrolysis product utilisation: Phosphate-Doped Biochar as fertiliser	
2.40-2.45 PM	Questions &		
2.45-3.00 PM	Invited 10	Senthilmurugan Subbiah, IIT Guwahati	
		Pyrolysis Reactor for Sustainable Biochar Production	
3.00-3.05 PM	Questions &	•	
3.05-3.25 PM	Sponsors	Thermo Fisher Scientific India Pvt. Ltd.	
	Slot 1	Sunil Kumar	
3.25-3.45 PM	Sponsors	JEOL, India	
	Slot 2		
4.00-4.45 PM	Tea & Coffee		
4.45-7.00 PM		(Parallel Session): Modelling in Biomass Pyrolysis (Kinetics, AI/ML models)	
	Session Cha	airs: Shogo Kumagai and Sanjeev Yadav	
4.45-5.00 PM	Invited 11	Himanshu Goyal, IIT Madras	
		First-principles and ML modeling of biomass thermochemical conversion	
5.00-5.05 PM	Questions &		
5.05-5.20 PM	Invited 12	Anjireddy Bhavanam, NIT Jalandhar	
		Co-pyrolysis of torrefied rice straw and coal: thermal behavior and kinetic analysis	
5.20-5.25 PM	Questions &		
5.25-5.40 PM	Invited 13	Chinta Sankar Rao, NIT Surathkal	
		Leveraging Explainable AI for Predictive Modeling of Product Yields from Lignocellulosic	
		Biomass Using Machine Learning	

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5.40-5.45 PM	Questions &	& Answers	
5.45-5.55 PM	Short	Deepak Bhushan, IIT Roorkee	
	Oral 8	Multi-parameter optimization and predictive modeling of pyrolysis of walnut shells using	
		response surface methodology and machine learning algorithms	
5.45-5.47 PM	Questions & Answers		
5.47-5.57 PM	Short	Kartik S, UPL University of Sustainable Technology, Vadodara	
	Oral 9	Catalytic Cracking of Plastic waste fractions: Kinetic and Thermodynamic parameter	
		estimation through non-linear approach	
5.57-6.00 PM	Questions & Answers		
6.00-6.10 PM	Short	Zi Wei Ng, Monash University, Malaysia	
	Oral 10	Exergy, CO <sub>2</sub> Emission, and Techno-Economic Analysis of DME Production via EFB Biomass	
		Gasification	
6.10-6.12 PM	Questions & Answers		
6.12-6.22 PM	Short	Hemant Balsora, UPL University of Sustainable Technology, Vadodara	
	Oral 11	Artificial Neural Network Based Models for the Prediction of Pyrolysis Product Distribution	
	<b>.</b>	Using Preliminary Analysis	
6.22-6.24 PM	Questions & Answers		
6.24-6.34 PM	Short	Pritam Kumar, IIT Madras	
	Oral 12	Pyrolysis of Blends of Rice Husk with Bagasse and Wood Chips: Pyrolysate Composition	
6 24 6 26 DM	Questiens	Analysis and Distributed Activation Energy Modeling	
6.34-6.36 PM	Questions &	& Answers	
6.36-6.46 PM	Short Oral 13		
6.46-6.48 PM	Questions 8	2 Angularg	
4.45-7.00 PM		(parallel session): Catalytic Pyrolysis and HDO	
4.45-7.00 PW		airs: Pankaj Tiwari and Pratik Seth	
4.45-5.00 PM	Invited 14	N. Sivamohan Reddy, IIT Roorkee	
4.45-5.00 F W	Invited 14	Catalytic Effect on the Degradation Behavior of Metal loaded Biomass	
5.00-5.05 PM	Questions & Answers		
5.05-5.20 PM	Invited 15	Anjana P A, NIT Warangal	
5.05 5.20 1 11	invited 15	Heterogeneous catalysts in Pyrolysis reaction	
5.20-5.25 pm	Questions & Answers		
5.25-5.40 PM	Invited 16	Samuel L. Rokhum, NIT Silchar	
		Development of superhydrophobic biochar catalyst for biodiesel production	
5.40-5.45 PM	Questions 8		
5.45-5.55 PM	Short	Saimatun Nisa, IIT Jammu	
	Oral 14	Catalytic and non-catalytic pyrolysis of walnut shell waste	
5.55-5.57 PM	Questions & Answers		
5.57-6.07 PM	Short	Santoshnambi Yadav, IIT Kharagpur	
	Oral 15	Bio-oil production from lipid-rich microalgal biomass grown in open raceway system: An	
		analytical Py-GCMS study	
6.07-6.09 PM	Questions &	& Answers	
6.09-6.19 PM	Short	Prabu Marimuthu, IIT Madras	
	Oral 16	Synergistic Catalytic Insights: Noble Metals supported on Ni-based Perovskite Catalysts for	
		Enhanced Hydrodeoxygenation of Guaiacol	
6.19-6.21 PM	Questions 8		
6.21-6.31 PM	Short	Pikesh Kumar, IIT Guwahati	
	Oral 17	Conversion of lignocellulosic biomass to 5-HMF over bifunctional metal-loaded biochar	
		catalyst with biphasic solvent	

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6.31-6.33 PM	Questions & Answers		
6.33-6.43 PM	Short	Janaki Komandur, IIT Guwahati	
	Oral 18	Catalytic Hydrodeoxygenation of bio-oil produced from biomass and plastic waste	
6.43-6.45 PM	Questions & Answers		
6.45-6.55 PM	Short	Munmi Bhattacharyya, IIT Guwahati	
	Oral 19	One-pot green synthesis of NiO/MgO nano-composite catalyst for the thermo-catalytic	
		devolatilization studies of sawdust pyrolysis and its comparative analysis with industrial	
		zeolite and dolomite bulk catalysts	
6.55-6.57 PM	Questions & Answers		
7.00-8.00 PM	Posters and Networking		
8 PM onwards	Dinner		