

## **Special Session 4:** ***Energy from Biomass and Waste***

### **Organized by the ARC Research Hub for Transformation of Reclaimed Waste Resources to Engineered Materials and Solutions for a Circular Economy (TREMS)**

Biomass and waste are renewable feedstocks for energy (in the form of heat and electricity) generation and fuel (solid, liquid, and gaseous) productions. There are plethora of conversion technologies and processes that have been developed and applied for various biomass and waste categories. The characteristics of the feedstock and the desired output dictate the processes to be applied.

The aim of this special session is to share the knowledge in principles and practices of energy generations and fuel productions from biomass and waste. The 10<sup>th</sup> 3RINC in 2024 would like to invite researchers, practitioners, and policy makers around the world to share their experiences.

### **Program**

\*Chair:

Prof. Lu Aye, Leader of Renewable Energy and Energy Efficiency Group, Faculty of Engineering and Information Technology, The University of Melbourne, Australia

Prof. Kalpit Shah, Deputy Director of ARC Training Centre for Transforming Australia's Biosolids Resource and a Co-Leader of Innovative Resource and Waste Conversion Technologies (iRWT) Research Group, RMIT University, Australia

O = Onsite, L = Online

Time	Title		Presenter	Co-author	Organisation
13:00-13:10	Waste-to-Energy: An Indian Perspective	L	Sadhan Kumar Ghosh	M. Veerachary, Misizu Asari	International Society of Waste Management, SWMAW, India
13:10-13:20	Energy Valorisation of Grass Clippings (C000112)	O	Lu Aye	Nilupa Herath, Amitha Jayalath, Priyan Mendis	University of Melbourne
13:20-13:30	Exploration of pyrolysis characteristics of Ecuadorian coffee residues for their simultaneous waste treatment and revalorization (C000057)	O	Shogo Kumagai		Tohoku University
13:30-13:40	The effects of micronutrient-biochar addition on AD performance (C000039)	O	Jae Hac Ko		Jeju National University
13:40-13:50	Pre-treatment of food and green wastes for anaerobic digestion	L	Kexin Hu	Lu Aye, Nilupa Herath, Felix Hui	University of Melbourne
13:50-14:00	Advance thermochemical conversion approaches for waste to energy and high-value product formation	L	Kalpit Shah		RMIT University
14:00-14:10	Followed by QA session				
14:10-14:20					
14:20-14:30					