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### **Fourth International Conference**

# "Valorization of Agricultural Residues Towards Climate-Smart Agriculture in South-East Asia"

"Giá trị gia tăng từ phụ phẩm nông nghiệp hướng tới nông nghiệp thông minh thích ứng với khí hâu tai Đông Nam Á"

Organized by Technical University Berlin & Hanoi University of Science and Technology

Dates September 19<sup>th</sup> 2024

**Venue** Seminar Room C2-Hanoi University of Science and Technology

Website https://s-ircle.com/EN conference.html

### Scientific organization:

- 1. Prof. Vera Susanne Rotter Technology University Berlin
- 2. Assoc. Prof. Tuyet Nguyen Thi Anh Hanoi University of Science and Technology
- 3. Assoc. Prof. Son Chu Ky Hanoi University of Science and Technology
- 4. Assoc. Prof. Huong Hoang Thi Thu Hanoi University of Science and Technology
- 5. Assoc. Prof. Thuy Ly Bich Hanoi University of Science and Technology

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# **Program**

September 19 <sup>th</sup> (Thursday): Seminar room – C2 Building			
08:30 - 09:00	Registration		
09:00 – 09:10	Welcome Remarks	Assoc. Prof. Huynh Dang Chinh – Vice President of HUST	
Plenary Session Chaired by Assoc. Prof. Tuyet Nguyen Thi Anh			
09.20 - 09:40	Prof. Vera Susanne Rotter – TU Berlin Agricultural residues and biogas technology in Vietnam		
09:40 – 10:00	S-IRCLE Project Result	Marcel Spahr – Herbst Umwelttechnik GmbH S-IRCLE I Smart Filter Systems for H₂S Removal And S- recovery For Rural Biogas Plants	
10:00 –10:20	S-IRCLE Project Result	Trang Hoang – TU Berlin Study on fertilization potential of recovered sulfur from biogas purification on Pakchoi	
10:20 –10:35	Photo session and Coffee break		
Theme 1 - Biomass resources and bioenergy Chaired by Assoc. Prof. Do Khac Uan			
10:35 –10:55	Prof. Nguyen Xuan Thinh – TU Dortmund Digital twins and AI methods for climate change adaption and climate-smart agriculture		
10:55 – 11:15	Liwah Wong – TU Berlin Urban-rural material cycles: material flow analysis and stakeholder analysis of circular agricultural economy and future implementation Nguyen Xuan Duong -		
11:15 – 11:35	Dr. Duong Manh Cuong – Thai Nguyen University Agriculture and Forestry Effects of biochar in production of biogas and mitigation of corrosive gases in batch and continuous anaerobic digestion		
11:35 – 13:30	Lunch		
Theme 2 - Sustainable technologies Chaired by Assoc. Prof. Ly Bich Thuy			
13:30 – 13:50	Dr. Pham Kim Cuong - Animal Husbandry Association Vietnam Overview of livestock waste in Vietnam and treatment technologies		
13:50 – 14:10	Dr. Nguyen Thuy Chung – Hanoi University of Science and Technology Synthesis of modified biochar from coconut fiber for effective heavy metals removal in contaminated water		
14:10 – 14:30	Nguyen Thi Hai Anh - Hiroshima University Surface Reconstruction Enabling C <sub>3</sub> N <sub>4</sub> Nano-sheet/SnS <sub>2</sub> Heterostructure for Ultra-fast Visible Light Photodegradation of Acetonminphene		
14:30 – 15:00	Coffee break and Poster Presentation		

Theme 3 - Environmental Impacts and Management Chaired by Prof. Nguyen Xuan Thinh		
15:00 – 15:20	Dr. Nguyen Van Thinh - Hiroshima University Biodegradation and Fate of Aliphatic Polyester Plastic Films in Coastal Blue- carbon Ecosystems in Asia	
15:20 – 15:40	Dr. Vo Thi Le Ha - Hanoi University of Science and Technology Study on determining the greenhouse gas emissions from the pig farming waste management system in Thai Binh - case study in Thai Thuy and Vu Thu districts	
15:40 – 16:00	Dr. Dang Duc Long – Da Nang University Circular Economy Approaches to Rice Straw Management in Vietnam: Biochar Production and Application for Sustainable Agriculture	
16:00 – 16:20	Hoang Thi Hong Van – Hanoi University of Science and Technology Assessing the potential for recovery of refuse-derived fuels from landfill mining	
16:20 – 16:30	Closure of the conference	
18:30 – 21:00	Gala Dinner	
September 20th (Friday): Field trip Urenco 11		