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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 hậu tại Đông Nam Á”

<b>Organized by</b>	Technical University Berlin & Hanoi University of Science and Technology
<b>Dates</b>	September 19 <sup>th</sup> 2024
<b>Venue</b>	Seminar Room C2-Hanoi University of Science and Technology
<b>Website</b>	<a href="https://s-ircle.com/EN_conference.html">https://s-ircle.com/EN_conference.html</a>

### Scientific organization:

1. Prof. Vera Susanne Rotter – Technology University Berlin
2. Assoc. Prof. Tuyen 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 – 9:00	Registration	
9:00– 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   Smart Filter Systems for H <sub>2</sub> S 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	
14:10 –14:30	Liwah Wong – TU Berlin Urban-rural material cycles: material flow analysis and stakeholder analysis of circular agricultural economy and future implementation	
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	
11:35–1:30	Lunch	

<b>Theme 2 - Sustainable technologies</b> <b>Chaired by Assoc. Prof. Ly Bich Thuy</b>		
10:55 –11:15	Animal Husbandry Association Vietnam Overview of livestock waste in Vietnam and treatment technologies	
13:30 –13:50	Dr.Nguyen Thuy Chung – HUST Synthesis of modified biochar from coconut fiber for effective heavy metals removal in contaminated water	
13:50 –14:10	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 Acetonminphhene	
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- HUST 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 – DN 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 – HUST Assessing the potential for recovery of refuse-derived fuels from landfill mining
16:20 –16:30	<b>Closure of the conference</b>
18:30 – 21:00	<b>Gala Dinner</b>

**September 20th (Friday): Field trip Urenco 11**