SYMPOSIUM PROGRAM

Venue: Ta Quang Buu Library, Hanoi University of Science and Technology

Hanoi, November 13 - 15th 2019

13rd Nov 2019 **16:00-17:30**	**STEERING COMMITTEE MEETING (invited only)** **Room 201A, C4 Building**
14th Nov 2019	**CONFERENCE DAY**
	RECEPTION AND OPENING, Conference Hall, 10th Floor
7:30-8:30	**Reception**
8:30-9:00	**Opening remark and welcome speech**
	Prof. Dinh Van Phong, Vice president, HUST
	Prof. Shu-Yii Wu, President IAHE Biohydrogen Division; *Chimica Verde Bionet* Asia Pacific Association
9:00-12:00	**PLENARY SESSION, Conference Hall, 10th Floor**
9:00-9:30	**Green synergy solution for future** *Prof. Shu-Yii Wu, President IAHE Biohydrogen Division; Chimica Verde Bionet Asia Pacific Association*
9:30-10:00	**Biorefinery: the Thai experience** *Assoc Prof. Klanarong Sriroth, Director of Mitr Phol Group, Thailand*
10:00-10:10	**Photo session**
10:10-10:30	**COFFEE BREAK**
10:30-11:00	**Application of deep learning for bio-energy (TBC)** *Prof. Jun Miyake, Osaka University, Japan*
11:00-11:30	**A path from zero to hero: biohythane production technology and its applications in self-sustained community** *Assoc. Prof. Andrew, Chen-Yeon Chu, Fengchia University, Taiwan*
11:30-12:00	**Challenges in downstream processing of bio-products; energetic and economic aspects** *Prof. Wolfgang M. Samhaber, Johannes Kepler University Linz, Austria*
12:00-12:30	**Energy transition and development prospects for renewable energy in Vietnam** *Assoc. Prof. Pham Hoang Luong, HUST.* Vice Chairman, Key State Science and Technology Program on Energy of Vietnam (KC.05/16-20)
12:30-13:30	**LUNCH, Ta Quang Buu Library, 10th Floor**

13:30-17:15	**SCIENTIFIC SESSIONS** **Session 01: Biomass resources, Biohydrogen, Biogas and biofuel - Room 923** **Session 02: Fermentation and BioProcess - Room 901** **Session 03: Biomass process and refinery for energy and bioproducts - Room 902**
15:00-15:30	**COFFEE BREAK AND POSTER SESSION**
13:30-17:30	**WORKSHOP: ADDING VALUES TO SUGAR INDUSTRY IN VIETNAM** **Room 702 (invited only)**
18:00-20:30	**GALA DINER**
15th Nov 2019	**SCIENTIFIC SESSION**
8:45-11:30	**Session 01: Biomass resources, Biohydrogen, Biogas and biofuel (cont.) - Room 702** **Session 04: Bioenergy sustainability and bioeconomy-LCA - Room 902**
10:00-10:30	**COFFEE BREAK AND POSTER SESSION**
11:45-13:00	**LUNCH, 10th Floor**
13:00-18:00	**TECHNICAL TOUR: HABECO Brewery (registered only)**
18:00	**Return to the Hotel**

Day 1: 14th November 2019 **SCIENTIFIC SESSION**

13:30-17:15	**Session 01: Biomass resources, Biohydrogen, Biogas and biofuel** **(Room 923)** *Chair: Prof. Alissara Reungsang* *Assoc. Prof. Nguyen Lan Huong*	**Session 02: Fermentation and BioProcess** **(Room 901)** *Chair: Prof. Qiang Liao* *Assoc. Prof. Le Thanh Ha*	**Session 03: Biomass process and refinery for energy and bioproducts** **(Room 902)** *Chair: Dr. Peer Mohamed* *Assoc. Prof. Tran Lien Ha*
13:30-13:45	**BE-01:** Influence of silicone immobilized cell on biohydrogen production in *Rhodobacter sphaeroides.*	**BP-02:** The effects of alcohols on pore diameter of biocellulose during the membrane formed process.	**BR-04:** Direct bio-butanol production from cellulosic materialby the co-cultivation of white rot fungus and bacterium.
13:45-14:00	**BE-16:** Smart usage of salt: reduction of methane emission during the storage and enhancement of biogas production during anaerobic digestion of pig slurry.	**BP-03:** Enhancing microalgae harvesting of cationic starch flocculation by electrolysis flotation.	**BR-05:** Bioaugmentation application in cattle slaughterhouse wastewater treatment for biomass production.
14:00-14:15	**BE-17:** Substrates substitutions of photosynthetic and other bacteria for hydrogen economic purposes using batch culture system with photo- or dark-fermentation processes.	**BP-04:** Iron (II) phthalocyanine supported on heavy oil soot as the catalysts for microbial fuel cells.	**BR-06:** Ethanol production from cassava pulp by pre-hydrolysis and simultaneous saccharification and fermentation using immobilized enzymes and cells.
14:15-14:30	**BE-04:** Efficiency and economic benefit evaluation of dark- and photo fermentative biohydrogen production by fancy production efficiency methods and computable general equilibrium model integrated methodology in major circular economies.	**BP-05:** Effect of anode proton transport on cyclic voltammetry test in microbial fuel cell.	**BR-07:** Simultaneous production of hydrogen and ethanol from co-digestion of glycerol waste with algal biomass.
14:30-14:45	**BE-05:** Furfural tolerant biohydrogen producing bacteria: Isolation and characterization.	**BP-14:** Submerged fermentation of *Trametes versicolor* (YunZhi mushroom) polysaccharopeptide.	**BR-12:** The electro coagulation system with modified electrodes for the removal of cadmium and chromium III in wastewater.
14:45-15:00	**Q&A**	**Q&A**	**Q&A**
15:00-15:30	**COFFEE BREAK AND POSTER SESSION**		

	Chair: Dr Ao Xia Dr. *Dr. Dwi Susilaningsih*	*Chair: Prof. Am JANG* *Assoc. Prof. Le Thanh Ha*	*Chair: Assoc. Prof. Apilak Salakkam* *Dr. Pham Tuan Anh*
15:30-15:45	**BE-07:** Stimulating direct interspecies electron transfer via foamed nickel supplement to enhance anaerobic digestion.	**BP-06:** In situ visualization of biofilm formation in a microchannel for a microfluidic microbial fuel cell anode	**BR-03:** Enzymatic destructuration of different types of lignocellulose matrix: rheolometry, granulometry and hydrolysis kinetic.
15:45-16:00	**BE-08:** Continuous anaerobic co-digestion between alcoholic fermentation wastewater and glycerol waste to produce gaseous biofuel.	**BP-07:** Proton exchange membrane water electrolysis system–effect of pretreatment before electro-coated for ti anode support.	**BR-08:** Isolation of thermo-tolerant fresh water green microalgae as potential feedstocks for biofuel production in the tropical and subtropical area.
16:00-16:15	**BE-10:** Improvement of biogas production by sulfate removal in skim latex serum (sls) using rubber wood ash.	**BP-09:** Anti-oxidative and anti-tyrosinase activities of collagen peptides derived from vietnamese commercial catfish (*pangasius hypophthalmus*) gelatin.	**BR-09:** Dual stage peroxide oxidation process in cellulose extraction from oil palm empty fruit bunch: Effect of cellulose fiber composition and structure on thermal properties analysis.
16:15:16:30	**BE-11:** Enhancing bio-hydrogen and methane production by co-digestion of *Chlorella* sp. with cassava pulp.	**BP-11:** Characterization and Identification of Lipid Producing Microalgae Isolated from Belitung Island, Indonesia.	**BR-10:** Cellulose regeneration using ionic liquid from direct dissolution of lignocellulosic biomass.
16:30-16:45	**BE-12:** Multi-enzyme pretreatment of *Chlorella* sp. biomass for biohydrogen production.	**BP-12:** Mining enzymes from *Geobacillus* sp. pk12 for bioethanol synthesis under consolidated bioprocessing.	**BR-11:** Production and application of the magnetic cellulose from pineapple peel.
16:45-17:00	**BE-13:** Co-digestion of biogas effluent and filter cake for methane production: optimization of substrate proportions.	**BP-13:** Optimization of cultivation medium for CMCase production from *Bacillus subtilis* G4.	**BR-15**: Study on organic calcium production from crustaceans harvested in Quang Ninh Province by using organic acids.
17:00-17:15	**BE-15:** Life cycle assessment of two-stage biohydrogen and biomethane production from palm oil mill effluent.	**SB-08:** Diversity of oleaginous yeast newly isolated and their intracellular lipid accumulation ability.	**BP-08:** Effect of torrefaction, hydrothermal carbonization and degradative solvent extraction on moisture adsorption and spontaneous combustion characteristics of biomass.
17:15-17:30	**Q&A**	**Q&A**	**Q&A**

Day2: 15th November 2019

8:45-11:30	**Session 01: Biomass resources, Biohydrogen, Biogas and biofuel (Room 702)** *Chair: Prof. Alex Chang* *Prof. Seoktae Kang*	**Session 04 Bioenergy sustainability and bioeconomy-LCA (Room 902)** *Chair: Prof. Chen-Yeon Chu* *Assoc. Prof. Nguyen Thi Anh Tuyet*
8:45-9:00	**BE-14:** Pre-treatment of palm oil mill effluent for biohydrogen production and bacterial community analysis via next gene sequencing.	**SB-01:** Evaluate energy efficiency in road transportation activities of Vietnam.
9:00-9:15	**BR-13:** Semi–continuous from solid-state anaerobic co-digestion empty fruit bunches with palm oil mill effluent: A case study on the effect of hydraulic retention time.	**SB-02:** Economic feasibility of biomass power plant based on short rotation acacia on post mining land in Halong city.
9:15-9:30	**SP-01:** Enhanced acidogenesis by using Multi-walled carbon nanotubes (MWNT) in anaerobic digester.	**SB-04:** Life cycle evaluation of GHG bio-energy.
9:30-9:45	**SB-03:** Enhanced methane conversion efficiency using conductive permeable electrode in microbial electrosynthesis system.	**SB-06:** The environmental impact of symbiosis energy system to the community.
9:45-10:00	**Q&A**	**Q&A**
10:00-10:30	**COFFEE BREAK AND POSTER SESSION**	
	Chair: Prof. Jamaliah Md Jahim *Dr. Prawit KONGJAN*	*Chair: Prof. Dong-Hoon Kim* *Assoc. Prof. Van Dinh Son Tho*
10:30-10:45	**BE-03**: Multi-walled carbon nanotubes (MWNTs) enhanced the conversion of organic sulfur compounds to gaseous sulfur.	**SB-07:** The utilization of coconut husk for synthesis gas production and industrial wastewater treatment.
10:45-11:00	**BE-18:** Hydrogen sulfide removal from biogas by using recycled water absorption for concentration latex factory.	**SP-05:** A self-assembly 3D macroporous (GO)/Fe_3O_4 biocathode enhance the performance of CO_2 reduction to CH_4.
11:00-11:15	**BE-19:** Biomass and polyurethane co-gasification for syn-gas production.	**BP-10**: Enhanced anaerobic digestion of phenol via electrical energy input.
11:15-11:30	**BE-21:** Biogas upgrading from hydrogen gas in dark fermentation by two-stage anaerobic digestion process.	**BE-09:** Patent analysis of technology development in water electrolysis by renewable energy based on TRIZ method.
11:30-11:45	**Q&A**	**Q&A**

POSTER PRESENTATION

DAY 1: 14th November 2019, 15:00-15:30

DAY 2: 15th November 2019, 10:00-10:30

ID	Title
P-01	Effect of ethanol on biogas production from beverage wastewater
P-02	Effect of acidification time on anaerobic methane production from chicken manure
P-03	Integration of CO_2 electrocatalysis for efficient syngas production in biological conversion to ethanol
P-04	Cultivation and use of *Chlorella* sp. biomass as feedstock for hydrogen and methane production
P-05	Screening of oleaginous yeast from Vietnamese environment
P-06	Color control from soybean fermentation wastewater by carbon-based adsorbents
P-07	One-step synthesis of fluorescent carbon dots from lemon juice for adsorption of methylene blue
P-08	Research, designing and manufacturing the equipment of pyrolysis for producing charcoal with the raw material from waste wood and renewable – planted wood.
P-09	Characterization of complete genome sequence and rubber degradation genes of *Actinoplanes* sp. strain OR16
P-10	Identification of microbial communities associated with coal in the red river basin, Vietnam
P-11	Influence of electrostatic field on the bioelectrochemical conversion of coal to methane
P-12	Ab initio simulation of hcl leaching during catalytic hydrolysis over cellulase-mimetic solid acid catalyst using density functional theory
P-13	Effect of pre-treatment methods on solubilization and anaerobic biodegradability of co-substrate of piggery wastewater and kitchen waste
P-14	Effect of organic loading rate on the hydrogen production in microbial electrolysis cells
P-15	Performance of UASB reactor for natural rubber processing wastewater treatment using cultivated polyvinyl alcohol gel beads
P-16	Two-stage biogas production from swine manure in commercial field

P-17	The effect of reactor volume ratio of the dark and photo-fermentation on the bio-hydrogen production
P-18	Producing Bioethanol and organic manure from cashew apple
P-21	Beta-Carotene fermentation using *Rhodotorula* sp. on food industrial byproduct
P-22	Thermophilic anaerobic co-digestion of *Chlorella* sp. with empty fruit bunch for biohythane production
P-23	Inoculum acclimation improves food waste utilization for high methane production
P-24	Study on cellulase biosynthesis by thermophilic *Streptomyces Thermoviolaceus* CX9 and the enzyme properties
P-25	Enhanced anaerobic digestion of long chain fatty acid by adding magnetite and carbon nanotube materials
P-26	Enhancement of lignocellulose enzymatic hydrolysis using a novel bionic flexible reactor
P-27	Polyhydroxybutyrate (PHB) production by co-culture of *Acinetobactor junii* BP25 and *Aeromonas hydrophila* using wastewater derived from Bio-hydrogen production
P-28	Biogas upgrading with trickling pall ring filter
P-29	Effects of auxiliary bio-electrochemical reactor on methane production and electrochemical impact in anaerobic digestion reactor
P-30	Bio-electrochemical activation of methanogenesis through SMA test and ANOVA
P-31	Immobilization of *Chlorella sorokiniana* in polyvinyl alcohol for nutrient removal and biomass collection
P-32	Application of forward osmosis process to concentrate volatile fatty acids from anaerobic digestion
P-34	Pretreated micoalgal waste as the source for bio-hydrogen production
P-35	Two-stage thermophilic biohythane production from palm oil mill effluent by two-ring reactor
P-36	Enhancement of hydrogen production through a mixed culture from anaerobic bacteria