

## PROGRAM

The 7<sup>th</sup> ASEAN Bioenergy and Bioeconomy Conference (ABB2023):

## Sustainable Bioresources for Green Energy and Economy

August 31<sup>st</sup>, 2023

Queen Sirikit National Convention Centre (QSNCC), Bangkok, Thailand

## Opening Ceremony (MR 109 CD)

Moderator:	Dr. Chayanon Sawatdeenarunat, Chiangmai Rajabhat University
08.30 – 09.00	Registration
09.00 – 09.15	<b>Report on the opening ceremony</b> Dr. Pilanee Vaithanomsat, Director of Kasetsart Agricultural and Agro-Industrial Product Improvement Institute (KAPI), Kasetsart University, Thailand
09.15 – 09.30	<b>Opening ceremony</b> Dr. Chongrak Wachrinrat, President of Kasetsart University, Thailand
09.30 – 10.15	<b>Keynote presentation</b> <b>“Towards Carbon Neutrality by Bio and Renewable Energy”</b> <b>Prof. Dr. Shabbir H. Gheewala</b> The Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi
10.15 – 10.30	Coffee break and <i>separate to session rooms</i>

## Bioenergy Session (MR 109 CD)

10.30 – 12.00	<b>Panel Discussion</b> <b>“Thailand's Challenges and Actions Toward Carbon Neutrality Goal”</b> <b>Moderator: Assoc. Prof. Dr. Rattanawan Mungkung</b> Managing Director of VGREEN KU Co., Ltd. & Senior Lecture, Faculty of Environment, Kasetsart University <b>Panel Speakers:</b> • “Thailand Voluntary Emission Reduction Program: T-VER” <b>Dr. Puttipar Rotkittikhun</b> Director of Carbon Credit Certification Office, Thailand Greenhouse Gas Management Organization (TGO) • “Case study T-VER” <b>Miss Patwalai Ananjanich</b> Managing Director, 9S Engineering and Consultant Co., Ltd. • “Renewable Energy Certificate: REC” <b>Mr. Prasertsak Chergchawano</b> Deputy Governor – Strategy, Electricity Generating Authority of Thailand (EGAT) • “Case study REC” <b>Mr. Somboon Samakphan</b> Advance Specialist - Energy & Environmental Management, BMW manufacturing (Thailand) Co., Ltd.
12.00 – 13.30	Lunch (on your own)

### Bioenergy Session (MR 109 CD)

Chairman:	Dr. Chayanon Sawatdeenarunat, Chiangmai Rajabhat University
13.30 – 13.50	<b>EN-Roo1:</b> Model study of small char furnace for biomass carbonization process <b>Lalita Petchaihan</b> School of Renewable Energy, Maejo University, Thailand
13.50 – 14.10	<b>EN-Roo2:</b> Prediction of atmospheric water generation with using vapor compression refrigeration <b>Tirawat Wongsatiam</b> School of Renewable Energy, Maejo University, Thailand
14.10 – 14.30	<b>EN-Roo3:</b> Biofuel and energy transition <b>Robert Edyvean</b> Department of Chemical and Biological Engineering, The University of Sheffield, United Kingdom
14.30 – 14.50	<b>EN-Roo4:</b> Performance of agricultural diesel engine with using pyrolysis oil blended biodiesel <b>Phontakorn Liam-Kloub</b> School of Renewable Energy, Maejo University, Thailand
14.50 – 15.10	Coffee break and Poster session
15.10 – 15.30	<b>EN-Roo5:</b> Hydrochar production from elephant dung via hydrothermal carbonization process <b>Sasithorn Saipa</b> Asian Development College for Community Economy and Technology, Chiang Mai Rajabhat University, Thailand
15.30 – 15.50	<b>EN-Roo6:</b> Conversion of coffee husk charcoal into biomass fuel briquettes <b>Suphanat Kaewtae</b> School of Renewable Energy, Maejo University, Thailand
15.50 – 16.10	<b>EN-Roo7:</b> Effect of mixing to biogas production from wastewater of black soldier fly larvae (BSFL) processing in floating drum digester <b>Suradech Rungthong</b> School of Renewable Energy, Maejo University, Thailand
16.10 – 16.30	<b>EN-Roo8:</b> Quantification of the bioethanol produced from coconut sap, young coconut husk, matured and young coconut water using simple fermentation-distillation process <b>Dharell B. Siano</b> Bataan Peninsula State University, Abucay, Bataan, Philippines
16.30 – 17.00	Announcement of Presentation Awards and Closing Bioenergy Session

## Bioeconomy Session (MR 109 H)

Chairman:	Asst. Prof. Dr. Patthra Pason, King Mongkut's University of Technology Thonburi
10.30 – 11.00	<b>Invited presentation 1</b> <b>“Advanced Process Technologies for High-Quality Food Applications”</b> <b>Dr. Isao Kobayashi</b> Principal Research Scientist, Division of Food Processing and Biomaterials Research, Institute of Food Research, NARO, Japan
11.00 – 11.20	<b>EC-R001:</b> The effective debranching type I pullulanase from <i>Priestia koreensis</i> HL12 as high potential biocatalysts for starch saccharification and modification <b>Daran Prongjit</b> Department of Biotechnology, Faculty of Science and Technology, Thammasat University, Thailand
11.20 – 11.40	<b>EC-R002:</b> Efficient bimetallic of CuCo/ $\gamma$ -Al <sub>2</sub> O <sub>3</sub> catalyst for hydrogenolysis of glycerol conversion <b>Bheechanat Duangdee</b> Department of Chemical Engineering, Faculty of Engineering, Kasetsart University, Thailand
11.40 – 12.00	<b>EC-R003:</b> Market trends in biofuel supply and demand <b>Supatchalee Sophonthammaphat</b> Department of Alternative Energy Development and Efficiency, Thailand
12.00 – 13.30	Lunch (on your own)
13.30 – 14.00	<b>Invited presentation 2</b> <b>“Bio-Based Polymers for Circular Economy”</b> <b>Prof. Dr. Hakimah Osman</b> Faculty of Chemical Engineering Technology, Universiti Malaysia Perlis, Malaysia
14.00 – 14.20	<b>EC-R004:</b> Cricket as an economic animal: A sustainable alternative protein source with the potential to be prebiotic <b>Jaruporn Rakmai</b> Biomass and Bio-Energy Technology Division, Kasetsart Agricultural and Agro-Industrial Product Improvement Institute (KAPI), Kasetsart University, Thailand
14.20 – 14.40	<b>EC-R005:</b> Production of pectinase by <i>Bacillus tequilensis</i> M1 using banana peel as an economical substrate <b>Alif Qurrotul Afidah Lailiyah</b> School of Bioresearch and Technology, King Mongkut's University of Technology Thonburi, Thailand
14.40 – 15.00	<b>EC-R006:</b> Integration of natural silica and alumina sources for synthesis of MCM-22 and MCM-36 zeolite: Effect of precursor's ratio <b>Worapak Tanwongwan</b> College of Materials Innovation and Technology, King Mongkut's Institute of Technology Ladkrabang (KMITL), Thailand
15.00 – 16.00	Coffee break and Poster session
16.00 – 16.30	Announcement of Presentation Awards and Closing Bioeconomy Session