

Agenda

The 7th ASEAN Bioenergy and Bioeconomy Conference (ABB2023): Sustainable Bioresources for Green Energy and Economy

August 31st, 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	Report on the opening ceremony Dr. Pilanee Vaithanomsat, Director of Kasetsart Agricultural and Agro-Industrial Product Improvement Institute (KAPI), Kasetsart University, Thailand
09.15 – 09.30	Opening ceremony Dr. Chongrak Wachrinrat, President of Kasetsart University, Thailand
09.30 – 10.15	Keynote presentation “Towards Carbon Neutrality by Bio and Renewable Energy” Prof. Dr. Shabbir H. Gheewala, The Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi, Thailand
10.15 – 10.30	Coffee break and <i>separate to session rooms</i>

Bioenergy Session (MR 109 CD)

10.30 – 12.00	Panel Discussion “Thailand's Challenges and Actions Toward Carbon Neutrality Goal” Moderator: Assoc. Prof. Dr. Rattanawan Mungkung Managing Director of VGREEN KU Co., Ltd. & Senior Lecture, Faculty of Environment, Kasetsart University, Thailand Panel Speakers: “Thailand Voluntary Emission Reduction Program: T-VER” Dr. Puttipar Rotkittikhun Director of Carbon Credit Certification Office, Thailand Greenhouse Gas Management Organization (TGO) “Case study T-VER” Miss Patwalai Ananjanich Managing Director, 9S Engineering and Consultant Co., Ltd. “Renewable Energy Certificate: REC” Mrs. Rangsinee Prakij Director of Business Development Division, Electricity Generating Authority of Thailand (EGAT) “Case study REC” Mr. Somboon Samakphan 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

- 13.30 – 13.50 **EN-R001:**
Model study of small char furnace for biomass carbonization process
Lalita Petchaihan
School of Renewable Energy, Maejo University, Thailand
- 13.50 – 14.10 **EN-R002:**
Prediction of atmospheric water generation with using vapor compression refrigeration
Tirawat Wongsatiam
School of Renewable Energy, Maejo University, Thailand
- 14.10 – 14.30 **EN-R003:**
Biofuel and energy transition
Robert Edyvean
Department of Chemical and Biological Engineering, The University of Sheffield, United Kingdom
- 14.30 – 14.50 **EN-R004:**
Performance of agricultural diesel engine with using pyrolysis oil blended biodiesel
Phontakorn Liam-Kloub
School of Renewable Energy, Maejo University, Thailand
- 14.50 – 15.10 **Coffee break and Poster session**
- 15.10 – 15.30 **EN-R005:**
Hydrochar production from elephant dung via hydrothermal carbonization process
Sasithorn Saipa
Asian Development College for Community Economy and Technology, Chiang Mai Rajabhat University, Thailand
- 15.30 – 15.50 **EN-R006:**
Conversion of coffee husk charcoal into biomass fuel briquettes
Suphanat Kaewtae
Department of Renewable Energy, School of Renewable Energy, Maejo University, Thailand
- 15.50 – 16.10 **EN-R007:**
Effect of mixing to biogas production from wastewater of black soldier fly larvae (BSFL) processing in floating drum digester
Suradech Rungthong
School of Renewable Energy, Maejo University, Thailand
- 16.10 – 16.30 **EN-R008:**
Quantification of the bioethanol produced from coconut sap, young coconut husk juice, matured and young coconut water using simple fermentation-distillation process
Dharell B. Siano
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, KMUTT

10.30 – 11.00 **Invited presentation 1**

“Advanced Process Technologies for High-Quality Food Applications”

Dr. Isao Kobayashi

Principal Research Scientist, Division of Food Processing and Biomaterials
Research, Institute of Food Research, NARO, Japan

11.00 – 11.20 **EC-R001:**

The effective debranching type I pullulanase from *Priestia koreensis* HL12 as
high potential biocatalysts for starch saccharification and modification

Daran Prongjit

Department of Biotechnology, Faculty of Science and Technology,
Thammasat University, Thailand

11.20 – 11.40 **EC-R002:**

Efficient bimetallic of CuCo/ γ -Al₂O₃ catalyst for hydrogenolysis of glycerol
conversion

Bheechanat Duangdee

Department of Chemical Engineering, Faculty of Engineering,
Kasetsart University, Thailand

11.40 – 12.00 **EC-R003:**

Market trends in biofuel supply and demand

Supatchalee Sophonthammaphat

Department of Alternative Energy Development and Efficiency, Thailand

12.00 – 13.30 **Lunch (on your own)**

13.30 – 14.00 **Invited presentation 2**

“Bio-Based Polymers for Circular Economy”

Prof. Dr. Hakimah Osman

Faculty of Chemical Engineering Technology,
Universiti Malaysia Perlis, Malaysia

14.00 – 14.20 **EC-R004:**

Cricket as an economic animal: A sustainable alternative protein source with
the potential to be prebiotic

Jaruporn Rakmai

Biomass and Bio-Energy Technology Division, Kasetsart Agricultural and
Agro-Industrial Product Improvement Institute (KAPI),
Kasetsart University, Thailand

14.20 – 14.40 **EC-R005:**

Production of pectinase by *Bacillus tequilensis* M1 using banana peel as an
economical substrate

Alif Qurrotul Afidah Lailiyah

School of Bioresearch and Technology,
King Mongkut's University of Technology Thonburi, Thailand

14.40 – 15.00 **EC-R006:**

Integration of natural silica and alumina sources for synthesis of MCM-22
and MCM-36 zeolite: Effect of precursor's ratio

Worapak Tanwongwan

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**