

International Symposium on Emerging Trends in Role and Production of Bioenergy for Sustainable Development (ETBSD-2022)

Organized by

Korea University, Republic of Korea
University of Glasgow, UK
&
Supergen Bioenergy Hub, UK

July 4-5,
2022

In association with

International Bioprocessing Association
IFIBiop
An International Forum on Industrial Bioprocessing

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Scientific Program](#)

Hosted by

**Korea University (BK 21 Four R&E Center for Chemical and Biological Engineering ,
Institute of Chemical Engineering Convergence Systems)
Korea Carbon to X Research Center**



Venue

**Engineering Building Auditorium (5th Floor), Korea University, Seoul,
Republic of Korea**

Background

One of the major issues currently mankind is facing is about the climate change, which urgently needs adopting ways and means to attain sustainable development in energy and environment sectors. Curtailing greenhouse gas (GHG) emission has been one of the major focuses of the Glasgow Climate Pact held recently in SEC Centre in Glasgow, Scotland. After the power sector, which accounts for a quarter of global GHG emissions, organic wastes (3.2%), burning of agricultural residues (3.5%), and livestock and manures (5.8%) are the other major contributors to the global GHG emission. At the same time, the world is also facing unprecedented shortage of energy insecurity, and disposal of rapidly growing organic wastes and residues. In this respect, role and relevance of bioenergy seem to be extremely potential, which aims to resolve dual purpose by developing processes for the production of 'green' energy to save the climate changes and also to address the treatment and management of biowaste, including industrial effluent, rich in organic nature for the production of energy (waste to energy). Thus, the production of green (bio)hydrogen, cultivation of microalgae for waste mitigation and waste to energy concept have emerged as potential approaches for energy and environmental sustainability, which would be discussed in this symposium.

July 4-5, 2022

SCIENTIFIC PROGRAM

Scientific program of the symposium would comprise invited talks and contributory short oral and posters presentations and panel discussion.

TOPICS

- **BIOHYDROGEN PRODUCTION**
 - Fermentative production
 - Gasification and pyrolysis of lignocellulosic and algal biomass
 - Life-cycle assessment and Techno-economic studies
- **MICROALGAL BIOREFINERY**
 - Production of fuels and chemicals
 - Life-cycle assessment and Techno-economic studies
 - CO₂ mitigation
- **WASTE TO ENERGY**
 - Biogas production
 - Advanced anaerobic processes

SUBMISSION OF ABSTRACTS

Abstracts (about 200 words) of the papers should be submitted as word doc file by email to etbsd@korea.com. The deadline to receive the abstracts is May 31, 2022. Acceptance notification will be sent on or before 5th June 2022.

PUBLICATION

Works presented in the symposium will be considered for publication in a special issue (SI) of **BIORESOURCE TECHNOLOGY** following the standard peer review process of the journal. SI will open for submission on August 1 and close on August 31, 2022. While submitting the manuscript online, in the covering letter, authors must mention the registration number and declare that the work was presented in ETBSD-2022. Contributory delegates can submit research articles only; review articles will be by invitation to the invited speakers.

ORGANIZING TEAM

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& IBA India Office Executive

Keynote speaker

Jin Suk Lee, Korea Institute of Energy Research, Republic of Korea

Plenary speakers

Quanguo Zhang, Henan Agricultural University, China

Roger Ruan, University of Minnesota, USA

Samir Kumar Khanal, University of Hawaii-Manoa, USA

Sang Hyouon Kim, Yonsei University, Republic of Korea

Sang Jun Sim, Korea University, Seoul, Republic of Korea

Siming You, University of Glasgow, UK

Sung Hoon Park, Ulsan National Institute of Science and Technology, Republic of Korea

Invited speakers

Byung In Sang, Hanyang University, Republic of Korea

Chang Soo Lee, Ulsan National Institute of Science and Technology, Republic of Korea

Gopalakrishnan Kumar, the University of Stavanger, Norway

Hana Kim, Korea Advanced Institute of Science and Technology, Republic of Korea

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