

# Symposium on Biodiversity-Based Low-Carbon Green Technology

Host: Division of Biochemical Engineering, NIBR(Nat'l Institute of Biological Resources), KAIST

Sponsor: NIBR(Nat'l Institute of Biological Resources), KAIST

Pusan BEXCO Room 206

2024. 10. 17.(Thu), 09:00~10:40

Chair: Jeong Chan Joo, Kyung Hee Univ.

09:00	Opening remarks	Minkyu Oh, Korea Univ.
09:05	Congratulatory remarks	Bok-Chul Chung, NIBR(Nat'l Institute of Biological Resources)
09:10	[Keynote Lecture] Trends in biological greenhouse gas reduction policies and research	Moonsuk Hur, NIBR(Nat'l Institute of Biological Resources)
09:30	[Keynote Lecture] Stepping on the gas: Innovating for a circular bioeconomy	Michael Köpke, Lanza Tech
09:50	Biotransformation of methane gas into value-added products using methanotrophs	Eun Yeol Lee, Kyung Hee Univ.
10:05	Synthetic biology of acetogenic bacteria for sustainable C1 gas bioconversion	Byung-Kwan Cho, KAIST
10:20	Comprehensive study of bioleaching for recycling of critical minerals, lithium, nickel, cobalt from spent lithium ion battery using indigenous bacterial species	Junmo Ahn, Jeonbuk Nat'l Univ.

## Keynote Speaker



**Moonsuk Hur, NIBR**  
2012 PhD, Biotechnology, Inha Univ.  
2014 Research Officer, NIER  
Present Senior Research Officer, NIBR



**Michael Köpke, Lanza Tech**  
1998 PhD, Biotechnology, Univ. of Ulm, Germany  
Present Chief Innovation Officer, LanzaTech, USA  
Adjunct Lecturer, Northwestern Univ., USA

## Invited Speaker



**Eun Yeol Lee, Kyung Hee Univ.**  
1995 PhD, Chem. Technol., Seoul Nat'l Univ.  
2007 Visiting Prof., Biomedical Eng., Cornell Univ.  
Present Prof., Chem. Eng., Kyung Hee Univ.



**Junmo Ahn, Jeonbuk Nat'l Univ.**  
2020 PhD, Mining&Geological Eng., Univ. of Arizona.  
2022 Manager, LS-MnM Inc  
Present Prof., Mineral Resources&Energy Eng., Jeonbuk Nat'l Univ.

## Organizer/Speaker



**Byung-Kwan Cho, KAIST**  
2003 PhD, Biochem. Eng., Seoul Nat'l Univ.  
2009 Postdoc., Bioeng. UCSD  
Present Prof., Biol. Sci., KAIST

## Organizer



**Soo-Jin Yeom, Chonnam Nat'l Univ.**  
2010 PhD, Biotechnology, Konkuk Univ.  
2019 Senior researcher, Center for synthetic biology, KRIBB  
Present Assoc. Prof., Biological Sciences and Technology, Chonnam Nat'l Univ.

## Chair



**Jeong Chan Joo, Kyung Hee Univ.**  
2011 PhD, Chem. Eng., Seoul Nat'l Univ.  
2020 Center for Bio-based Chemicals, KRIST  
2024 Prof., Biotech., The Catholic Univ. of Korea  
Present Prof., Chem. Eng., Kyung Hee Univ.