

NJAU - International Virtual Conference Sustainable Processing of Biomass and Biogenic Matter

AUGUST 12, 2025 (ONLINE)

Co-Chair:

7:00pm - 10:10pm Beijing time BTT 7:00 - 10:10am Eastern Standard Time EST

Meeting Link: https://zoom.us/i/95840848722?pwd=iwNw13bjD505uVEH4a2bu3bVpb1juY.1

Chair: Prof. Janusz A. Kozinski (Lakehead University, Canada)

J.A. Kominhi Prof. Zhen Fang (Nanjing Agricultural University, China) 方真

Secretaries: Dr. Yang Cao 2025006@njau.edu.cn

> Dr. Lin Chen chenlin3776@njau.edu.cn

Sustainable processing of biomass is one of the driving forces in the 21st century for generating carbon-neutral biofuels and multi-functional bioproducts.

The International Virtual Conference will serve as a vibrant forum for exchanging ideas and sharing knowledge on the state-of-the-art innovative technologies converting a variety of biomass resources to biofuels, biochemicals, and biomaterials while generating positive socio-economic impact.

Global and local challenges and opportunities – as well as future novel processes – will be presented, discussed, and debated.

Opening address

Prof. Zhen Fang

Session 1 – Chaired by Prof. Zhen Fang

7:05 – 7:25 pm BJT Prof. Zhidan Liu (China Agricultural University, Beijing))

Hydrothermal technology for sustainable food-energy-water nexus

7:25 – 7:40 pm BJT (8:25 – 8:40 pm Tokyo time)

Prof. Richard Smith (Tohoku University, Japan)

Fundamentals of Solvothermal and Hydrothermal Fluids for Biomass Valorization

7:40 – 7:55 pm BJT Prof. Charles Xu (City University of Hong Kong)

Sugar-platform biorefinery: catalytic conversion of carbohydrates into platform chemicals

7:55 - 8:10pm BJT(1:55 - 2:10 pm Paris time)

Dr. Iskender Gokalp (Middle East University, Turkey)

Hydrothermal carbonization of highly wet organic waste streams: a sustainable circular economy approach from sewage sludge to SAF

8:10 – 8:25 pm BJT Prof. Hongliang Wang (China Agricultural University)

Lignin-Based Micro/Nano Systems for Pesticide Encapsulation and Controlled Release

8:25 – 8:35 pm BJT (8:25 – 8:35 am EST) **Break**

Session 2 - Chaired by Prof. Janusz A. Kozinski

8:35 – 8:50 pm BJT (6:35 - 6:50 am Saskatoon time)

Prof. Ajay Dalai (USAK, Canada)

Comprehensive investigation of hydrogen generation from agricultural residues by supercritical water gasification process

(together with Kapil Khandelwal)

8:50 - 9:05 pm BJT (9:50 – 10:05 am Halifax time)

Prof. Sonil Nanda (Dalhousie, Canada)

Focused Perspectives on Waste Valorization, Net Zero Targets and Decarbonization

9:05 – 9:20 pm BJT (9:05 – 9:20 am Philadelphia time)

Dr. Richard Newbold (Supercritical-H2O, USA)

SCW gasification of organic wastes: batch *versus* continuous processing (a multi-university journey from lab world to real world)

9:20 – 9:35 pm BJT 6:50 – 7:05 pm Delhi time)

Prof. Mohan Reddy (IIT-Roorkee, India)

In-situ hydrothermal gasification of waste towards circular economy

9:35 – 9:50 pm BJT Prof. Lin Chen (Chinese Academy of Sciences)

Supercritical carbon dioxide assisted dissolution/extraction and heat transfer characteristics of the mixture fluid flow

9:50 – 10:05 pm BJT (9:35 – 10:05 am EST)

Open Forum – Discussion

Chaired by Prof. Janusz A Kozinski and Prof. Zhen Fang

10:05 – 10:10 pm BJT Closing remarks Prof. Janusz A Kozinski