

## Organised by

- WasteEng Conference Series
- IMT Mines Albi-Carmaux (IMT-MA), France
- Tohoku University (TU), Japan

## In collaboration with

- Springer Nature
- National Center for Scientific Research, CNRS, France
- WTERT (Columbia University and City College of the University of New York), USA
- Princeton University, USA

## Important dates

- June 10, 2023:** Abstract submission opening
- October 17, 2023:** Abstract submission deadline
- February 6, 2024:** Authors notification
- March 5, 2024:** Registration opening
- May 2, 2024:** Early-bird registrations deadline
- August 20-23, 2024:** WasteEng2024 Conference



## Scientific Committee

- |                               |                              |                                 |
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| Gerente, C., France           |                              |                                 |

## Abstract submission

Details on abstract preparation and submission are available at the conference website:  
[www.wasteeng2024.org](http://www.wasteeng2024.org)

## Publication of theme issues

Following the experience of previous issues of WasteEng Conference Series, high quality and original contributions will be submitted for review in a peer reviewed journal.

## Contacts

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*The correspondence concerning other subjects (on-line registration, submission, payment...) should be addressed to:*

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10<sup>th</sup> International Conference  
on Engineering for Waste  
and Biomass Valorisation

August 20-23, 2024  
Sendai, Japan

[www.wasteeng2024.org](http://www.wasteeng2024.org)



# Invitation

## 10<sup>th</sup> International Conference on Engineering for Waste and Biomass Valorisation, WasteEng2024

We are delighted to announce the 10<sup>th</sup> Edition; **WasteEng2024** to be held from **August 20 to 23, 2024 in Sendai (Japan)**. The event of the WasteEng Conference Series will address the Engineering for Waste, Biomass and co-Products for Energy and added-value materials production. It will gather the international community working on cutting-edge R&D and addressing barriers related to the Conversion of Biomass, co-products and Waste into Energy to Added-Value Materials. This conference series emphasizes life cycle assessment and technologies/processes/practices that reduce emissions. This conference series has been developed within a global move towards a greener, more resource efficient and climate-resilient economy in synchronization with the natural environment. It intends to play a meaning role for the Energy and Environmental Transitions towards a Sustainable Development in line with the strong commitment to support the United Nation's Sustainable Development Goals (SDGs) and the targets of the COP21 Paris Agreement.

In this regards Advanced Biofuels, BioHydrogen, Biomethane, Sustainable materials from waste, Energy storage, CO<sub>2</sub> mitigation and storage, Emissions mitigation, Circular Economy initiatives and R&D actions are among the main topics that will be addressed for this issue (WasteEng2024).

We expect fruitful face-to-face exchanges, updates in the various relevant fields, and opportunities for future collaborations.

**Abstract submission is opened since June 10, 2023 and will be closed on October 17, 2023.**

Keep yourself in the loop with news and updates at  
[www.wasteeng2024.org](http://www.wasteeng2024.org)

We look forward to meeting you in person in Sendai in August 2024!

Prof. Junya Kano, Toshiaki Yoshioka and Ange Nzihou  
Co-Chair of the WasteEng2024 conference

# Topics

Plenaries, Keynotes, Oral, Oral Flash presentations and Posters will cover the following themes related to Biomass, Residues and Waste for Sustainable Development:

### TOPIC 1: Resources and Feedstock

- Resources and Sustainability
- Feedstock Availability, Characterisation, Composition and Suitability for a Dedicated Process
- Extraction of Critical Materials from Waste
- Recycling and Reuse

### TOPIC 2: Waste Plastics to Fundamental and Functional Chemicals

- Plastics Sorting
- Plastics to Fuels
- Plastics to Chemicals

### TOPIC 3: Biomass and Waste to Energy, Fuels and Chemicals using Biochemical and Chemical routes

- Methane, Ethanol and other bioproducts Production
- Conversion for Heat and Power
- Recovery and Valorisation of Methane from Landfill
- Gas cleaning and Processing
- Design and Industrial (full scale) Application
- New Products, Biofuels, Catalysts, Sorbents, Molecules and Components
- Rare Earth Metals

### TOPIC 4: Biomass and Waste to Energy, Fuels and Chemicals using Thermochemical route

- Syngas, Methane, Ethanol, Ethylene, Benzene and other Bioproducts Production
- Conversion for Heat and Power
- Gas Cleaning and Processing
- Design and Industrial (full scale) Application
- New Products, Biofuels, Catalysts, Sorbents, Enzymes, Functional Molecules and Components

### TOPIC 5: CO<sub>2</sub> to Fuels and Chemicals

- Valorisation of CO<sub>2</sub> – Capture/ Sequestration, Storage and Utilisation

### TOPIC 6: Sustainable Materials for Civil Engineering from Waste, Industrial and Agricultural by-products

- Durability
- Environmental Assessment (including leaching tests), Policy and Standardisation

### TOPIC 7: Emissions, Residues Mitigation and Prevention

- Waste and Residual Biomass Minimisation and Management
- Pollutant Treatments and Greenhouse Gas Valorisation
- Minimisation and Mitigation of Greenhouse Gas Emissions

### TOPIC 8: Energy Storage and Zero-emission Energy Systems

- Sustainable Materials for Energy Storage and Recovery
- Energy and Fuel Storage, Batteries, Supercapacitors, Solar, Photovoltaic and Wind Energies, Gases Sequestration

### TOPIC 9: Circular Economy - Connecting Economic, Environmental and Social Gains

- Eco-conception Approach
- Life Cycle Assessment, Ecological Footprint and Indicators
- Policies, Regulatory and Social Acceptance
- Health and Risk Assessment
- Education and Teaching
- From Research to Innovation and Industry, Economic and Market

### WasteEng2024 specific symposia

#### Symposium 1: Circular Electronics and Batteries: from E-waste Recycling to Emerging Carbon-Based Biodegradable Technologies

Co-organisers: Clara Santato (Polytechnique Montreal, Canada), Jaewook Myung (KAIST, S. Korea), Yuvi Sivalingam (SRM, Chennai, India & Tohoku U, Japan), M. Irimia-Vladu (J Kepler, Austria), M. Holuszko (UBC, Canada)

#### Symposium 2: Circular Economy and Decarbonisation in Construction

Co-organisers: Ailar Hajimohammadi (UNSW Sydney, Australia), to be completed



# Registration fees

## WasteEng2024 Conference (August 20-23, 2024)

Fees (net prices)	Up to May 2, 2024	From May 3, 2024 to August 11, 2024	From August 12, 2024
Scientific Committee members	600€ / 84 000 ¥	700€ / 98 000 ¥	800€ / 112 000 ¥
Standard registration	700€ / 98 000 ¥	850€ / 119 000 ¥	950€ / 133 000 ¥
Student registration	375€ / 52 500 ¥	500€ / 70 000 ¥	600€ / 84 000 ¥
Additional paper (≥3) *	150€ / 21 000 ¥		

Fees include: book of abstract, lunches and coffee breaks, welcome reception and gala dinner.

In order to benefit from the student registration fees, you will be required to send a copy of a valid student card.

### Important notice

- Each accepted paper should be accompanied by one registration
- Each participant may present up to two papers (oral presentation or poster)

\* Participants may present more than two papers. In this case a fee of 150€ per additional paper will be charged.

### Visa Application

If you need a participation letter to apply for a Japanese visa, you should have your registration to the conference completed. Once registered, you could retrieve the participation letter from the conference website. If you request an original copy to be mailed to you by the conference, please be aware that this will require a payment from your side as an «additional order» (please see the details on the registration page). Please contact the Conference Secretariat for any further request.

# Registration information

Please browse the conference website for further information if you plan to attend the conference.