

CONFERENCE FORMAT 2024

42 sessions (7 concurrent morning sessions, 7 concurrent afternoon sessions). Workshops will be held either the day before, after technical sessions, or concurrent with technical sessions if it aligns with a specific track where the overlap would not be significant)

Tracks (~ Focus Areas)

The Focus Areas are included, but are not limited to:

1. AI (Artificial Intelligence) in Green Chemistry

- a. Examples:
 - i. AI in a process chemistry
 - ii. AI in retrosynthesis
 - iii. AI in greener separations
 - iv. AI in the design of safer and functional chemicals/ materials
 - v. AI for property prediction

2. Synthesis & Catalysis

- a. New Reactivity
- b. New Bond Making & Bond Breaking Processes
- c. Chemistry in Different Media
- d. All Forms of Catalysis
- e. Alternative Energy Inputs
- f. Continuous Processes
- g. Peptide Synthesis

3. The Circularity of Chemicals and Materials

- a. Capture & Valorization of Waste Streams
- b. Closed Loop Supply Chains/Cradle to Cradle Design
- c. Resource Recovery from Wastewater
- d. Catalytic Processes for Bond Cleavage

4. Sustainable Product Design

- a. Design for Biodegradation
- b. Eco-friendly Packaging
- c. Design for Low environmental impact
- d. Design for circularity
- e. Design for function & low hazard

5. Chemistry Education

- a. Green Chemistry in undergraduate labs
- b. Green Chemistry in undergraduate courses
- c. Real-world applications into education
- d. Environmental Justice
- e. Tools for building green chemistry communities in academia

6. Polymers

- a. Green Polymer Synthesis
- b. Biopolymers & Bio-based polymers
- c. Polymers from CO₂
- d. Polymers for Drug Delivery
- e. Polymers in Nanotechnology

7. Greener Energy & Fuels

- a. Bio-Based Fuels
- b. Hydrogen Economy and Green Hydrogen
- c. Solar Energy Innovations
- d. Advanced Battery Technologies
- e. Sustainable Energy Policy and Economics
- f. Carbon Capture and Utilization

8. Sustainable Process Design

- a. Greener Separations
- b. Reaction Solvents
- c. Cleaning Methods
- d. Process Metrics
- e. Design for Circularity of consumer products