

October 22nd - 24th, 2025
Compiègne, France

Day 1: Wednesday, October 22nd, 2025

- **10:00 AM - 1:45 PM**
 - **Registration** for participants arriving on Day 1
- **1:45 PM - 2:15 PM**
 - **Opening Ceremony**
- **2:15 PM - 6:15 PM**
 - **Session 1: Strain Engineering for Sustainable Bioeconomy Applications**

Objective: Improving yeast strains for advanced biosynthetic pathways, optimizing byproduct and waste assimilation, and fostering sustainable production.

 - **2:15 PM - 3:00 PM:** Plenary Lecture by **Rodrigo Ledesma-Amaro**, Imperial College London, UK

Title: Engineering biology in yeast cells and communities for a sustainable bioeconomy

 - **3:00 PM - 4:15 PM:** Presentations and discussions (15 min each)
 - **4:15 PM - 4:45 PM:** Coffee Break and poster/demonstration session
 - **4:45 PM - 6:15 PM:** Presentations and discussions continue (15 min each)
 - **Session Topics:**
 - Metabolic engineering for optimized byproduct and waste utilization
 - Cloning pathways for de novo molecule synthesis in yeast
 - Enzyme optimization for biosynthetic efficiency
 - Yeast strain development and adaptation for industrial bioeconomy applications

Day 2: Thursday, October 23rd, 2025

- **8:00 AM - 9:00 AM**
 - **Registration** for participants arriving on Day 2
- **9:00 AM - 1:00 PM**
 - **Session 2: Fermentation Technology and Bio-Based Compound Production**

Objective: Leveraging byproducts and waste in yeast fermentation to produce high-value, sustainable compounds.

 - **9:00 AM - 9:45 AM:** Plenary Lecture by **Andreas K. Gombert**, University of Campinas, Brazil

Title: Microbial ecology and (meta)genomics for a better understanding and improvement of bioethanol production from sugarcane

- **9:45 AM - 11:00 AM:** Presentations and discussions (15 min each)
- **11:00 AM - 11:30 AM:** Coffee Break and poster/demonstration session
- **11:30 AM - 1:00 PM:** Presentations and discussions continue (15 min each)
- **Session Topics:**
 - Valorization of industrial byproducts and wastes in fermentation
 - Optimization of fermentation parameters for valuable compound production
 - Development of co-cultures for enhanced fermentation efficiency
 - Fermentation scaling and yield improvement techniques
- **1:00 PM - 2:30 PM**
 - **Lunch Break and poster/demonstration session**
- **2:30 PM - 6:00 PM**
 - **Session 3: Downstream Processing, Bioreactor Design, and Process Scale-Up**
Objective: Exploring advanced techniques in pre-treatment, extraction, purification, bioreactor design, and scalability for bio-based production.
 - **2:30 PM - 3:15 PM:** Plenary Lecture by **Elodie Vlaeminck**, Bio Base Europe Pilot Plant (BBEPP), Belgium

Title: Scaling yeast fermentation and downstream processing: Sustainable production of triacylglycerols with *Y. lipolytica*
 - **3:15 PM - 4:30 PM:** Presentations and discussions (15 min each)
 - **4:30 PM - 5:00 PM:** Coffee Break and poster/demonstration session
 - **5:00 PM - 6:15 PM:** Presentations and discussions continue (15 min each)
 - **Session Topics:**
 - Advanced pre-treatment, extraction, and separation techniques for yeast bio-based compounds
 - Purification strategies for high-purity product recovery
 - Bioreactor design, optimization, monitoring, and control in yeast-based production
 - Scale-up strategies for industrial yeast fermentation
- **8:00 PM - 11:30 PM**
 - **Gala Dinner**

Day 3: Friday, October 24th, 2025

- **8:00 PM - 8:30 PM**
 - **Registration** for participants attending only Day 3
- **8:30 AM - 12:30 PM**
 - **Session 4: Techno-Economic Analysis, Life Cycle Assessment, and Industrialization**
Objective: Evaluating the environmental impact, financial viability, and promoting process industrialization.
 - **8:30 AM - 9:15 AM:** Plenary Lecture by **Patrick Carré**, Terres Inovia, France

Title: Techno-economic analysis of microbial oil production: a case study on odd-chain fatty acids

- **9:15 AM - 10:30 AM:** Presentations and discussions (15 min each)
- **10:30 AM - 11:00 AM:** Coffee Break and poster/demonstration session
- **11:00 AM - 12:30 PM:** Presentations and discussions continue (15 min each)
- **Session Topics:**
 - Life cycle assessment for bio-based processes and products
 - Minimizing environmental impact in bio-based production
 - Techno-economic analysis of sustainable fermentation processes
 - Production process industrialization and market integration
- **12:30 PM - 1:30 PM**
 - **Lunch Break and poster/demonstration session**
- **1:30 PM - 2:00 PM**
 - **Closing Ceremony**
 - Presentation of awards
 - Announcement of the **YBC 2027** location
- **2:00 PM – 5:00 PM** Optional visit to the biotechnology platform.

