« 2nd International Conference on Biomolecules and the Bioeconomy »

Nancy (Centre de Congrès Prouvé & Visioconference)
4 & 5 November 2021

Program

The Day 1 presentations will be delivered in French or English with a simultaneous translation (French and English). The Day 2 presentations will be delivered only in English.

Day 1: Thursday 4 November

9h00 – 9h30 Registration – Welcome – Opening of the conference

Session 1 - How to integrate stakeholders throughout the value chain for an efficient European Bioeconomy: *Application to the biomolecules ecosystem*

9h30 – 11h00 Round table 1: How local, regional, national and European priorities can be leveraged to align bioeconomy stakeholders

Participants

- Roman Brenne, Policy officer- DG Research & Innovation, Bioeconomy and Food Systems Unit – European commission- Brussels Belgium
- Representative of the French Ministry of Higher Education, Research and Innovation (MESRI), and/or SGPFUE representative, France
- Philippe Mangin, Vice-president in charge of the bioeconomy, Region Grand-Est
- Christophe Choserot, Vice president of the Municipality of Nancy
- Meriem Fournier, President of Inrae Grand Est-Nancy

11h00 – 11H15 Coffee break

11h15 – 12h45 Round table 2: Role of the European Green Deal in fostering the integration of all relevant actors into the supply chain

Participants

- Chloé Johnson, Bio-Based Industries Joint Undertaking (BBI JU) Project officer
- European partners: Prof. Henrik Toft Simonsen, DTU, Denmark; Professor Philippe Jacques, head of TERRA Research and Education Centre at Gembloux Agro-Bio Tech, Université de Liège, Belgium); Marie Danielle Vasquez Duchene Public Scientific Affairs – BASF France, NESTLE representative; Representative from the German bioeconomy cluster: Bioeconomy e.v
- Karl Tombre, Vice-President in charge of European and International strategy, University of Lorraine

12h45 – 14h00 Lunch break

Session 2: Launch of the "One-bioeconomy" transnational Academy for structuring higher education and research at the "Great-Region" scale: *a focus on trans-sectoral et trans-disciplinary approaches*

14h00 – 15h30 Round table 1: How to use economic intelligence approaches to better respond to industrial expectations for the bioeconomy

Participants

- 3 industrial representatives: NESTLE representative, Jean Marc Petat, Head of Sustainable Agriculture, Communication & Public Affairs – BASF France Division Agro, Ecully, France; Frédéric Bourgaud, Chief Scientific Officer of Plant Advanced Technology (PAT), Nancy
- Prof. Michel Fick, Vice president of industrial partnership, University of Lorraine
- Louis Tiers, Competitive Intelligence Manager, French Bioeconomy Cluster (Pôle IAR)

15h30 – 15H45 Coffee break

15h45 – 17h15 Round table 2: How Artificial Intelligence (AI) approaches can be applied to advance biomolecules research

Participants

- 2 industrial representatives: Regis Marchand, Open Innovation & Sustainable Innovation Manager of Air Liquide-Seppic, France; Philippe Robin, President of Alysophil, Illkirch-Graffenstaden, France
- Prof. David Brie (CRAN), Prof. Yannick Toussaint (LORIA)

17h30 – Signature of the partnership chair agreement "Biomolecules for the Bioeconomy"

20h00 – Gala dinner (Place Stanislas, Nancy, France) - Online Registration required

<u>Day 2:</u> Friday 5 November – Major IMPACT Biomolecules outcomes

Biomolecule sources

9h00 – 10h00 WP1: How to select and produce new biomolecules from plants and microorganisms

Production of a molecule of interest, dicaffeoyl quinique acid, by a bioengineering approach *(Collaboration between PAT (Chief scientific officer Frédéric Bourgaud) and LAE, UL (Prof. Alain Hehn)*

Identification of a new family of prenyltransferase capable of prenylating phenolic compounds *(Collaboration between University of Kyoto and the University of Lorraine)*

10h00 – 10h15 Coffee break

Biomolecule formulation

10h15 – 11h15 WP2: How to integrate biomolecules into final industrially-relevant products

Development of a combination of microbial and enzymatic processes for the production of surfactants from renewable resources (*Prof. Séraphim Papanikolaou, University of Athens; Prof. Isabelle Chevalot, LRGP, UL)*

Chemical and/or biocatalytic hemisynthesis strategies for the functionalization of biobased polyphenolic extractives (*Prof. Christine Gérardin, LERMAB, UL)*

Biomolecule evaluation

11h15 – 12h15 WP3: How to evaluate functional properties of new biomolecules

Screening of natural extract libraries for anti-inflammatory properties *(Dr. David Moulin, Dr. Sophie Rahuel-Clermont, IMoPA*, UL*)*

Omega 3-resolvines and inflammation (*Prof. Magnus Bäck, Karolinska Institute, Sweden)*

Turning waste into value - towards a sustainable economy for agricultural by-products *(Prof. Claus Jacob, Saarland State University, Germany)*

LSR: lipoprotein receptor and inflammation *(Prof. Frances Yen-Potin/Prof. Catherine Corbier, URAFPA, UL; Pr. Sandrine Boschi-Muller, IMoPA, UL*

12h15 – 13h30 Lunch break

Biomolecules of interest: success stories

13h30 – 14h30 TA1: Engineering of modular natural product biosynthesis

Successes, surprises and pitfalls in modular polyketide synthase engineering *(Prof. Kira Weissman, IMoPA, UL)*

Engineering of non-ribosomal peptide syntheses: How to make new drugs *(Prof. Helge Bode, Max Planck Institute of Terrestrial Microbiology, Marburg, Germany)*

14h30 – 15h30 TA2: Polyphenols

Purification and biomedical valorization of phenolic fractions from industrial liquid effluents *(Sara ALBE SLABI (AVRIL); Prof. Romain Kapel, LRGP, UL; Prof. Jean-Pol Frippiat, SIMPA, UL)*

15h30 – 16h30 TA3: Metal Binding Peptides

From production to applications (*Prof. Charlotte Jacobsen, DTU Denmark*; Dr. *Cédric Paris, LIBio, UL; Dr. Katalin Selmeczi, L2CM, UL/Dr. Loic Stefan, LCPM, UL; Dr. Laetitia Canabady-Rochelle, LRGP, UL)*