

TOWARDS A BIO-BASED ECONOMY: SCIENCE, INNOVATION, ECONOMICS, EDUCATION

Milano Sept 4-8, 2017 - Preliminary program

The program includes lessons by academic and industrial experts of the field, visit to a company, exercises on topics related to bioeconomy to be developed during the week with the help of tutors. Results will be presented during the last day and give access to 3CFU. For information at: bioeconomy@unimib.it
Information about **registration and accommodation** at <http://www.summerschoolbicocca.com/>

Sept 4th: Introduction and scientific background

Introduction about the overall philosophy of bioeconomy and on the course structure (speaker UNIMIB)
Raw materials for bio-based production, the concept of biorefinery (**M. Bettiga**, Chalmers University)

Break

Bioconversion processes: focus on microorganisms (**P. Branduardi/D. Porro**, UNIMIB)

Bioconversion processes: focus on enzymes (**L. Pollegioni**, Insubria University)

Students presentations and poster session*, welcome cocktail.

* Sponsored by the EU-MSCA-RISE project Metable (Advanced bioinformatics for genome and metagenome analyses with discovery of novel biocatalysts from extremophiles: implications for improving industrial bioprocesses)

Sept 5th: bioeconomy in the international and local context

Bio-based industry and bioeconomy in Europe (**Nelo Emerencia**, Biconsortium EU)

Bioeconomy at the regional level and activities of the Cluster Industrial Biotechnology CLIB²⁰²¹ (**Karl-Erich Jager**, Bioeconomy Research Center North-Rhine Westphalia)

Break

Integrated biorefineries and their relevance for local economy (speaker Novamont)*

Transition towards a bio-based economy: biotech research, innovation and entrepreneurship in Austria (Speaker BOKU University, Austria)*

Exercises: assignment and start of the work

Sept, 6th : a biorefinery at work

Visit to the plant Biochemtex S.p.A, Crescentino

Sept 7th : Bio-business and sustainability issues

An introduction to life cycle assessment of bio-based products: Life Cycle Thinking, Life Cycle Costing and Social LCA. (**M. Janssen**, Chalmers University)

From the University to the startup world: opportunities and threats for BioInnoTech (**M. Pisano**, BioInnoTech)

Lunch

On the rational use of resources (KIC raw materials) (**A. Vedda**, UNIMIB)

Exercises: Discussion of the first ideas and preliminary results

Sept 8th : Regulatory and societal issues

Issues on the exploitation, property and protection of biological resources (*)

LCA in practice: methodology and case studies (**M. Janssen**, Chalmers University)

Lunch

Exercises: Presentation and discussion of the results

Speaker to be confirmed