

BioMat Summer School 2023

3 ECTS

Processes and Innovation along the Value Chain of Bio-Based Materials

Jointly presented by three Institutes of the Department of Life Sciences at the Zurich University of Applied Sciences ZHAW

Bio-based materials are the future! Products sourced from fossil resources do not meet the requirements of a future sustainable society. To meet climate targets, to stop polluting the environment, and to use our natural resources carefully, fresh solutions must be brought forward that replace current petroleum-based products. This requires innovation along the entire value chain of bio-based materials, starting from sourcing the raw material, applying green chemistry for extraction and processing, using products sustainably, and taking end-of-life and recycling into consideration. Even more: to turn your ideas into reality, you must be able to present them as a convincing proposal, withstand criticism, and sell them with confidence.

The institutes of Food and Beverage Innovation ILGI, Chemistry and Biotechnology ICBT, and Environment and Natural Resources IUNR joined forces to offer their knowledge in a 10-day summer school on bio-based materials. You will learn from an interdisciplinary team, attend practical workshops in different labs, and write your own proposal for a project. You will be guided and challenged. You will finish by presenting your idea and celebrate your achievements.

Main topics and content of the summer school

- Theoretical background in relevant topics on bio-based materials
- Hands-on experience of key processes along the bio-based materials value chain: Production, sourcing, processing, use, end-of-life
- Introduction to life cycle assessment
- Intense proposal writing and presentation
- Inputs from innovative entrepreneurs and networking opportunities



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Details



- Target Group:** Students from bachelor (4th semester and higher) and master programmes at the department N as well as external students with a comparable education (e.g., natural/environmental sciences, engineering).
- When:** **August 28th until September 6th, 2023.**
A compulsory online preparatory course will be made available in late spring 2023 and must be completed before the beginning of the summer school. Expect a workload of 1 ECTS.
- Where:** Campus Reidbach and Campus Grüental of the ZHAW in Wädenswil
- Language:** English, fluency in writing and speaking is required.
- Costs:** free of charge
- ECTS:** 3 (1 for the online preparatory course, 2 for the summer school)
See details below or ask your programme director/counsellor on how to enrol within your study programme to obtain ECTS (note that not all programmes award ECTS).
- Workload:** According to ECTS: the online preparatory course will amount to a workload of 30 hrs and the summer school covers eight working days.
- Registration:** Apply by email to dominik.refardt@zhaw.ch. Make sure to tell us your full name, your degree program, and the year you are in.

Specific information on how to enrol, apply, and earn credits

BSc Lebensmitteltechnologie - Enrol in the module external efforts to obtain credits (1 ECTS for the preparatory course and 2 ECTS for the summer school). Please contact the LM study coordinator before you sign up.

BSc Biotechnologie - Enrol in the module external efforts to obtain credits (1 ECTS for the preparatory course and 2 ECTS for the summer school). Please contact the BT study coordinator before you sign up.

BSc Chemie - Enrol in the module external efforts to obtain credits (1 ECTS for the preparatory course and 2 ECTS for the summer school). Please contact the CH study coordinator before you sign up.

BSc Umweltingenieurwesen - The summer school counts as an external module, for which you must apply with the corresponding form first (you can find it here in the section ‚weitere Mobilitätsangebote‘). Once your application has been accepted, you can apply with us for the summer school itself. If you need help, kindly address the study counsellors of the BSc UI.

MSc Environment and Natural Resources - Enrol in the module individual specialisation to obtain 1 ECTS for the preparatory course and 2 ECTS for the summer school.

MSc Life Sciences Food and Beverage Innovation / Chemistry / Pharmaceutical Biotechnology - Enrol in the module external effort I (3 ECTS-Credits) to obtain 1 ECTS for the preparatory course and 2 ECTS for the summer school. Please be aware, the module external effort is an optional module and, thus, does not count towards your 90 ECTS!

MSc Preneurship in Regenerative Food Systems - Enrol in the module individual skills to obtain 1 ECTS for the preparatory course and 2 ECTS for the summer school. Note that this summer school may collide with other duties of your study programme, so be aware!



Life Sciences und
Facility Management

IUNR Institut für Umwelt und
Natürliche Ressourcen

Institute of Food and Beverage Innovation ILGI
Institute of Chemistry and Biotechnology ICBT
Institute of Natural Resource Sciences IUNR