

Conference

Biomat-Conference: Integrated Bio-based Materials Value Chains | Processes, Materials and Appli- cations

5th. & 6th of October 2022
in Wädenswil

Registration: zhaw.ch/biomat/



About the conference

The depletion of oil reserves, climate change, and significant negative impact on the environment and dependency on politically unstable regions are all drivers for seeking alternatives to fossil-based resources. The bio economy encompasses the production of renewable biological resources and the conversion of these resources, residues, by-products and side streams into value added products, such as food, feed, bio-based products, services and bioenergy. It aims to use 'green' materials instead of fossil-based materials to generate bio-based products.

BIOMAT conference takes place from 05 to 06 October 2022 in Wädenswil, Switzerland, and is organized by the Zurich University of Applied Science. The BIOMAT-Conference will focus on the development of new biomaterials, processing technologies and application of biomaterials.

One of the key missions of this conference is to present the latest developments and discuss the potential application of biomaterials to replace the fossil based ones.

Program 5. – 6. October 2022

Wednesday, 05.10.2022

- 08:30** Registration
09:00 Welcome, Prof. Dr. Urs Hilber, Dean ZHAW-LSFM

Processes

Moderation by Prof Dr. Selcuk Yildirim, ZHAW-ILGI

- 09:15** **Biomat Research Project,**
Prof Dr. Selçuk Yildirim, ZHAW-ILGI
- 09:20** **A competitive bioeconomy for a sustainable future**
Michael Cook, Cook Business Consulting
- 09:50** **Bioplastic from algae – Prospects and challenges of a sustainable production of PHB**
Dr. Dominik Refardt, ZHAW-IUNR
- 10:10** **Recent developments in tailoring material properties of PHA**
Prof. Dr. Manfred Zinn, HES-SO

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- 10:30** 30 minutes coffee break
11:00 **Processing biomaterials into thin fibers and their applications**
Prof. Dr. Christian Adlhart, ZHAW-ICBT
- 11:20** **Life Cycle Assessment of Cyanobacteria cultivated on a thin-layer Photobioreactor**
Alena Frehner, ZHAW-IUNR

Materials

Moderation by Dr. Dominik Refardt, ZHAW-IUNR

- 12:55** **Opportunities for bio-based material future products**
Katariina Torvinen, VTT, Finland
- 13:30** **Unlocking the full potential of lignocellulose for biochemicals and -materials production by using carbocation scavengers in biomass pretreatment**
Dr. Thomas Pielhop, ZHAW-ICBT
- 13:50** **Photobiorefineries towards the creation of added-value from urban waste**
Patricia Zamora PhD, AQUALIA, Spain
- 14:10** 30 minutes coffee break
14:40 **Biorefineries: the source of our future bio-materials**
Phillip Scholten, Bloom Biorenewables SA
- 15:00** **History and perspectives of polymers as biomedical materials**
Jens Thies PhD, MBI, DSM Biomedical
- 15:20** **Condensed tannins from forest biomass: bio-based molecules for polymer and adhesive application**
Christopher Holmes, BFH
- 15:40** **Q&A and closing speach**

Wednesday, 05.10.2022

Evening program

- 16:30** **Laboratory tours on the either the campus Grüental and Reidbach**
- 18:20** **Apéro riche in the building GC on the campus Grüental**

Program 5.–6. October 2022

Thursday, 06.10.2022

- 08:30** Registration
09:00 Welcome, Prof. Dr. Christian Adlhart, ZHAW-ICBT

Applications

Moderation by Prof. Dr. Christian Adlhart, ZHAW-ICBT

- 09:15** **Organic Recyclable Packaging: H2020 YPACK and USABLE PACKAGING European Projects**
Prof. Dr. Jose M. Lagaron, IATA-CSIC, Spain
- 09:50** **Use of side streams of food and agricultural industry for the production of packaging material**
Susanna Miescher & Nadine Rüegg, ZHAW-ILGI
- 10:10** **End-of-life Options for Bioplastics – The dichotomy between biodegradability and renewable resources**
Prof. Dr. Urs Baier, Biomasse Suisse
- 10:30** **30 minutes coffee break**
- 11:00** **Circularity of potato chips byproducts in the development of bioplastic packaging**
Dr. Idalina Gonçalves, University of Aveiro, Portugal
- 11:20** **Cellulose nanofibers coating for food packaging applications**
Dr. Gilberto Siqueira, EMPA
- 11:40** **Revalorizing side-streams: challenges & opportunities in non-food applications**
Cecille Marie Cassar, RethinkResource GmbH
- 12:15** **Q&A and closing speech**

Information and Registration

Language of the conference

English

Costs

CHF 100.– incl. coffee-break refreshments, lunch and dinner on the first course day

Contact

Gabriel Mäder, ZHAW, Einsiedlerstrasse 29, Postfach, CH-8820 Wädenswil

+41 (0) 58 934 50 51
gabriel.maeder@zhaw.ch

Registration

until **21st September 2022** online at
zhaw.ch/biomat/

Conference location

The conference will take place in the Kulturhalle Glärnisch in Wädenswil, Glärnischstrasse 3, 8820 Wädenswil.

With public transport

To the Kulturhalle Glärnisch: From Wädenswil train station to the stop «Glärnischl» with the bus 123, 127 and 128; go to www.sbb.ch or www.zvw.ch.

With the car

From the A3 motorway exit Wädenswil to the Glärnisch car park (Address: Glärnischstrasse 3, 8820 Wädenswil)

Eventlocation for wednesday evening

On Wednesday, there will be laboratory tours organised on the campuses Reidbach and Grüental. The dinner itself will take place on the Campus Grüental in the Building GC.

