

## Scientific Programme

(subject to changes)

### 20 January 2025 (Monday) Minisymposium

8:00	9:00	Registration	
Introduction into biobased materials			
			Speaker
9:00	9:10	Introduction into HES-SO	Sergio Schmid
9:10	9:30	EFB Workshop Biobased Materials: A few basic explanations	Manfred Zinn
9:30	9:50	The wonderful world of biopolymers	Manfred Zinn
9:50	10:20	Safe and sustainable by design polyesters: integrating structural modeling, ecotoxicity and biodegradation studies for fast screening	Lucia Gardossi
10:20	10:40	Coffee break	
10:40	11:25	Enzymatic degradation of plastics	Georg Gübitz
11:25	11:55	Insights into bacterial cellulose: From properties to application trends	Cristina Campano
11:55	13:00	Lunch break	
Introduction into bioprocesses			
13:00	13:30	High-throughput fed-batch cultures: Advancing bioprocess efficiency & innovation	Frédéric Forini
13:30	14:00	Scale-up of biopolymer synthesis from shake flask to bioreactor: What needs to be considered?	Karin Philipp
14:00	14:30	Real-time monitoring and model predictive control for inclusion body fermentations	Basil Imoberdorf
14:30	14:50	Coffee break	
14:50	15:20	Insights into bacterial cellulose: From properties to application trends	Maria Tsampika Manoli
15:20	16:50	Presentations by participants	
16:50	17:30	Apéro and networking (additional costs may apply)	

**21 January 2025 (Tuesday) Laboratory**

**Tailor-made biomaterials**

8:30 8:40 Program of the day

Manfred  
Zinn

Screening	Bioreactors	PHA biosynthesis	Biodegradation
Group 1	Group 4	Group 3	Group 2
Group 2	Group 1	Group 4	Group 3

10:10 10:40 *Coffee break*

Group 3	Group 2	Group 1	Group 4
Group 4	Group 3	Group 2	Group 1

12:10 13:10 *Lunch*

Microalgae	Tailormade PHA
Group 1 & 2	Group 3 & 4
Group 3 & 4	Group 1 & 2

14:40 15:15 *Coffee break*

15:15 16:00 Challenges and solutions in processing of composites containing biosourced fibres and matrices

Véronique  
Marchaud

16:00 16:45 tba

16:45 18:30 Workshop case studies

18:30 22:00 *Symposium fondue (additional costs may apply)*

## 22 January 2025 (Wednesday) Minisymposium and laboratory

Processing of biopolymers					
9:00	9:15	Program of the day	Manfred Zinn		
9:15	10:00	Keratin	Roger Marti		
10:00	10:30	3D printing	Daniel Werren		
10:30	11:00	Coffee break			
11:00	11:30	Valorization of Lignin	Philip Scholten		
11:30	12:15	Analysis of growth studies	Frédéric Forini / Melanie Morschett		
12:15	13:15	Lunch break			
13:15	14:00	Biodegradation of polymers	Georg Gübitz/Lukas		
14:00	14:45	Analysis and control of enzymatic degradation for the surface modification of biopolymers	Nils Hanik		
14:45	15:30	Keratin processing	Group 1	Group 2	Roger Marti
15:30	16:15	Downstream processing of PHA and their properties	Group 2	Group 1	Véronique Amstutz
16:15	16:45	Coffee break			
16:45	18:00	Workshop case studies			

## 23 January 2025 (Thursday) Minisymposium

Life cycle assessment and case studies			
8:30	8:40	Program of the day	Manfred Zinn
8:40	9:20	How sustainable are biotechnologies?	Tim Börner
9:20	10:00	Sustainability assessments to guide research and technology development	Claudia Som
10:00	10:40	Coffee break	
10:40	11:55	Workshop case studies	
11:55	12:15	Wrap-up of Workshop	Manfred Zinn

Optional: Afternoon sledging or Sion visit (*additional costs may apply*)