

**Student Camp 2019**

**25-28 February**

# **Biorefineries and Biobased Industrial Products**

**Wood KPLUS, Linz, Austria**



This project has received funding under the European Union's Horizon 2020 research and innovation programme under grant agreement N° 656760



## General Course Information

The 2019 Edition of the **Student Camp** will take place between **25-28 February** at the Wood KPLUS headquarters in Linz, Austria. Participants will gain experience on the **wood pulp industry and its non-food biorefinery products**. The Student Camp will focus on **plant biomass, used as feedstock to produce a range of products spanning from fuels and fertilizers to chemicals, polymers, adhesives, and energy**.

### What is the Student Camp?

For 4 days you will join **small, interdisciplinary groups of students**, and together with **Wood KPLUS experts, industrial partners and researchers**, you will develop innovative solutions to complex issues affecting the biorefinery sector. You will experience first-hand how this sector works thanks to the **on-site visit of the Lenzing Industrial plants**.



©Lenzing- Photo: Lenzing Site

### Why focussing on the biorefinery sector?

The industrial use of raw materials, from agriculture, forestry, landscape conservation, and organic waste management, is gaining new momentum.

Plant biomass is used as feedstock to produce a wide range of products for all areas of life.

## Application Procedure

### Who are we looking for?

- Students of the masters “Biorefinery Engineer” at TU Graz, and “Bioresource Value Chain Manager”, at the University of Twente.
- Students (Bachelor, Master, PhD) enrolled in degrees with the following background: Chemistry, Biotechnology, Process Engineering, Resource Management, Marketing, Business.

Academic Recognition: 3 ECTS

### Registration

Register to the Student Camp 2019 by [sending an email to Prof. Dr. Birgit Kamm, Key Biorefinery Researcher at Wood KPLUS](#).



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### Application Deadline

30 January 2019

### Expenses

Costs and organization of arrival and departure is in the responsibility of the participants. Pöstlingberg dinner on day two: 30 euro + VAT per person. Participants are invited to bring along their chemistry coats, required for the laboratory experiments on day 3.



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### Suggested Accommodations

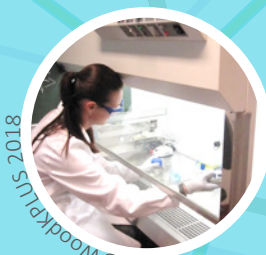
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# Tentative Course Programme

## Day 1

### Session I: Substantial use of wood and non-wood biomass

13.00	Welcome and Introduction to the Student Camp 2019
13.30	Forest resource and aspects of forestry based industry
14.15	Biobased Composites & Processing
14.45	Cascade use of non wood biomass
15.00	Discussion Session 1
15.30	Coffee Break
16.00	Critical parameters in existing systems
17.00	Results of Discussion



## Day 3

09.00	Visit and Experiments at the Wood KPLUS Biotechnology Area
10.30	Visit and Experiments at the Wood KPLUS Chemistry Area
12.30	Lunch Break
13.00	Experiments in wood physical and analytical methods, sensors
14.30	Plasma treatment on biobased materials
15.00	Discussion Session 3
16.00	Coffee Break



## Day 2

### Session II: Visit of Lenzing

10.00	Primary refinery and pulping industry
10.30	Products of Lenzing AG
11.00	Visit to the Lenzing Industrial plants
12.30	Lunch Break
13.30	Return to Linz

### Session III: Biobased Products, Market

15.00	Bio-based commercial products on cellulose basis
15.30	Recent developments of market product lignin
16.00	Discussion Session 2
18.00	Pöstlingberg Dinner (Optional)

## Day 4

### Session IV: Biorefining, Market, Sustainability

09.00	Biorefineries: Industrial Processes and Products
09.30	Biorefinery Economics
10.00	Biomass, Biorefineries and Sustainability
10.30	Discussion Session 4
11.00	Coffee Break
11.30	Future aspects of biorefining, market and sustainability
13.30	End of the Student Camp



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