Call for Participation

ÖWGP Summer School on Sustainable Production

July 10-14 2023, Graz and Vienna

Goals

The goal of the ÖWGP Summer School is to **promote joint research** of young Austrian and European scientists, especially Ph.D. students, from various disciplines related to the area of production systems, product and materials research, also in the light of humanity's current exceptional challenges, such as climate change, pandemics, the circular economy, increasing scarcity of natural resources, structural changes in work, geopolitical shifts and demographic developments and to stimulate interdisciplinary European research in this field. The summer school is intended to provide **excellent education** carried out by distinguished experts and a platform for getting together and **meeting other young researchers** from this area.

Format and Target Audience

The school is mainly targeted at students doing their **Master or PhD** at one of the **Austrian Universities** of the ÖWGP members but is also **open to international students**, especially within Europe, to promote international cooperation and exchange. We especially welcome students studying production systems, product and materials from a technical viewpoint but also from a societal or economic perspective who are interested in **inter- and transdisciplinary research** exchange. Instruction formats include lectures, seminar-style discussions but also interactive exercises under the supervision of renowned experts in the field.

Participation and Costs

Students can apply for participation in the summer school via this link (https://forms.gle/Gj5k6WfxFJoxnm7H6) where they need to fill in a google form with personal data and attach a CV.

Application Deadline: May 7 2023

Notification of Acceptance: May 15 2023

Up to **24 students will be accepted** for the summer school. Accepted students are expected to attend all sessions, starting from Monday, July 10, 11am with the opening in Graz until the closing session on July 14, 12:30pm in Vienna. The transport from Graz to Vienna will be arranged and is free of charge for the students. Also **attendance is free of charge** and includes lunch on days 1-4 of the summer school as well as a welcome reception on Monday. Students will have to arrange their travel to Austria / Graz on their own as well as accommodation in Graz and Vienna if needed. Students in need for further organizational support or a scholarship may contact the organizers once they are accepted for the school.

Learning Outcomes and Grading

Students will be **graded based on their active participation** in the summer school. After successful completion, they will receive a certificate of attendance and a confirmation that they have passed courses equivalent to **2 ECTS** including the list of courses they have chosen. Students will also have the opportunity to deliver a final paper after the summer school in cooperation with the supervising professors which is **planned to be published in a book**.

Organizing Committee

Gabriele Kotsis, Johannes Kepler University Linz, gabriele.kotsis@jku.at
Franz Haas, Technical University Graz, franz.haas@tugraz.at
Sebastian Schlund, Technical University of Vienna, sebastian.schlund@tuwien.ac.at

Programme Overview

- **Keynote**
  Roberta De Palma (Unido)
  Chief Technical Adviser, Circular Economy and Environmental Protection Division, Circular Economy and Resource Efficiency Unit
- **Polymer Engineering**
  Instructor: Vasiliki-Maria Archodoulaki (TU Wien)
  - Part I: Plastics and their impact on the climate and environment (teaching unit)
  - Part II: Understanding packaging (Workshop)
- **Manufacturing**
  Instructors: Sebastian Schlund, Fabian Holly (TU Wien)
  - Part I: Circular Economy in Manufacturing
  - Part II: Towards Adaptive and Personalized Work Systems in Manufacturing
- **Composites**
  Instructor: Ralf Schledjewski (Montanuniversität Leoben)
  - Part I: Sustainable economy
  - Part II: Model based processing of composites
- **Human Work**
  Instructor: Robert Weidner, Lennart Ralfs (Universität Innsbruck)
  - Part I: Sustainability of Human Work
  - Part II: Sustainability of Human Work (continued)
- **Lightweight Design**
  Instructor: Stefanie Elgeti (TU Wien)
  - Part I: Tutorial on Shape Optimization in Lightweight Design
  - Part II: Accompanying Workshop
- **CPPS Modelling**
  Instructor: Alois Zoitl (Johannes Kepler University Linz)
  - Part I: Semantic CPPS Modelling with OPC UA
  - PArt II: Developing Distributed Control Systems for CPPS
- **Surface Engineering**
  Instructor: Paul H. Mayrhofer (TU Wien)
  - Part I: Tutorial on Sustainability in Surface Engineering
  - Part II: Accompanying Workshop
- **Production Engineering**
  Instructor: Franz Haas (Technical University Graz)
  - Part I: Tutorial on Sustainability in Production Engineering
  - Part II: Accompanying Workshop

Time Table

Time	Monday, 10.07. Graz	Tuesday, 11.07. Graz	Wednesday, 12.07. Graz->Wien	Thursday, 13.07 Wien	Friday, 14.07. Wien
9.00-10.30		Parallel Lectures Composites / G-Al1	Transfer Graz->Wien	Parallel Lectures Manufacturing / Polymer Engineering II	Student Presentations and Paper Workshop
10.30-11.00		Coffee Break		Coffee Break	Coffee Break
11.00-11.15	Welcome, Opening	Parallel Lectures Composites II / G-Al2		Parallel Lectures Human Work I / Lightweight Design I	Student Presentations and Paper Workshop
11.15-12.30	Keynote **Roberta De Palma** Circular Economy and Resource Efficiency Unit, Unido				
12.30-14.00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Closing End of Seminar
14.00-15.30	Student 5 minute presentations	Parallel Lectures Surface Engineering II / Product Engineering II	Parallel Lectures Manufacturing II / Polymer Engineering I	Parallel Lectures Human Work II / Lightweight Design II	
15.30-16.00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16.00-17.30	Parallel Lectures Surface Engineering I / Product Engineering I	Company Visit HyCentA	Company Visit Manner	Industrial Panel	
Evening	Get Together Party				