

1st Summer School on Circular Design and Management of Packaging, Construction, Mobility & Electronics

September 18 - September 29, 2023

Goal

Circular economy (CE) is an innovative way of thinking, looking at production and consumption in a more sustainable, connected way. Instead of the traditional linear approach, this model seeks to minimize waste and keep resources in circulation. The CE model benefits people and the planet by creating an interdependent and responsible ecosystem for everyone.

In the frame of the 1st Summer School on Circular Design and Management of Packaging, Construction, Mobility & Electronics the manifold aspects (policy, legislation, technology, logistics, and economics) of Circular Economy are taught and discussed with international experts in the field. Besides the theoretical background, best practices of CE for different sectors of our economy are introduced and discussed. Moreover, the summer school is completed by technical visits of the industry.

Organization

TU Wien, Academy for Continuing Education

Katharina Neumann, BA
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Academic Directors

Prof. Dr. Christoph Scharff & Assoc. Prof. Dr. Johann Fellner Institute for Water Quality and Resource Management Karlsplatz 13/226 A-1040 Vienna





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Programme

<u>Week 1 | September 18 – 22</u>

Monday, September 18

- Welcome and Introduction (Christoph Scharff & Johann Fellner, TU Wien)
- Policy and Principles of the Circular Economy Concept (Karl Falkenberg, EU Commission, ret.)
- Clean Cycles and Final Sinks A Perquisite for Circular Economy (Helmut Rechberger, TU Wien)

Tuesday, September 19

 Circular Economy in the PACKAGING SECTOR I – from design to recycling (Christoph Scharff, TU Wien; Sabine Nadherny-Borutin, Plastics Europe Austria; Manfred TACKER, packforce)

Wednesday, September 20

• Circular Economy in. the PACKAGING SECTOR II – recycling of plastics and paper (Werner Kruschitz; Wolfgang Hofer, OMV; Thomas Greigeritsch, MM Service GmbH)

Thursday, September 21

 Circular Economy in the PACKAGING SECTOR III - Technical visits to sorting and recycling facilities for packaging waste (plastics and paper)

Friday, September 22

• Circular Economy in BUILDINGS, INFRASTRUCTURE AND MOBILITY I – Buildings (*Arne Ragossnig, RM Umweltkonsulenten ZT GmbH & ISWA Austria; Johannes KISSER, alchemia nova*)

Week 2 | September 25 – 29

Monday, September 25

- Circular Economy in BUILDINGS, INFRASTRUCTURE AND MOBILITY II Public Transport & Infrastructur
- Circular Economy Policy of a Public Transport Provider (Eva Keuschnig, Wiener Linien)
- Case studies of Implementing Sustainable Resource Management and Circularity in Public Transport (Hans Daxbeck, RMA)

Tuesday, September 26

- Circular Economy in BUILDINGS, INFRACTURE AND MOBILITY III Automotive
- Circular and Climate-Neutral Mobility The Case of Vehicles (*Hanno BUCHNER, Magna Steyr Fahrzeugtechnik*)
- Recycling of BEV Batteries (Thomas Nigl, Leoben University & Bettina Rutrecht, K1-MET)

Wednesday, September 27

 Digitalization of the Circular Economy and Recycling of Electronics I – Re-use and Recycling of Waste Electric and Electronic Equipment (Kerstin KUCHTA, TU Hamburg; Matthias NEITSCH, RepaNet)

Thursday, September 28

• Digitalization of the Circular Economy and Recycling of Electronics II – Tracking and Digitization of Material Flows (*Michaela Heigl & Felix Badura, digi-Cycle ; Andreas Opelt, Saubermacher*)

Friday, September 29

Technical Visits to Waste Recycling Facilities and Car Manufacturer

Key Learnings

- You will learn the relevant concepts and legislation behind Circular Economy;
- You will learn how assess the current level of circularity of different sectors and how to enhance it by developing and implement Circular Economy strategies;
- You will develop an understanding of important factors that need to be considered in order to unfold the full potential of Circular Economy;
- You learn how modern tools (such as digitalization) could foster the circularity of materials;
- You will gain a deep inside into best practice examples for Circular Economy in different sectors, namely Buildings, Infrastructure, Mobility, Packaging and Electronics;
- You will get also familiar with potential limitations of the Circular Economy concept and the dynamics in recycling technologies.

Key Facts

The summer school takes place in **small groups (15-25 participants)** in order to enable an intensive elaboration of the topic and to cater to individual needs and create an atmosphere of personal exchange. The faculty of summer school is composed of renowned experts in Circular Economy based in industry, administration, and university.

Didactics: theoretical contents (incl. relevant legislation), case studies-based learning, field visits at the industry, collegial case consultation, reflections and discussions.

Our academic lecturers are **renowned researchers and scholars** who have made significant contributions to the field of circular economy through their publications and expertise. In addition, we have carefully selected **industry professionals** who have successfully implemented circular economy practices in their respective sectors. Their practical experience and first-hand knowledge of the challenges and opportunities in these fields will enrich your learning experience and provide you with valuable industry insights.

Certificate: 15 ECTS credits

Location: TU Wien

Language of Instruction: English

Tuition Fee: Students: € 3.500 | Professionals: € 5.200 (not including travel & accommodation costs or visa fees)

Application

Admission Requirements

- Internationally recognized first degree in any field of study (bachelor's degree), or high school diploma and a minimum of two years relevant professional experience.
- English language proficiency. Non-native speakers need to provide evidence of their language skills (e.g. CPE, IELTS, TOEFL).

Application Documents

<u>Registration Form</u>; Curriculum Vitae; statement of Purpose (max. 2 pages); Scans of: High School Diploma, Academic Degree(s), other relevant certificates (e.g. proof of professional experience), passport; digital photo (284x 426 pixels, formats: jpg, png, gif)

Send the completed registration form along with your documents to rewace@tuwien.ac.at

Application Deadline: August 31, 2023