

The Professorship Circular Economy at the TUM Campus Straubing for Biotechnology focuses on circular economy and bioeconomy systems for a sustainable use of resources.

Currently, we are looking for a master's thesis candidate with the topic

Awareness raising in a circular economy – a case study of mobile phones

at the earliest possible date.

In 2018, 1.4 billion smartphones were sold on a worldwide scale for which a huge quantity of raw materials (e.g. gold, silver, copper) had to be mined beforehand. While consumption keeps increasing, reusing and recycling of mobile phones tends to stagnate on a low level. The massive disposal of mobile phones further contributes to the increasing amount of e-waste which adds up to 53.6 million metric tons for the year 2019. This number sets a new record due to an increase of 21 per cent in just five years.

Within the area of circular economy, a wide range of different solutions are already available to counteract this problematic development. Innovative and diverse business models are evolving that aim at closing cycles and slowing resource consumption.

However, many consumers are still not aware of neither the negative environmental implication their purchasing and disposal behaviour causes nor of the circular solutions that may help to decrease their adverse ecological impacts.

Thus, the goal of this master thesis is to develop a solid framework for awareness raising in a circular economy for the use case of mobile phones. The framework will be based on a thorough literature review, the application of the latest scientific research results and interviews that will be conducted.

Your tasks:

- Literature research on awareness raising programs with focus on circular economy and analysis of available research results regarding the programs' effectiveness
- Conduct interviews with program managers, practitioners, participants etc.
- Development of an awareness raising program for higher levels of circularity in mobile phone consumption and disposal

Your skills:

- You are close to finishing your Master's degree, preferably in a field closely related to sustainability management, environmental science or pedagogy
- Experience in conducting interviews
- First experience with interview coding and software (e.g. MAXQDA)
- Strong motivation and interest for finding ways to transform the current economy into a circular one
- Ability to work and learn new topics autonomously
- Proactive, goal-oriented and communicative way of working
- Good language competence in English, written as well as spoken

In case you are interested in this topic or have questions, please contact vanessa.heinrich@tum.de until **31.12.2020** to discuss the further proceeding.