



**APPLIED
CIRCULAR
SUSTAINABILITY**



IBAM

Open Innovation Challenge

Boost circular economy through Additive Manufacturing

For decades, society is confronted with an ever-increasing demand for resources and energy, and consequently steadily increasing waste. The proper handling of resources, the design of production processes, and the use and reuse of products and related materials require innovative concepts across the entire value chain.

Additive manufacturing (AM) can play an important role in this systemic challenge, providing potentials for radical innovation and solutions for a circular economy.

We plan to focus on the following fields of interest:

Process and Material Design

- use side streams
- degradable and recyclable materials
- biomaterials

Design for Eternity

- traceability, separability
- integration of intelligence

Design for Repair and Re-use

- disassembling & recycling
- reparability and modularity
- directory of reusable parts and materials

Questions to be discussed at the workshop:

- Is material recycling through additive manufacturing sustainable and economical?
- Are there materials that are predestined for recycling through AM? (e.g. titanium, organic materials, etc.)
- Does AM shorten supply chains and enable localized production?
- Does AM support the circular economy in the context of digitalization?
- Are material savings through a digital inventory and additive manufacturing realistic?
- Is on site repair with AM in the near future possible?

In our workshops (2 dates), you will discuss and develop needs and ideas in interdisciplinary teams together with **experts from the Innovation Boosters Additive Manufacturing and Applied Circular Sustainability on how additive manufacturing can make an important contribution on the way to a circular economy.**

The best ideas will be funded for further work with up to CHF 25'000.-.

1st day: Challenge Framing

- **Keynotes**
 - Sustainability through circular economy (CE)*
by [Ben Nott](#), Co-founder of Blanco-ad, Architect
 - The role of additive manufacturing in CE*
by [Prof. Dr. Markus Bambach](#) – ETH
- **Understanding the problems** followed by a lunch
- **Defining Challenges** followed by a network-apéro

Tuesday, 28th of March 2023; 10:00 – 17:30

Proof of Concept Lab

Lagerplatz 24, 8401 Winterthur

2nd day: Ideation

- **Developing ideas** followed by a lunch
- **Solution Finding**
- **Pitching** followed by a network-apéro

Tuesday, 2nd of May 2023; 10:00 - 17:30

HES-SO Valais-Wallis

Rue de l'Industrie 21, 1950 Sion

This workshop is open to experts from industry, economy, politics, society and academia. Participation is free of charge. Number of participants is limited.

Registration:

www.ibam.swiss/registration-oic

registration deadline: 14th of March 2023

Further information and Contact:

IBAM: [Website](#) email: contact@ibam.swiss

IB ACS: [Website](#) email: ntn-acs.zpp@zhaw.ch