

Training on Multi-Physics and **Multi-Scale Simulations for** Additive Manufacturing

CHALLENGE AND SOLUTIONS

Additive Manufacturing (AM) has developed rapidly during the last decade. Various technologies such as SLM or DED have demonstrated new opportunities in flexible product design and resource-efficient process development. While many companies are entering the AM market, manufacturers still struggle to produce high-quality, certifiable parts with these new technologies.

Project TR-AM aims to educate todays and future professionals using state-ofthe-art modelling and simulation software, to optimize part designs and additive build-up processes, already in the development stage.

TIMING AND MILESTONES

- Project Kick-Off April, 2021
- Nugget and training concept done July, 2021
- Live training preparations at TU Wien Pilotfabrik 4.0 finalized September, 2021
- Nuggets and learning paths integrated on skills.move platform February, 2022
- Pilot training online / live at Vienna (depending on COVID19 restrictions) – April, 2022



Manufacturing



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UNIVERSITY of TARTU

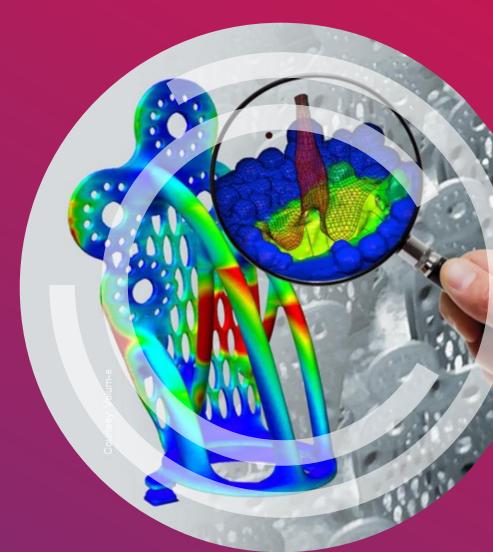


Thanks to EIT, we are part of the development and industrialization of one of the most exciting new technologies in many years!

MAIN PROJECT RESULTS



ALVO AABLOO Professor of Polymer Materials Technology, IMS Lab, University of Tartu





Self-evaluation tool for industry to identify needs for competences in additive manufacturing (AM) design and process development



• Set of EIT-M labelled learning nuggets focusing on finite element modelling and simulation for AM available on the EIT learning platform skills.move



Live-Training opportunities at TU Wien Pilotfabrik 4.0 Vienna, including machinery equipment to actually produce simulated parts!

Courtesy: Volum-e