



inspire is a publicly funded technology competence center of the Swiss Federal Institute of Technology Zurich (ETHZ) in collaboration with the Swiss MEM industry. Inspire supports the Swiss industry in researching and developing cutting-edge technologies, processes and methods. The inspire Product Development Group Zurich (ipdz) focuses on the industrialization of Additive Manufacturing to strengthen the Swiss industry's competitiveness.

Research Associate – Design for Additive Manufacturing and Design Tools (100%) with the option of a PhD at ETH Zurich

Place of work is Zurich, employment as of now or by agreement

Background

Additive Manufacturing (AM) enables the transformation of products and services through a digital value chain and is a key driver for innovations. Additive Manufacturing offers a huge innovation potential for a wide range of applications, but it is still poorly understood how these new products, value chains, and business models look in detail. We have dedicated our research to understanding additive manufacturing in the context of the value creation of specific applications. Our work ranges from designing new parts and systems to developing new digital process chains and business models. In our projects, we work on developing new AM applications and implementing AM technology in companies along with the needed methods and processes.

To strengthen the AM team, we are looking for a new team member, ideally with experience in AM. The position offers the possibility of a doing PhD program, which will be supervised by Prof. Mirko Meboldt at ETH Zurich, who is co-responsible for the inspire team. All our projects are in collaboration with industrial partners. The projects focus on applications for AM, implementation, new part designs, automated design tools, change management, and business models.

Field of activity

The design of AM parts requires a high level of process and application knowledge that is not yet available. The goal is to perform pilot studies with Laser-Based Powder Bed Fusion (L-PBF or SLM) and Binder Jetting (BJ) for specific applications.

- Development of L-PBF and BJ parts for specific applications
- Development of automated design tools for AM
- Knowledge transfer to industrial partners

Your profile

- Very good Master's degree (Master of Science)
- Passion for additive manufacturing and innovation
- Preferably experiences in mechanical engineering and development
- Interest in applied research with industry collaborations
- Prior knowledge and experience in relevant aspects of the specific profile
- Independent work style and a confident manner
- Ability to work in a team
- Proficiency in the English language, both written and spoken
- Knowledge of the German language is an advantage
- Applicants must be either Swiss citizens, EU or EFTA nationals or have the legal right to work in Switzerland

Our offer

We offer an inspiring, supportive and team-based industry and research environment that helps you to create your own research and expertise profile. Our team shares a common mission to make a measurable impact in both research and research transfer. The team has an excellent international and national network with research institutions and industrial partners. In the field of design and industrialization of additive manufacturing, we are one of the leading groups with a strong reputation.

Curious?

Then we look forward to receiving your application.

Please apply exclusively via mail to Petra Kahl, kahl@inspire.ethz.ch, CC to ferchow@inspire.ethz.ch. If you have any questions, please contact Dr. Julian Ferchow per mail or by phone +41 (0)44 633 88 18.