

**Ph.D. researcher in the field of materials for Additive Manufacturing**  
**Dept. Aerospace Engineering, Institute of Materials Science**  
**(TVöD E13)**

Our team is doing research on various aspects of the materials science of additive manufacturing. This includes the development of novel alloys and composites, investigation of materials used in multi-material AM, process-microstructure-property relationships, fracture and fatigue of AM-produced alloys, novel AM processes, and AM-produced metamaterials. We are currently looking for a researcher interested in doing a Ph.D. in the above mentioned fields joining our team as soon as possible.

**What you will be working on:**

- The Ph.D. project could be focused on one of several topics, depending on your interests and expertise, to be decided during the application process:
  - 3D printing of (oxide) ceramic materials via the MEX, debinding and sintering process route, with the goal of producing complex, mechanically loaded parts
  - Multi-material processing of novel alloy combinations: optimization of interface properties via process parameters, production of metamaterials or function-integrated composites.
  - Laser-wire DED processing of steels: productivity improvements, intrinsic heat treatment of the processed material, production of complex shapes.
- Participation in the teaching tasks of the institute (e.g. by supervising labs and student theses)
- Publication of your results in peer-reviewed journals and presentations at international conferences.

**What you bring to the table:**

- You have a M.Sc. degree (or equivalent) in Materials Science with very good grades. If your degree is in physics, mech. eng., or similar, please explain your interest in materials in your application.
- You speak and write English fluently. Knowledge of German is a bonus and will help you in your daily life at the institute and beyond.
- You enjoy working in the lab and in a small, international team (~12 people)

**What we will provide:**

- You will be employed as a researcher according to TVöD E13 with a fixed duration contract (initially: 2 years; pending review of the performed tasks and your qualifications according to §12 TVöD)
- You will be able to pursue your Ph.D. full-time with active support from your supervisors.
- A stimulating environment working with a young, dedicated team of materials researchers embedded in a larger group of institutes working on various aspects of AM (cf. project FLAB-3Dprint)
- Excellent experimental facilities in-house and a well-established network of academic and industrial partners should your research require collaboration.
- Part-time work and partial work from home is possible.

The University of the Bundeswehr München is trying to achieve an increasing share of female scientists, so we especially welcome their application. At equivalent skill level, applications by handicapped people will be given special consideration.

**Interested?**

Then please contact Univ.-Prof. Dr. Eric A. Jäggle ([eric.jaegle@unibw.de](mailto:eric.jaegle@unibw.de)) directly. Please include a short (max. ½-1 page) letter explaining why you are interested in working with us, an up-to-date CV, and all relevant certificates (including transcripts or other documents listing your grades).

With your application, you consent to your personal data being saved, processed, and forwarded to all relevant offices for the purpose of processing your application. More detailed information regarding privacy can be accessed at <https://www.unibw.de/home/footer/datenschutzzerklaerung>

**We are looking forward to your application!**