Universität der Bundeswehr München

Post-doc researcher / group leader
in the field of materials for Additive Manufacturing
Dept. Aerospace Engineering, Institute of Materials Science
(TVöD E13/14)

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 post-doctoral researcher interested in the above-mentioned fields joining our team as soon as possible.

What you will be working on:

- Your research 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, hierarchically structured 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.
- Preparation of project proposals and management of existing extramural-funding projects.

What you bring to the table:

- You have a Ph.D. (or equivalent) in Materials Science, physics, M. Eng., or a similar field.
- You have published in peer-reviewed journal as part of your previous research.
- You have worked on AM, alloy design, composite synthesis, sintering, or similar topics before.
- Previous experience with applying for funding and managing (several) projects is beneficial.
- 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 and may be required after a certain time.
- You enjoy working in the lab and in a small, international team (~12 people)

What we provide:

- You will be employed as a researcher according to TVöD E13 or E14, depending on your qualifications (pending review of your tasks and qualifications according to §12 TVöD).
- You will be working as a post-doc researcher with the opportunity to become a group leader, take over supervision tasks and responsibilities for labs.
- The contract will initially have a fixed duration of 2 years. There is an opportunity at a later time to convert the contract to a permanent one, including civil servant status.
- You will be able to pursue a habilitation degree 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.
- Work at a family-friendly campus university on the outskirts of Munich, including sports and child care facilities, health promotion activities, and advanced training offerings.
- 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 disabled people will be given special consideration.

Interested?

Then please contact Univ.-Prof. Dr. Eric A. Jägle (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, your 3 most important publications, and relevant certificates (incl. 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/datenschutzerklaerung

We are looking forward to your application!