Job offer

The Institut für Strahlwerkzeuge (IFSW) at the University of Stuttgart (www.ifsw.uni-stuttgart.de) is one of the world's leading research institute in the field of laser technologies for manufacturing applications.

In the department "Laser Development and Laser Optics", the group "thin-disk lasers" focuses on the research and development of new methods and concepts for novel designs, assembly and operation of thin-disk gain modules and their use in different laser systems in all operating modes from CW to ultra-short pulsed (femtosecond).

For the challenging research and development activities in this ambitious field we are looking for a motivated and qualified

**Physicist or engineer**

with a university Master degree as a scientific assistant with knowledge in

- Laser physics
- Laser optics
- Interferometry
- Design, assembly and operation of lasers and optical systems
- Thermo-mechanical simulation (Matlab, Comsol-multiphysics, ANSYS, etc.)
- Knowledge in electronics and CAD will be highly appreciated (optional)

The most important tasks are

- Development of mode-locked high power disk laser oscillators Development of CPA (Chirped Pulse Amplification)-based high power disk laser multipass amplifiers
- Investigation of nonlinear (pulse) compression in high power disk laser multipass amplifiers
- Assistance in the acquisition of new research projects
- Assistance in the conduction of bilateral industrial projects
- Supervision of students
- Assistance in the daily-operation of the institute

We expect an above-average university degree, the willingness to familiarize oneself with complex physical and technological problems as well as independent and responsible work with state-of-the-art equipment.

We offer the opportunity to work towards a doctorate in a motivated team of engineers and physicists. The offered position is remunerated according to TV-L 13. The University of Stuttgart would like to increase the proportion of women in the scientific field and is therefore particularly interested in applications from women. Severely disabled persons will be given priority in the case of equal suitability. The contract is initially limited to 2 years duration with a possible extension upon agreement.

Please send your complete application documents (Letter of motivation, Curriculum Vitae, track records of your Bachelor and Master, 2 recommendation letters) in electronic form only and until the 8 of December 2023 to:

Dr. Marwan Abdou Ahmed, Institut für Strahlwerkzeuge, University of Stuttgart, Pfaffenwaldring 43, D-70569 Stuttgart, marwan.abdou-ahmed@ifsw.uni-stuttgart.de