



**Leibniz
Universität
Hannover**

The Hannover Center for Optical Technologies (HOT) and Faculty of Mechanical Engineering invites applications for the position of a

Research Assistant (m/f/d) - Intelligent optical design and optimization (Salary Scale 13 TV-L, 100 %)

to be filled as soon as possible. The position is initially for 3 years (with possible extension). The position provides the opportunity of further academic qualification, such as a doctoral degree.

Responsibilities and duties

The duties of this position include the use of existing software for optical simulation at the micro- and nano-scale, and the development of artificial intelligence algorithms and optimization techniques for the automatic discovery and engineering of new optical devices. This research has significant potential to accelerate the production of new optical devices, such as plasmonic and dielectric metasurfaces and metamaterials, waveguides, optical phased arrays, nanophotonics systems, etc.

Hiring requirements

Applicants to the position must have a relevant Diploma or Master degree, for example in physics, photonics and optics, electrical engineering, mechanical engineering, computer science or a related field. The ideal candidate has a strong background in optics and photonics, electromagnetic theory, and code development. Knowledge in optimization techniques and/or artificial intelligence is desirable. The candidate should have the ability and willingness to work together with experts from a broad background in science and technology. The successful candidate will demonstrate creativity, motivation, and problem-solving skills. In addition, very good communication skills in English, oral as well as written, are expected.

Our offer

As a member of our international team, you have the opportunity to sharpen your scientific profile in a dynamic and excellent research environment and advance in your professional career. We offer a scientifically and intellectually inspiring atmosphere at a leading technical university with a long tradition of research in optics and photonics. The Leibniz University Hannover is home to several specialised institutes and organisations in this fast-evolving research field, e.g. the Cluster of Excellence PhoenixD (Photonics, Optics, and Engineering, Innovation Across Disciplines), the HOT - Hannover Centre for Optical Technologies and the newly founded Leibniz School of Optics & Photonics. PhoenixD alone comprises of more than 100 scientists from the fields of physics, mechanical engineering, chemistry, electrical engineering, computer science and mathematics. Concerning teaching, students benefit from the existing Master's degree programme Optical Technologies and a planned Bachelor's programme in Optics & Photonics. Leibniz University has a long track record of successful spin-offs in the field of optical technologies. Quite a few specialised companies reside in the Hannover region, and many of them have close ties with the university. An internationally well-known non-profit research institute for photonics and laser technology is the Laser Zentrum Hannover e.V. (LZH).

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Part-time employment can be arranged on request.

As an equal opportunities employer, Leibniz University Hannover intends to promote women and men. For this reason, suitably qualified women are specifically invited to apply. Preference will be given to equally qualified applicants with disabilities.

For further information, please contact Prof. Dr. Antonio Calà Lesina.

Please submit your application with the usual documents (CV, Cover Letter with research interest and motivation, Transcripts, etc.) in electronic form to

Email: antonio.calalesina@hot.uni-hannover.de

or alternatively via postal mail to:

Gottfried Wilhelm Leibniz Universität Hannover

HOT - Hanover Centre for Optical Technologies

Nienburger Str. 17

D-30167 Hannover

<http://www.uni-hannover.de/jobs>

Information according to Article 13 GDPR for the collection of personal data can be found at <https://www.uni-hannover.de/de/datenschutzhinweis-bewerbungen/>.