

The Leibniz Institute for Surface Engineering (IOM) in Leipzig is seeking to fill the following position starting in September 2026 for a limited duration of three years:

Marie Skłodowska-Curie Actions Doctoral Network - Training & Research in Advanced Dispersion Engineered grating-waveguide Structures (TRADES) (m/f/d)

The Leibniz Institute of Surface Engineering (IOM) conducts research into new functional and precision surfaces for applications of high social relevance and innovative technologies. The focus is on fundamental physical and chemical processes using ions, electrons, plasmas, and photons. We are part of the Leibniz Association, one of the four major non-university scientific organizations with 96 institutes in Germany.

We are looking for a competent, open-minded, and team-oriented personality to join the Marie Skłodowska-Curie Actions doctoral training network "Training & Research in Advanced Dispersion Engineered Grating-Waveguide Structures" (TRADES) as a doctoral candidate in September 2026 to further advance the ion-beam-based fabrication of such dispersive elements.

We offer you:

- Excellent research infrastructure and state-of-the-art technical equipment
- An exciting role with diverse activities in an interdisciplinary working environment, along with the possibility of pursuing a doctorate
- Research activity for 36 months
- Attractive salary plus allowances package according to the Marie Skłodowska-Curie/ Innovative Training Networks rules
- Flexible working hours (40 hours/week)
- A wide range of offerings to support work-life balance

Your tasks:

- Research on advanced technologies for the reactive ion beam etching of pulse compression gratings
- Investigations on ion beam-based etching processes used for the pattern transfer
- Simulation and experimental validation of pattern transfer on optical substrates
- Gain hands-on experience with state-of-the-art ultra-precision manufacturing techniques, vacuum equipment, and surface analysis systems, and enhance your practical skills
- Help develop a deeper understanding of high-fidelity grating waveguide structures fabrication

Our requirements:

- Completed Master's degree in the field of engineering, physics, chemistry
- Basic knowledge in physics, materials science, optics manufacturing technology
- Experience with programming tools, and practical experimentation with vacuum systems and surface characterization techniques
- Interest in working in an international and interdisciplinary team
- You must not have resided or carried out your main activity (work, studies, etc.) in Germany for more than 12 months in the 36 months immediately before their recruitment date Willingness to integrate into an interdisciplinary and international research group
- Goal-oriented way of working and pragmatic attitude as well as high ability to work in a team
- Secure IT user skills
- Very good written and spoken English skills

Severely handicapped individuals and those of equivalent status will be given preferential consideration if they are equally qualified. If you require special support or accommodation for barrier-free and inclusive work, please do not hesitate to contact us. We will be happy to assist you. The IOM attaches great importance to the professional equality of women and men and therefore strongly encourages qualified women to apply. The compatibility of career and family is specifically promoted.

Please send your application documents or questions by **23.05.2026** at **bewerbung@iom-leipzig.de** with the **ID: 17-2026-MSC-FB1** in a single PDF file.

The applicant agrees to the storage/processing of personal data data (Art. 13 DSGVO) for the purpose of selecting applicants.

Leipzig, 24.04.2026