

OeAW - Discovering the future

As a central non-university institution for science and research, the **Austrian Academy of Sciences**- **OeAW** has the task of "**promoting science in every respect**". Founded in 1847 as a learned society, it now has over 760 members and around 1,800 employees dedicated to innovative basic research, interdisciplinary knowledge exchange and the dissemination of new insights. The OeAW initiates and maintains partnerships worldwide and represents Austria in international scientific organizations; it cooperates with numerous institutions in the scientific field in order to actively **shape the research landscape**.













# SENIOR ENGINEER (F/M/X) in satellite laser ranging

Job ID: IWF011TEC125

The Space Research Institute (IWF) with about 100 employees from twenty nations, is one of the largest institutes of the Austrian Academy of Sciences (OeAW). The institute is located in the Victor Franz Hess Research Center of the OeAW in the south of Graz and hosts eight research groups on the astrophysics of the solar system, exoplanets, and space

instrumentation. The IWF also operates a world-leading satellite laser ranging station at the Lustbühel Observatory. The Space Research Institute in Graz invites applications for a

#### SENIOR ENGINEER (F/M/X) in satellite laser ranging

(Full-time employee)

The successful candidate will be appointed in the frame of the "DLR laser ranging station" project and will join the Satellite Laser Ranging (SLR) group at the Space Research Institute (IWF) in Graz. Within this project IWF designs, innovates, assembles and tests laser and detection packages for satellite and Space Debris Laser Ranging (SDLR). Laser and detection packages - as a complex setup of optical, electronic, laser and mechanical components - build the foundation of any SLR station. Scientific and technological advances require interdisciplinary expertise in electronics, laser optics, physics or geodesy. This post is part of IWF's efforts, to advance SLR and SDLR technology while pushing research on Space Ecology topics. The successful candidate will focus on improving precision, performance and stability, especially with respect to newly emerging technologies such as MHz laser ranging, infrared laser ranging, daylight debris detection or adaptive optics.

### Your Tasks

- Independent investigation and testing of innovative solutions in laser, detector, and imaging technologies
- Autonomous software development and optical raytracing simulations
- Full responsibility for the assembly, alignment, optimization, and testing of laser and detector packages
- Simulation and design of FPGA electronics used for real-time station operation
- SLR & SDLR observations, documentation, data analysis and post processing

## Your Profile

- Master degree, PhD or Engineering diploma in Physics, Optics, Electrical Engineering or closely related fields
- Hands-on experience in laser physics, design, assembly and alignment of optical systems

- Software development and programming expertise (Python and/or C++)
- Experience in scientific publishing

# Our Offer

- A position in an innovative and internationally active environment crucial to succes
- Numerous voluntary social benefits and health insurance
- A position initially for 3 years
- An annual gross salary of € 63.142,10 according to the collective agreement of the Austrian Academy of Sciences

Please apply online including a cover letter in addition to (1) curriculum vitae, (2) certificates for full academic record (3) a statement on past experience related to laser physics, integration of optical systems and electrical engineering (max. 3 pages) (4) two references letters **no later** than April 30, 2025.

Start date of the position: May 01, 2025

For inquiries, contact Dr. Michael Steindorfer.

#### **APPLY NOW**

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.

#### Contact

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