

Scientist in optical radiometry

Our core mission is to serve as an international calibration center for meteorological radiation instruments. To this end, we develop radiation instruments for use on the ground and in space. Our research focuses on the influence of solar radiation and solar activity on Earth's climate and its impact on the Earth's atmosphere. We develop and maintain reference radiometers and spectroradiometers to ensure worldwide homogenisation of all meteorological radiation measurements (www.pmodwrc.ch). We characterise and calibrate radiation instrumentation on our measurement platforms outdoors and in our optical laboratory. We have been designated by the Swiss National Metrology Institute METAS as designated institute for solar irradiance (spectral and total) and the essential climate variable surface radiation budget; we are a member of EURAMET and the CIPM. The PMOD/WRC has close links to the Physics Department of the ETHZ through the institute director Prof. Dr. Louise Harra.

Job description

We are looking for an 80%-100% FTE scientist or technical engineer to join our team in the World Radiation Center at Davos. You will support the calibration and characterisation of the radiometric instruments and facilities in our optical laboratory. You will be responsible for operating and improving our laser-based facility for detector based traceability of spectral irradiance in the range from 300 nm to 1000 nm and its application to solar radiometry. Furthermore, you will participate in the international research project S-CALe iIT (Self-calibrating photodiodes for integrated and infrared technologies) within the European Partnership on Metrology and have the possibility to collaborate with leading experts in optical radiometry.

Requirements

Essential experience, skills, and characteristics:

- A degree in experimental physics or in a similarly technically oriented field.
- Excellent written and spoken English proficiency.
- Ability to work independently and in a team.
- Occasional participation to project meetings & experimental campaigns at various places in Europe.
- Publication track record in international peer-reviewed journals.
- Good programming skills in a high level language (Matlab, Python, ...)

Desirable criteria:

- Experience in optical radiometry.
- Experience in working with a quality system such as ISO/IEC 17025.
- Knowledge in project management and reporting.

What we offer

A friendly working environment in a reputed research institute in a beautiful touristic town in the Swiss Alps. We respect and support the compatibility of professional and private life and promote individual development opportunities. In line with our values, we encourage an inclusive culture. We promote equality of opportunity, value diversity and nurture a working and learning environment in which the rights and dignity of all our staff and students are respected. Visit our gender equality plan [web-page](#) to find out how we ensure a fair and open environment that allows everyone to grow and flourish.

Application information

The application will be open until filled. We are looking for a suitable candidate starting as soon as 1 September 2026 or anytime later as agreed for an initial 2 year contract. Please send your complete application via e-mail to the head of human resources, Eliane.Tobler@pmodwrc.ch:

- Curriculum Vitae.
- Up to 5 relevant peer-reviewed publications.
- Summary of your main achievements (3 maximum).
- Name and contact detail details of two potential references.

The interviews will be held either physically at PMOD/WRC or via suitable remote video platform. For further information, please contact Dr. Julian Gröbner, co-head of the World Radiation Center (julian.groebner@pmodwrc.ch).