

Senior Optical System / AIT Engineer (Reference JP1912)

COMPANY PROFILE

Micos Engineering GmbH (www.micos.ch) is a privately owned and an independent system engineering SME that focuses on optical instrumentation for the European space market. Micos serves its Customers with design, engineering and AIT (Assembly, Integration and Testing) of ground support equipment and flight hardware.

Micos facilities dedicated to integration and testing account for ISO5, ISO6 and ISO7 cleanroom areas equipped with quality and metrology instrumentation to support opto-mechanical integration and verification; TVAC facility with double cooling circuit; an Electrostatic-discharge Protected Area (EPA) optical lab equipped with instrumentation operating in the range between VIS to LWIR range for breadboarding activities; thermometry calibration and vibration monitoring equipment are also inhouse. Micos is an ISO 9001 certified organization.

Micos' facilities are embedded in the premises of the Swiss Federal Laboratories for Materials Science and Technology (www.empa.ch) which notably augments the quality and range of our services to customers and partners.

Field of Expertise

Our multi-disciplinary team runs projects with a professional network of industrial and institutional partners. Micos key competences are:

- Optical, Opto-Mechanical Design and AIT
- Characterization & Calibration Systems and GSEs
- Optical fiber based Metrology Systems
- Spectroscopic and Interferometric Systems
- Prototype Processing and Algorithms
- Project and Subcontractor Management, Product Assurance

JOB DESCRIPTION

Micos is looking forward to expanding our multidisciplinary team by an experienced Optical System / AIT Engineer with an opto-mechanical background (in space).

Ideally, he/she should have hands-on expertise in:

- Hands on design, engineering and testing of free space optical instrumentation and systems for space devoted applications and industry.
- Conceptual and detailed design and analysis of opto-mechanical subsystems
- Guiding thermo-mechanical analyses and interpreting results in view of system optical performance
- AIT planning and execution in controlled environments (use of clean rooms and TVC) under space regulations starting from 3D/2D drawings
- Generating CAD models and manufacturing drawings
- Executing technical procurement of optical / mechanical components with international suppliers and inspecting the parts at arrival for acceptance

- Supporting the further development and improvement of technical processes of Micos, aiming at providing services for optical instrumentation for space

PROFILE AND ASSETS

Following indicators regarding job profile and assets are of interest to Micos:

- Professional expertise in space engineering domain 10+ years.
- Expertise in optical instrumentation domain 10+ years. *Background in dispersive and/or FTS spectrometry is an asset.*
- Ability to trade-off technical, schedule and financial requirements. *Entrepreneurial mindset is an asset.*
- Knowledge of space related development, processes and qualification aspects. *Knowledge of product assurance and quality assurance aspects is an asset.*
- Demonstrated sensitiveness to the level of tolerancing required for precision opto-mechanical systems.
- Hands-on experience in working with ZEMAX is mandatory. *Experiences of FRED is an asset.*
- Proofed experimental and testing expertise.
- Ability to support and complement the design team in AIT related issues. Comprehensive knowledge of mechanical / opto-mechanical engineering, including design and analysis best practice to mitigate thermo-mechanical and mechanical stress issues.
- Ability to organize, design and execute an optical / opto-mechanical test plan including the necessary equipment and infrastructure. Ability to critically assess the measurements results before reporting.
- Hands on experienced in working with optical laboratory metrology within cleanroom environment. *Experience in operating in Thermal Vacuum Chamber conditions is an asset.*
- Familiar with handling instrumentation data flow (including command, acquisition and post treatment). Willingness to learn and adapt to new interfaces/software.
- Proficiency in spoken and written English. *Knowledge of a Swiss National language is an asset.*

We are looking forward for candidates being very well able to integrate in teams and willingly to take on responsibility for successful working and good social cooperation. One of your competences should be characterised by autonomous working driven by your analytical thinking skills and target-oriented, constructive behaviour to get things done on time.

Micos, as an industrial player active in the space domain, offers for intrinsically motivated persons a dynamic, very exciting and challenging environment on a daily basis. Contractually, labour conditions to work with Micos team are kept at favourable level.

The position is available as of now.

INTERESTED?

Please send your Curriculum Vitae with subject reference **JP1912** to the following email address: **micos4u@micos.ch**.