# SWISSto12 SA

EPFL Innovation Park, Building L Chemin de la Dent d'Oche 1b CH-1024 Ecublens, Switzerland info@swissto12.ch T +41 (0) 21 353 02 40



Lausanne, October 24th 2018

#### Open position for a Chemical Engineer - Surfaces Treatment W/M:

#### Introduction:

SWISSto12 is a high growth SME active in the space and aeronautic industries. The company pioneers the commercialisation of Radio Frequency (RF) antenna, waveguide and filter products based on additive manufacturing (3D printing). The novel technologies behind its products have been developed by the company over the past years and have now reached a maturity stage that allows them to be airborne and space qualified. SWISSto12 experiences high growth and has to face the challenge of combining this growth with persistent high-quality and on-time delivery of its products to large aerospace programs.

SWISSto12 focuses its product portfolio towards high added value antenna components or subsystems. Every project starts with an important multidisciplinary design phase (RF, mechanical, thermal) which is performed internally. Products are then 3D printed in high-performance polymers or metals. This novel approach to manufacturing replaces traditional machining of metallic materials. In this context, SWISSto12 products feature drastic performance improvements, weight reductions, and competitive costs. SWISSto12 products are currently commercialised for satellite telecommunication applications (antennas and payload subsystems onboard satellites) as well as on aircrafts (antennas to connect passengers via satellite links). The company is also active on Radar and Test & Measurement applications.

SWISSto12 is currently headquartered in Renens, Switzerland.

The Chemical Engineer will be a member of the R&D team engaged in surfaces treatment process development of additive manufacturing components and their industrialisation for RF application. The Chemical Engineer works closely with Design Engineers to develop solutions challenging problems. He/she will also work with the manufacturing, program management, customers and test support organizations. Responsibilities of this position include leading optimization of actual processes to improve their industrial performances (productivity and yield improvement), interaction with customers (for aerospace qualification) and/or vendors, documentation/technical reporting and presentation of results.

## Functions:

- Performs electroless plating process development to optimize and implement new manufacturing route based on Additive manufacturing: Management and planning of tests campaign, implementation of means and methods, development of tooling...
- Performs plating characterization and analysis: metallography cross section, mechanical and physical and adhesion tests.
- Builds new plating route (galvanic and electroless).
- Builds plating reports for space components and plating control procedures.
- Ensures scientific, technical, ISO standards watch on new plating processes and electroless formulas.
- Documents and communicates analysis results to project teams, project managers and customers
- Documents test plans/procedures, and processes

# SWISSto12 SA

EPFL Innovation Park, Building L Chemin de la Dent d'Oche 1b CH-1024 Ecublens, Switzerland info@swissto12.ch T +41 (0) 21 353 02 40



#### Qualifications, experience and competencies:

- Master's degree at least in chemical engineering / surfaces treatment.
- 5 years of direct experience, preferably with close involvement with hardware development and test
- Direct experience with electroless plating, electroplating and electroforming.
- Ability to analyse chemical formulation
- Working Knowledge and a thorough understanding of plating and surfaces characterization tools
- Ability to conduct studies, analysis and development.
- Experience and ability to prepare documents, reports and oral presentations
- Familiarity with prototype or research and development (R&D) environments

## Working conditions and contact:

Start date: asap

Location: Renens, Switzerland

Occupation: Full time

An application containing a CV, a motivation letter, references, a copy of your important diplomas and grades must be sent through Job Up application.