



French-German Research Institute of Saint-Louis

The **French-German Research Institute of Saint-Louis (ISL)** situated in the border triangle of Germany, France and Switzerland is an internationally renowned research institute belonging to a global industrial and economic network. The spectrum of our core activities comprises a variety of topics: aerodynamics, energetic and advanced materials, lasers and electromagnetic technologies, protection, security and situational awareness. Our activities are related to both basic and applied research.

www.isl.eu

For immediate placement, we are currently looking for an

Engineer in experimental devices in detonics (m/f/d)

in our research group **PCD (shock waves and detonics)**.

The group PCD works on materials and energetic systems as well as on their reactive behaviour. The group's tasks include:

- ◆ Producing and describing base materials, e.g. crystallisation of explosive particles ;
 - ◆ Producing and characterising explosive mixtures and energetic systems
 - ◆ Doing research in shock wave physics
 - ◆ Studying reactive waves and induced transition phenomena: ignition, combustion, deflagration, detonation
- The studies include experimental work as well as numerical simulations.

Your new tasks and responsibilities - challenging and future-oriented:

- ◆ As an experimental engineer in detonics you will have the following tasks:
- ◆ Preparing and conducting experiments and experimental campaigns in high-speed physics; Measuring high-speed phenomena using different technologies (high-speed cameras, interferometers, laser sources, optical fibres, photodiodes...) and in compliance with pyrotechnical safety standards
- ◆ Procuring, using, developing and maintaining tools and devices required for experiments. Doing result analysis using adjusting software
- ◆ You will contribute with your scientific group to the development of different topics linked to electrics / mechanics / optics having a focus on pyrotechnical ignition chains
- ◆ Writing detailed documentation of test results and editing reports
- ◆ You will be monitoring safety rules and editing the required documents, especially in connection with pyrotechnic safety

Further tasks:

- ◆ Performing experiments for third-party contracts (analysis, services)
- ◆ Participation in the group's activities as well as in increasing the scientific reputation of ISL.

Your qualifications – solid and appropriate:

- ◆ Master or Engineering degree in electronics / physical measurements or equivalent degree
- ◆ You have technical skilling in physical measurements, electronics, optoelectronics and signal processing
- ◆ You are a career starter or professional with working experience as a research engineer or metrology engineer
- ◆ Know-how in the handling of energetic materials and/or pyrotechnics, and additional experience in optical metrology and construction would be an advantage
- ◆ Good communication skills. You like to work in a team and to take initiatives. You are an effective organizer, easily adapting to new situations
- ◆ A good command of French and/or German would be an advantage

Your qualifications – solid and appropriate:

- ◆ Fixed-term contract of 5 years, possibility of conversion to permanent contract
- ◆ Attractive remuneration, flexible working time and balanced working-private life
- ◆ Various possibilities of advanced training
- ◆ An international and modern working environment with about 400 colleagues
- ◆ Career development opportunities
- ◆ The position is open to people with disabilities

If this challenging description fits your profile, we are looking forward to receiving your complete application (letter of motivation, curriculum vitae in tabular form, school certificates, university degrees with detailed examinations, work references and other relevant documents), mentioning the following keyword: "PCD-I"

French-German Research Institute of Saint-Louis
Mrs. Viviane WEIHS
5 rue du Général Cassagnou
BP 70034
68301 SAINT LOUIS CEDEX, France
Phone: +33 (0)3 89 69 51 31
humanresources@isl.eu