



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 a

Engineer for dynamic mechanical characterization of materials (m/f/d)

Your new tasks and responsibilities – challenging and future-oriented

Dynamic mechanical characterization of materials including the following tasks:

- ◆ Split-Hopkinson-Bar: testing of different kinds of materials (metals, ceramics, polymers, fibers, composites) and material combinations at ambient, low and high temperatures:
 - Split-Hopkinson-Pressure-Bar: compression-only tests or other experiments for which the device has to be adjusted, e.g. direct impact tests, compression and shear tests
 - Tensile tests: developing tools and methods to characterize various materials, adapting the methods to the materials to be tested
- ◆ Gas accelerator:
 - Perforation tests at intermediate speeds (between Split-Hopkinson-Bar range and the ballistic range)
 - Developing test facilities for dynamic material characterization (e.g. plate impact tests) and/or validate material models
- ◆ Using and optimizing the measuring equipment together with the engineer in charge of these tasks: speed measurement, signal acquisition, image correlation, etc.
- ◆ Responsible for the dynamic characterization facilities (Split-Hopkinson-Bars, gas accelerators), staff training (interns, PhD students) and maintenance of these facilities. Observe the safety guidelines for the use of gas accelerators, gas bottles, high-current devices, etc.
- ◆ Using and developing numerical and mathematical tools to control, model and simulate the testing facilities and experimental results
- ◆ Follow-up of government and third-party contracts, write summary reports
- ◆ Managing and training interns

Your qualifications – solid and appropriate

- ◆ Engineering degree or University master's degree in mechanical engineering, mechatronics, or equivalent degree
- ◆ Knowledge in the following areas is required:
 - Mechanics of materials
 - Mechanical characterization
 - IT tools
- ◆ Good communication skills. You like to work in a team and to take initiatives. You are an effective organizer, easily adapting to new situations
- ◆ Very good command of English and good command of French and/or German

Our offer

- ◆ 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: "AMT-I".

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