

Waterjet AG looks back to more than 20 years of corporate history. In 1989, we put the first water jet cutting device into operation. 1992 we launched Waterjet AG, of which I assumed the overall operational management, and which I introduced to the newly founded Waterjet Holding two years later. After having worked already in 1991 with four devices, we moved to the premises of a former textile factory in 1994 and since then, we have continued to write company history with our hightech products.

Job offer:

## **PhD Researcher (Coordination of models validations on AWJM)**

### **Objectives:**

This work is directed to evaluate the accuracies of the models for AWJM and especially to understand the sources of errors caused by the constructive particularities (e.g. design of the mixing head) of these machines and how to analytically account for them into the developed models.

- Evaluation of the sources of error through specially designed experiments (DOE) on AWJM
- Corrective actions and optimization by including new contributions on the model on AWJM
- Final Validation based on direct comparison between the optimized model and experimental results.

### **Tasks and methodology:**

- Design of experiments (DOE) covering the process parameters considered in the model
- Characterization of AWJM features and direct comparison to model results. Model refinement and optimization will be targeted based on this characterization and comparison.
- Validation: Definition and execution of experimental tests to validate the AWJM model

### **Requirements**

- Engineering - Materials Engineering
- Engineering - Process engineering
- PhD or equivalent
- Degree Field: Physics or Engineering
- Experienced researcher or 4-10 yrs (Post-Doc)
- Required Languages: English (excellent)
- 

At the time of recruitment, the researcher (ER) must not have resided or carried out his/her main activity (work, studies, etc...) in Switzerland for more than 12 months in the 3 years immediately prior to the recruitment date (July 2015).

**Start of work:** asap