Job Offer



The Institute of Combustion Technology of the German Aerospace Center (DLR) in Stuttgart is seeking a

Postdoc

for the analysis of gas turbine combustors with laser techniques.

The DLR Institute of Combustion Technology carries out research and project work on the design principles of technical combustion processes. For information about the Institute, see http://www.dlr.de/vt/en/. The position is assigned to the department of combustion diagnostics where laser diagnostic and optical techniques are developed and applied for the study of research topics such as flame stabilization, thermo-acoustic instabilities and fuel-flexible burners.

You have the following tasks and responsibilities:

- Planning and conduction of scientific investigations on gas turbine combustors with the goal to analyze the combustion process in detail and optimize combustion concepts.
- Design of combustion chambers with optical access for measurements in high-pressure test-rigs.
- You optimize laser measurement techniques and apply them to carry out investigations on flame structure and stability and on dynamic combustion processes in turbulent flames.
- Based on the measurement results, you analyze the performance of combustion systems and point out potential for optimization.
- You will be involved in the management of research projects with partners from industry and science.
- You summarize the measurement results for conference papers and publications.
- You will work closely with laser spectroscopists, chemists, engineers and flame modellers.

Required qualification:

- University degree in physics or engineering, e.g. in aerospace engineering
- Doctorate in Physics, Physical Chemistry or Engineering
- Profound knowledge in the fields of fluid mechanics and combustion
- Practical experience with high-pressure or combustion test benches
- Several years of practical experience in laser measurement technology, measurement data acquisition and evaluation
- Very good knowledge of German and English

The position is limited to a period of 3 years and open from now on. The starting salary is according to class E13 of the TVöD (German civil service pay scale).

For more information, contact:

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