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## **DLR - DAAD Fellowships**

Fellowship No. 552

Research Area: Space

Research Topic: Structures in Water and Functional Materials

**DLR Institute:** Institute of Materials Physics, DLR Cologne, Germany

**Position:** Postdoctoral Fellow

Openings: 1

**Job Specification:** Structure determines the dynamics and hence the functionality in dense

molecular liquids. Ab initio calculations allow the identification of such structures essentially from first principles. In the case of water some of these features are of quantum nature. Such features are possible but costly to simulate on a classical computer. And it is such features that are promising to deliver a quantum advantage on special quantum computing hardware. Beyond water, applications in materials physics are. Data analysis and the publication in international journals shall complete the

tasks.

Required Qualification: PhD in chemistry/physics or related field, experience in ab initio techni-

ques

**Advantageous Skills:** Experience in a range computer simulation techniques including ab

initio; quantum computing; programming and data analysis

**English competence:** See requirements on <a href="https://www.daad.de/dlr">www.daad.de/dlr</a>

Fluent in speaking and writing

Earliest Start Date: As soon as possible

**Application Deadline:** Until position filled

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http://www.dlr.de http://www.daad.de/dlr