



DLR – DAAD Fellowships

Fellowship No. 552

Research Area :	Space
Research Topic:	Structures in Supercooled Water
DLR Institute:	Institute of Materials Physics, DLR Cologne
Position:	Postdoctoral Fellow
Openings:	2
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 considered. 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 techniques
Advantageous Skills:	Experience in a range computer simulation techniques including ab initio; quantum computing; programming and data analysis
English competence:	See requirements on www.daad.de/dlr Fluent in speaking and writing
Earliest Start Date:	September 1 st 2022

Application Deadline: Until positions filled

Further Information: matthias.sperl@dlr.de
www.dlr.de/mp

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