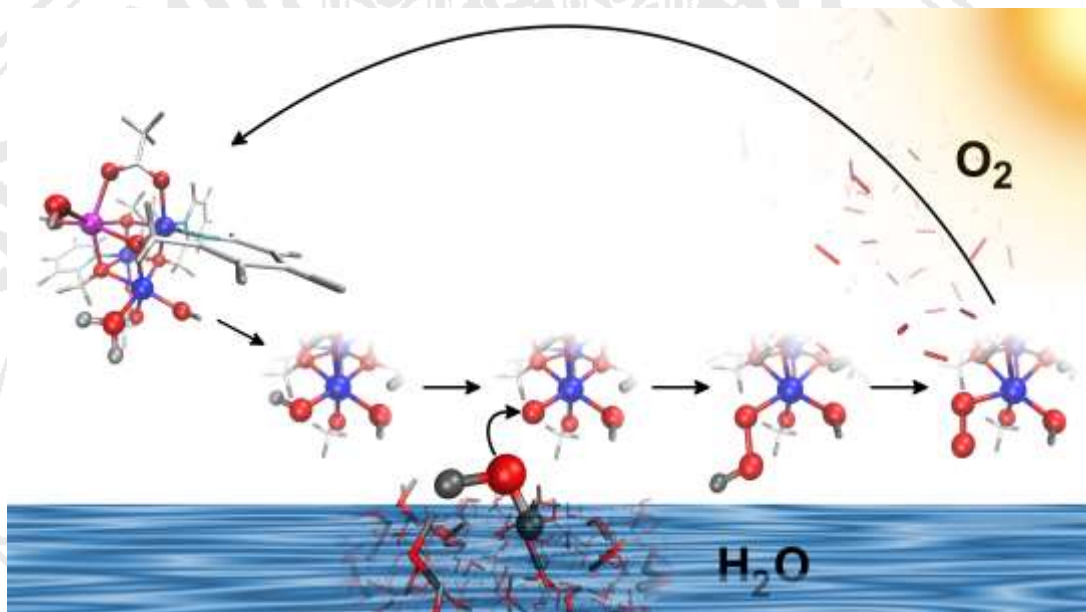


# SONDERKOLLOQUIUM

AM 28. MÄRZ 2017 UM 15:30 UHR  
IM SEMINARRAUM, GUSTAV-MIE-HAUS



## Computational study and design of bio-inspired systems for solar light-driven water splitting

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One of the most important challenges of the current century is the sustainable production of clean energy, which becomes more and more urgent due to the increasing world-wide need for energy, shortage of fossil fuels, and global climate change. Solar light-driven water splitting is a very promising route for environment-friendly hydrogen production, which is a powerful carrier for energy storage and conversion. In order to develop efficient artificial water splitting systems, ab initio calculations are indispensable for a detailed understanding of the complex structures and processes, in this way providing essential information for informed design of novel tailored materials. I will give an overview about our recent developments for the innovative study and design of bio-inspired water splitting catalysts. This will be complemented by forefront spectroscopic approaches based on static and dynamic computational methods, which enable the in-depth characterization of a broad range of functional systems.