

ENERGIEKOLLOQUIUM 2020



TECHNISCHE
UNIVERSITÄT
DARMSTADT



ENERGIESYSTEME
DER ZUKUNFT

Abstract Prof. Jan Philipp Hofmann

16. Juni 2020, 17:00 -18:30 Uhr

„Solar Fuels Materials Challenge: Insights into Function and Failure“

Solar energy conversion and storage are key to a future, sustainable and CO₂ neutral energy system. Due to the intermittency of the renewable energy sources such as solar light and wind, efficient storage options are needed. Storing renewable energy in chemical bonds, an approach called Solar Fuels, is one promising pathway to enable this large scale storage. To solve this challenge, materials science aspects, which determine the performance and durability of Solar Fuel generators, have to be addressed on a fundamental level. In this talk, recent work on non-critical materials for electrocatalytic hydrogen production as well as devices for photoelectrochemical water splitting will be highlighted and discussed in relation to the energy transition.