



GESELLSCHAFT DEUTSCHER CHEMIKER  
ORTSVERBAND SIEGEN

## ***Ankündigung***

Am Dienstag **22. Juni 2021** um **16:30 Uhr** hält am  
Department Chemie und Biologie der Universität Siegen

***Prof. Dr. Manuela Killian***  
***Universität Siegen***

ihre **Antrittsvorlesung** zum Thema

***„Hybrid inorganic-organic nanostructures“***

Der Vortrag findet per Videokonferenz via **ZOOM** statt:

<https://uni-siegen.zoom.us/j/99777681137?pwd=Yy95QWkrbnR4NnIUUTTMrUVdTR21CUT09>

Meeting-ID: 997 7768 1137

Passwort: &08vD88k

Alle interessierten Kolleginnen und Kollegen, Mitarbeiterinnen und Mitarbeiter  
und Studierende sind zu diesem Vortrag herzlich eingeladen.  
Gäste sind herzlich willkommen.

Der Ortsverbandsvorsitzende  
PD Dr. Stephan Bäurle  
Tel. 0160 99891224



**Prof. Dr. Manuela S. Killian**

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## **Hybrid inorganic-organic nanostructures**

Self-assembled monolayers of functional organic molecules allow to alter the surface chemistry of oxides without compromising on the bulk properties of the material. A vast range of oxide nanostructures can be produced via anodic oxidation. The choice of oxide and functional molecules allows the development of novel nanomaterials with designed properties – for application in fields ranging from biomaterials to energy conversion.

Our goal is to develop metal oxide nanostructures, such as vertically oriented nanopores and nanotubes or nanosponge, which are coated with SAMs of functional organic molecules either homogeneously over the entire nanostructure or at selected positions. We aim at the development of complex, multifunctional architectures by selective modification of distinct depths and positions of the structures.