



# TRR 80 Sonderseminar

Am Mittwoch, den 09. Februar um 15:45 Uhr

spricht

**Prof. Dr. Bettina V. Lotsch**

**Department Chemie, LMU München**

über das Thema

## ***Functional Nanostructures for Sensing and Energy Conversion***

The synthesis, manipulation and analysis of structures with ever diminishing dimensions increasingly wipes out the borderlines between classical disciplines such as physics, chemistry, and life sciences, thereby furnishing synergies that challenge our perception of static and dynamic processes on the molecular and supramolecular level. Our research revolves around understanding the impact of nanoscale structure and morphology on transport and conversion of matter and energy. To this end, we utilize solid-state, „soft chemistry“ and nanofabrication methods, as well as a broad spectrum of analytical tools to develop functional materials with an enhanced property profile. Current research activities are centered on the development of „smart“ photonic crystal architectures as label-free optical sensors, the synthesis of highly porous organic and hybrid materials for applications in optoelectronics and heterogeneous catalysis, and the rational synthesis of macroscopic materials based on 2D nanosheet building blocks à la „Chimie Douce“. In this context, we are aiming at novel photoactive materials such as carbon nitrides and carbon nitride-doped titanates for photovoltaics and photocatalysis.

Gäste sind herzlich willkommen!

Der Vortrag findet im Seminarraum 242/Physik-Nord, Universität Augsburg statt.

Gastgeber: Prof. Dr. Jochen Mannhart

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