

## GDCh- und Chemisches Kolloquium

Der GDCh-Ortsverband Oldenburg und das Institut für Reine und Angewandte Chemie der Carl von Ossietzky Universität Oldenburg laden zu einem Vortrag

**von** Prof. Dr. Oliver G. Schmidt  
Institute for Integrative Nanosciences  
Leibniz-Institut für Festkörper- und Werkstoffforschung, Dresden

**zum Thema** **Chemistry, physics and technology of functional hybrid nanomembranes**

herzlich ein.

**Termin:** **Donnerstag, den 11.11.2010, 17 Uhr c.t.**  
Großer Hörsaal der Naturwissenschaften, W3-1-161,  
Carl-von-Ossietzky-Straße 9-11

**Einladende** Prof. Dr. Katharina Al-Shamery

Nanomembranes are thin, flexible and can be stretched and shaped into almost arbitrary geometries. These mechanical particularities together with the wealth of different materials and material combinations open up an almost endless number of new phenomena and applications in the physical and chemical sciences, such as flexible and stretchable electronic devices and unique nanophotonic components. Highly stressed nanomembranes can roll-up into tubes once released from their substrates. These exceptional structures find potential use as photonic, optofluidic, electronic, thermoelectric and catalytic robotic applications. Particular emphasis is put on the fabrication of ultra-compact self-wound energy storage devices both on and off the chip. Current efforts include the development of fully integrative and multifunctional lab-in-a-tube systems as well as autonomous micro-/nanoengines for manipulation and analysis of individual biochemical entities.

GDCh-Ortsverband Oldenburg  
Der Vorsitzende  
Prof. Dr. Mathias Wickleder

Institut für Reine und Angewandte Chemie  
Der Direktor  
Prof. Dr. Gunther Wittstock



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