

## Einladung zum GDCh-Colloquium des Ortsverbandes Hannover

Das Colloquium findet um 17h c.t. im Dr.-Oetker-HS (Raum 007, Gebäude 2504) der Leibniz Universität Hannover, Institut für Physikalische Chemie und Elektrochemie, Callinstraße 3a, D-30167 Hannover statt.

**14.12.2023 Prof. Dr. Sebastian Polarz**  
**Institut für Anorganische Chemie, LUH.**  
**SMART SOAP – Surfactant Swiss Knives**

Did you know that your body right now contains kilograms of soap?



'Surfactant' is an acronym for surface active agents and represents a class of molecules of enormous scientific and technological importance. Fascinating abilities regarding forming self-organized structures, like micelles or liquid crystals, originate from their amphiphilic architecture, which comprises a polar head group linked to a hydrophobic chain. A new family of surfactants is now emerging with functionalities beyond amphiphilicity.

The presentation will discuss selected examples of how using unique head groups leads to next-generation surfactants. Cases range from soap possessing (photo-)catalytic and stimuli-responsive properties. The chemical synthesis of those complex surfactants will be presented, followed by the physical characterization of amphiphilic, biochemical, and other functional properties. The presentation will finish with a reflection of future challenges in the field, such as the generation of dissipative self-assembly and break-throughs in micellar catalysis. .

**Prof. Dr. Jens-Uwe Grabow**  
**Vorsitz OV Hannover**

Vor dem Vortrag findet eine ‚Kaffeerunde‘ in der Bibliothek des PCI statt.