

## INM COLLOQUIUM

### “SYNTHESIS, STRUCTURE AND BIOLOGICAL APPLICATIONS OF BIMETALLIC AND ULTRASMALL NANOPARTICLES”

Prof. Dr. Matthias Epple  
Universität Duisburg-Essen

Tuesday, October 29, 2019, 2:00 pm  
INM, Leibniz-Saal, Campus D2 5

Host: Prof. Dr. Tobias Kraus

Metallic nanoparticles have many applications in chemistry, physics, and biology. Their special properties like plasmon resonance, autofluorescence and easy chemical surface functionalization offer many opportunities that ceramic and polymeric nanoparticles do not possess. After a short introduction into the current state of metallic nanoparticles, the presentation will focus on three main aspects of metallic nanoparticles: Crystallographic analysis of nanoparticles, synthesis of bimetallic nanoparticles, and ultrasmall nanoparticles (1 to 2 nm). The latter ones are significantly smaller than biomacromolecules like proteins and can be surface-functionalized to target specific epitopes on the protein surface. In terms of chemistry, only nanoparticles of noble metals will be considered.

Epple group: [http://www.uni-due.de/chemie/ak\\_epple/](http://www.uni-due.de/chemie/ak_epple/)

You are invited to have coffee with the speaker 15 minutes before the talk starts.

#### KONTAKT

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