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METALLOID CLUSTERS AND METAL NANOPARTICLES: SYNTHESIS AND BASIC PRINCIPLES

This course is intended to provide an overview on the synthesis and properties of metal nanoparticles and metal clusters and actual description models like the Jellium model, magic numbers, Wade`s rules etc.

Metal nanoparticles are a class of nanoscaled compounds that are widely used in modern nanotechnology due to their unique properties with respect to the bulk phase. Thereby metal nanoparticles exhibit a certain size distribution and are a mixture of metalloid clusters of different size. Consequently, metalloid clusters are the key for a deeper understanding of the evolution of the behavior of metal nanoparticles. Especially the existence of nanoscaled metalloid clusters shows that certain structures / sizes are more stable than others and there are a couple of actual models to describe the different stabilities. Additionally, different strategies have been invented in recent years for the synthesis of metalloid clusters and metal nanoparticles. These actual aspects will be discussed together with general models and some historical developments in the field of metal nanoparticles.

Termin	Dzień tygodnia	Godzina	Miejsce
26.03.2019	wtorek	9.15 – 12.00	Minicentrum Konferencyjne (Luwr)
27.03.2019	środa	9.15 – 12.00	Minicentrum Konferencyjne (Luwr)
28.03.2019	czwartek	9.15 – 12.00	Minicentrum Konferencyjne (Luwr)
29.03.2019	piątek	9.15 – 12.00	Minicentrum Konferencyjne (Luwr)
02.04.2019	wtorek	12.15 – 15.00	Minicentrum Konferencyjne (Luwr)