



Donnerstag, 24.04.2014

Hörsaal C, Chemie Zentralbau, 17:15 Uhr

Sprecher: Volkhard May Humboldt-Universität zu Berlin

Thema: Photoinduced Excitation Energy Transfer in Nano-Hybrid Systems

Abstract: Excitation energy transfer and Frenkel-exciton formation in molecular assemblies and dye aggregates has been studied for decades. Recent interest focuses on such phenomena if semiconducting or metallic nano-particles are involved.

Own contributions to this field are presented. At first, a mixed quantum-classical description of energy transfer in a supramolecular complex is explained. Then, it is described how optical properties of a molecular chain are affected by the coupling to plasmon excitations of a nearby placed metal nano-particle. Such a molecule metal nano-particle coupling is also introduced as a source of single molecule electroluminescence enhancement. Finally, an atomistic description is offered of excitation energy transfer between a semiconducting nano-crystal and a single molecule.

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> Informationen zur Forschergruppe unter: http://www.for1809.uni-wuerzburg.de