Optics of
Nano and Quantum
Materials



Bachelor's Project/Thesis with Experimental Focus

Structure matters – Optical Studies of Self-Assembled Meta-Gratings

Nanostructured materials play a major role in modern optics ranging from fundamental research in nano-optics and plasmonics all the way to applications in sensing and catalysis. Via the structure of a material or material layer, the optical properties can be tailored selectively.

In this project, you will investigate the optical response of novel optically grown metallic meta-gratings. This artifical exotic system is fabrictaed using a straight-forward laser-induced deposition process. The resulting gratings consist of nanoparticles of different sizes and densities. They feature a wide range of interesting optical and structural properties to be studied in detail.

We are looking for **enthusiastic and bright Bachelor candidates** to support our scientific activities in the context of the aformentioned intriguing materials. This project is part of an international collaboration with the St. Petersburg State University, Russia (Manshina group).

Interested? Apply and Join the Team!

Email to Peter Banzer (peter.banzer@uni-graz.at)

