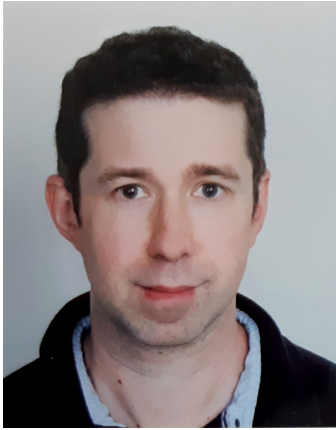


neaSCOPE for Nanoscale Optical Material Characterization with 10nm Spatial Resolution Technology and Applications



**Dr. Tobias Gokus, attocube systems AG September 24th
at 1:00pm in BRK_1001**

Zoom Link: <https://purdue-edu.zoom.us/j/95310453224>



Every scientific question has its own merits and demands specific instrumentation to search for answers. Nanoscale infrared is a novel versatile optical microscopy technology which allows to probe material properties such as chemical composition, molecular orientation, stress & strain fields, and free-carrier concentration with 10 nm spatial resolution.

In our presentation, we will introduce the basic working principle of near-field optical microscopy modalities available for the neaSCOPE microscope system and will highlight the broad spectrum of applications for studying the nanoscale optical, electronic and structural properties of various material classes such as polymers, minerals, 2D and layered materials, semiconductors, photonic as well as novel photovoltaic and battery materials.

Bio:

Dr. Tobias Gokus finished his Diploma at University Siegen and Tuebingen working on single molecule/particle optical microscopy and spectroscopy of individual carbon nanotubes. For his PhD he joined the group of Prof. Achim Hartschuh at LMU, Munich for developing dedicated confocal and near-field optical microscopes optimized for studying the luminescence properties of low dimensional carbon materials. Captivated by the possibility to introduce the huge application potential of infrared near-field microscopy to a broader scientific community Tobias joined the nanoscale analytics department (ALX) of attocube systems AG as application engineer. In his current position he is exploring together with researchers in academia and industry new applications of near-field microscopy for their research.

