The "Ultrafast Nano-Optics" group (www.uol.de/uno) at the Faculty V - Mathematics and Natural Sciences - of the University of Oldenburg invites applications for a

Ph.D. position (m, f, d) "Ultrafast Optical Nanoscopy" (E13 TV-L / 65 %)

for a period of 3 years.

In the framework of the proposed thesis, we will implement a new experimental technique, combining scanning tunneling and ultrafast near-field spectroscopy, to probe optical fields in functional nanostructures with sub-femtosecond time and nanometer spatial resolution. The planned experiments shall give conceptually new insight into energy- and charge transfer phenomena in nanoscale quantum materials. The research is embedded in the Center for Nanoscale Dynamics (www.uol/cenad) and funded by the Deutsche Forschungsgemeinschaft and the "Niedersächsisches Ministerium für Wissenschaft und Kultur" (DyNano). The research will be performed in close collaboration with the Scanning Probe Spectroscopy group (N. Nilius) in Oldenburg.

Are you interested in Ultrafast Optics? Scanning probe spectroscopy? Nanotechnology? If yes, might be the right position for you. Feel free to send us informal inquiries if you want to know more.

We offer an interdisciplinary scientific environment and provide expertise and scientific infrastructure to perform cutting-edge, exciting research in collaboration with leading national and international partners.

We are seeking candidates with a qualifying university degree in physics or related areas. We expect competence in at least two areas comprising optics, spectroscopy, nano science, scanning probe spectroscopy and solid-state physics. We expect high motivation, excellent communication skills and the ability to work in a team.

The University of Oldenburg is dedicated to increasing the percentage of female employees in the field of science. Therefore, we strongly encourage female candidates to apply. In accordance with Lower Saxony regulations (§ 21 Section 3 NHG) female candidates with equal qualifications will be preferentially considered. Applicants with disabilities will be given preference in case of equal qualification.

Please send your application (including a letter of motivation, curriculum vitae, list of any publications, copies of university certificates) and any questions related to the specific content of these projects electronically **as a single PDF file no later than 16.07.2022** to Prof. Dr. Christoph Lienau (Universität Oldenburg, Faculty V, Institute of Physics, 26129 Oldenburg, phone 0441-798 3485, Email: christoph.lienau@uni-oldenburg.de)