

# Low Energy Electron Microscopy as a Tool for Surface Science

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Low Energy Electron Microscopy allows real-time imaging of surfaces on a micrometer scale with sub-10 nm resolution. In the seminar talk, I will introduce the capabilities of the technique on several examples from our laboratory. Bright-field imaging and diffraction will be demonstrated on real-time imaging of the transformation of molecular phases of 4,4'-biphenyl dicarboxylic acid (BDA) and determination of their structure by local congruence method, respectively. Graphene on SiC and FeSe on Bi<sub>2</sub>Se<sub>3</sub> will serve as systems for demonstrating I-V analysis and dark-field imaging. Finally, I will present an electron-beam-induced reaction that can be induced and followed by LEEM.