In 2006 researchers discovered that some bacteria are capable of generating conductive hair-like structures. These so called bionanowires do not only shed new light on bacterial adaptation strategies to varying needs. They could also represent an alternative to existing semiconductor nanowires for the utilization in FET-based sensors. Therefore we are working on the implementation of bionanowires, generated by the bacterium *Shewanella oneidensis*, into electrode setups for their further electrical investigation and their possible application in a sensor platform. In the presentation the biological background as well as the experimental setups and results will be shown.
Linda started studying biology at the FU Berlin in 2006 and got her Bachelor in 2009 on "Characterization of Histidin-Phosphotransfer-Proteins in Physcomitrella patens" with Prof. Thomas Schmüling. Afterwards she studied biology at TU Dresden from 2009 to 2011 (M.Sc.). In the group of Prof. Michael Bachmann she was working on her Master thesis on "Immunotargeting of cancer cells with bispecific antibodies". In August 2012, Linda joined the InnoMedTec group as a PhD student. Her research focus lies on the development of a sensor platform based on bacterial nanowires.