

O 16: Invited Talk Ulrike Diebold

Time: Monday 17:00–17:45

Location: HE 101

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The Surfaces of Bulk Semiconducting Metal Oxides —
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Semiconducting metal oxides such as TiO₂, ZnO, SnO₂, and In₂O₃ find applications in a large number of technical fields, e.g., they are

used photocatalysts, gas sensors, and electronic materials. In many of these applications, the fundamental surface properties play a major role. In the talk, we will give an overview of some of our recent research results on investigating bulk oxide single crystals with Scanning Tunneling Microscopy and related spectroscopic techniques. Many of our results are verified with DFT calculations, and the fruitful interplay between theory and experiment will be discussed.