Surface-Confined Two-Step Synthesis of the Complex (Ammine)(meso-tetraphenylporphyrinato)-zinc(II) on Ag(111)

*Ken Flechtner, Andreas Kretschmann, Liam R. Bradshaw, Marie-Madeleine Walz, Hans-Peter Steinrück and J. Michael Gottfried**

Universität Erlangen-Nürnberg, Lehrstuhl für Physikalische Chemie II, Egerlandstr. 3, 91058 Erlangen, Germany

Supporting Information

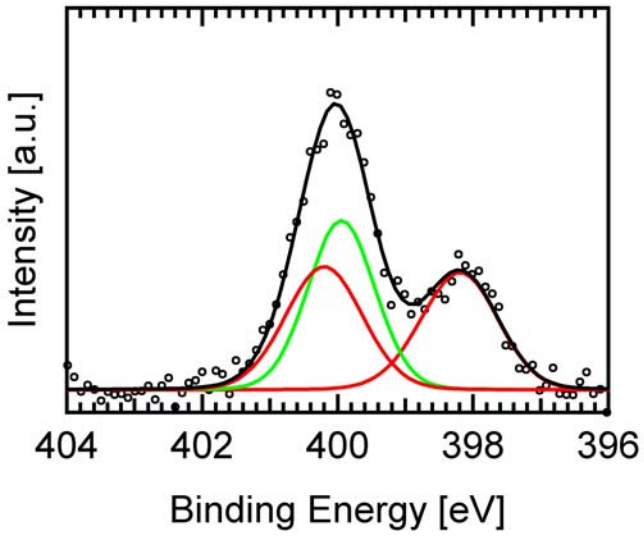

Figure S1: N 1s XP spectrum of H_2TPP multilayers on Ag(111) at 140 K in the presence of an NH_3 background pressure of 1×10^{-8} mbar. Adsorption of NH_3 is revealed by the increased signal around 400 eV. Signal deconvolution: red – H_2TPP, green – NH_3, black – envelope.

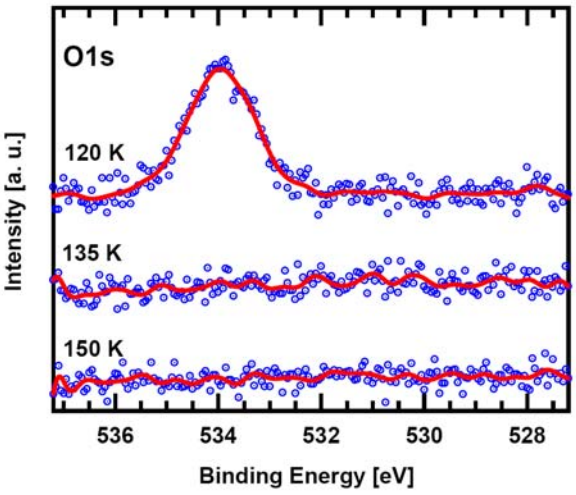

Figure S2: Temperature dependency of the adsorption of water (from the residual gas) on the ZnTPP monolayer after extended periods of time (> 2h) in the presence of an NH_3 background pressure of 1×10^{-8} mbar. At and above 135 K, no adsorption of water (indicated by the signal at 534 eV) adsorbs on the ZnTPP layer, regardless of the presence of NH_3.

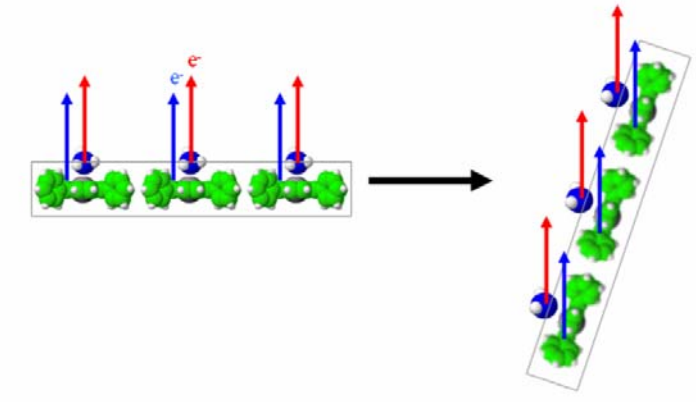

Figure S3: Detection of the N 1s photoelectrons in normal (left) and grazing geometry (right). For grazing detection, the electrons emitted from the porphyrin nitrogen atoms must pass through part of the porphyrin layer, which reduces the effective signal intensity relative to that of the NH_3 related signal.