

## Functional molecules synthesized on-surface: Model systems for atomic-scale electronics and molecular machines

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Scanning tunneling microscope (STM) experiments permit a deep insight into the electronic properties of molecular and atomic systems. Furthermore, on-surface synthesis is presently developing as a powerful strategy for the generation of complex functional molecules on a surface and opens new perspectives for the development of technology at the atomic scale. In this talk, recent low-temperature scanning tunneling microscopy experiments will be reviewed, where on-surface reactions are applied to investigate the electronic and mechanical properties of designed molecular systems.