

## Single-Ion Magnets: Playing with Molecule-Substrate Interactions

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Single-Ion Magnets (SIMs) [1-3] contain a single transition metal or rare-earth ion embedded in an organic ligand. In contrast to many other mononuclear molecular magnets, SIMs exhibit long magnetization relaxation times rendering them good candidates for future molecular spintronics or information processing applications. In order to exploit their properties they should be organized and addressable one-by-one [4], and one way to achieve this goal is to deposit submonolayers of SIMs on to surfaces. Interestingly, the properties of SIMs can be strongly modified upon adsorption on a surface with respect to the bulk crystalline phase because of molecule-substrate interactions [5]. It is thus important to understand how these interactions can be employed to control magnetic and structural properties of the SIMs. We will present our most recent experiments with respect to these goals.

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