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Stern-Gerlach molecular beam deflection studies of magnetic sandwich clusters[1] MARK KNICKELBEIN, Argonne National Laboratory, KEN MIYAJIMA, ATSUSHI NAKAJIMA, Keio University — Stern-Gerlach studies of transition metal-benzene [$M_n(bz)_m$] and lanthanide-cyclooctatetarene [$Ln_n(COT)_m$] sandwich clusters and related sandwich compounds have identified several systems that are ferromagnetically ordered. Such ordered organometallic systems are promising candidates as building blocks for spintronic and information storage applications: their quasi-one-dimensional molecular structures introduce the spatial anisotropy required for magnetic bistability. Magnetic moment measurements of representative magnetically ordered $M_n(bz)_m$ (M=Sc and V) and $Ln_n(COT)_m$ (Ln=Eu, Tb, Ho) systems will be presented.

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