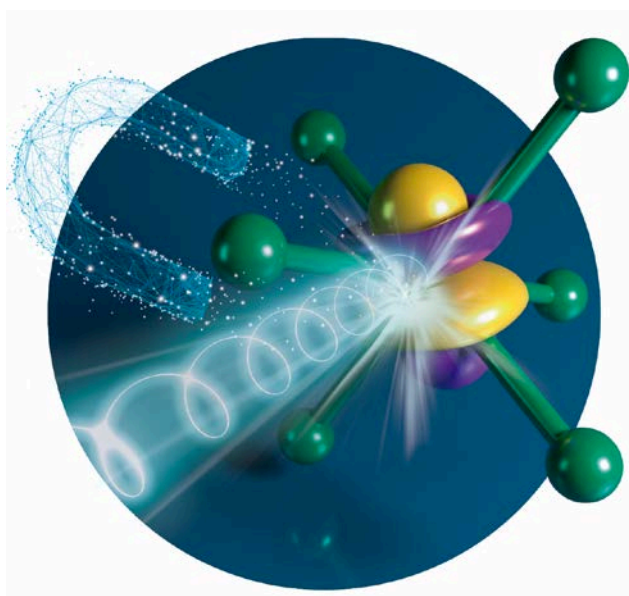


# Modular Approaches to Magnetic Materials of 4d, 5d, and 5f Metal Ions

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Diffuse orbitals and large magnetic anisotropy, resulting from strong spin-orbit coupling, make complexes with central ions from the heavier transition element periods interesting modules for magnetic materials. In this talk, the use of  $[\text{MF}_6]^{2-}$  complexes of the 4d, 5d and 5f series as modules for molecular magnetic systems of various dimensionality will be presented [1,2,3,4]. It will further be shown how X-ray spectroscopy, and in particular, X-ray magnetic circular dichroism may provide novel insight into the magnetic properties of such molecule-based materials.



## References

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