

# **Frustrated Quantum Magnets: Real Materials Versus Magnetic Models**

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Modern research on frustrated quantum magnets is advanced by the close interplay of experimental and theoretical studies. On the experimental side, most importantly, it requires the availability of materials to provide test cases for probing the different magnetic models. While identifying suitable materials, the first step is always a thorough sample characterization, here using analytical concepts stemming from chemistry, metallurgy and condensed matter physics. Subsequently, more specialized experimental tools can be used in order to verify specific theoretical predictions. In the lecture, an overview is given about these concepts and tools, as well as the pitfalls encountered, by discussing selected case studies on frustrated quantum magnets.