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Attractive magnetic Prussian blues

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Abstract

Four experimental demonstrations are proposed, which can be presented to large audiences: precipitation of Prussian blue on an overhead; attraction of a room temperature Prussian blue analogue; oscillating magnet, device transforming light in mechanical energy; thermal probe and magnetic switch. The experiments celebrate the 300th anniversary of the discovery of the first coordination compound by its synthesis. They illustrate simply the concept of Curie temperature, the transformation of light into mechanical energy and the use of molecule-based magnets as a thermal probe.

Keywords: Magnetic Prussian blues; Experimental demonstrations