Cover Picture

Esther Breuning, Mario Ruben, Jean-Marie Lehn, Franz Renz, Yann Garcia, Vadim Ksenofontov, Philipp Gütlch, Elina Wegelius, and Kari Rissanen

The cover picture shows how both, fine arts and science, avail themselves of a system of intertwined symbolic and iconic languages. They make use of a common set of abstracted signs to report on their results. Thus, already in 1925, Wassily Kandinsky painted a masterpiece (bottom), which now, 75 years later, might be regarded as a blueprint for a scientific project. In his painting, Kandinsky pictured a grid-shaped sign that resembles in effect an actual molecular switch. Apparently following an enigmatic protocol, the groups of Lehn and Gütlch (see p. 2504 ff. for more details) constructed a grid-type inorganic architecture that operates as a three-level magnetic switch (center) triggered by three external perturbations (p, T, hν). The switching principle is based on the spin-crossover phenomenon of FeII ions and can be monitored by Mössbauer spectroscopy (left) and magnetic measurements (rear). Maybe not by chance, the English translation of the title of the painting “signs” is a homonym of “science”, since both presented works are a product of the insatiable curiosity of man and his uniring desire to recognize his existence.