Cover Picture

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The cover picture shows the molecular modeling of a star-shaped metallo-supramolecular polymer and the schematic drawing of a linear analogue. These molecules are of great interest because of their unique properties. Metallo-supramolecular polymers emerge by the well-directed combination of polymers, the properties of which have dominated the development of materials in recent years, with supramolecular ligands, which have the ability to organize spontaneously and form unique structures on a molecular level, and transition-metal ions, which, through their physical properties bring characteristic functionalities. The well-known properties of the individual components allow the use of established methods, such as UV/Vis spectroscopy, NMR spectroscopy, and gel permeation chromatography for characterization. However, the combination also requires the application of new methods, such as analytical ultracentrifugation or MALDI-TOF mass spectrometry. More about metallo-supramolecular polymers based on bipyridine and terpyridine complexes can be found in the review by U. S. Schubert and C. Eschbaumer on p. 2892 ff.