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The monograph presents the published works results on the creation and study of metal-containing liquid crystals – metallomesogens. The liquid crystal complexes of transition metals with giant magnetic anisotropy, spin-crossover properties at room temperature and the magnetic behavior of mesogenic metal-polymers are considered. Especial attention is devoted to the luminescence properties of lanthanide derivatives.

It is intended for Bachelors in the field of study 18.03.01 «Chemical Technology» with the subjects «Physical Chemistry» and «Additional chapters of physical chemistry», for Masters in the field of study 18.04.01 «Chemical Technology» with the subjects «Theoretical and experimental research methods in chemistry». The monograph can be used by PhD students studying in the field of «Chemical Sciences» with the postgraduate program «Physical Chemistry».

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