

Russian Chemical Bulletin 1999 vol.48 N2, pages 381-383

Liquid-crystalline CuII and PdII complexes with nonmesogenic ferrocene-containing β -aminovinyl ketone

Kadkin O., Galyametdinov Y., Rakhmatullin A., Mavrin V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

New liquid-crystalline heteropolynuclear complexes L₂M (M = Cu²⁺ (2a), Pd²⁺ (2b)) were synthesized by the reactions of C₅H₅FeC₅H₄-C₆H₄NH-C₂H₂-(CO)-C₆H₄OC₁₂H₂₅ (1, LH) with copper(II) and palladium(II) acetates. Compound 2b was found to possess monotropic nematic and smectic phases; 2a exhibits the monotropic nematic phase and a phenomenon of "double melting." The compositions and structures of compounds 1 and 2a,b were established by elemental analysis, ¹H and ¹³C NMR, ESR, and IR spectroscopy.

Keywords

Coordination compounds, Ferrocene, Liquid crystals, Metallomesogens