



Terpyridine-tetrathiafulvalene hybrid ligands and their electroactive metal complexes

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Auteur	Belhadj, Esmah [1], El-Ghayoury, Abdelkrim [2], Ripaud, Emilie [3], Zorina, Leokadiya [4], Allain, Magali [5], Batail, Patrick [6], Mazari, Miloud [7], Sallé, Marc [8]
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Résumé en anglais	<p>The synthesis and full characterization (including X-ray structures) of two redox-active terpyridine-tetrathiafulvalene ligands namely (4-amido-2,2':6,2'-terpyridyl)-6,7-ethylenedithiotetrathiafulvalene (1) and 2-(4-thioacetamide-2,2':6,2'-terpyridyl)-3,6,7-tris(methylsulfanyl)-6, tetrathiafulvalene (2) are described. The binding properties of these multifunctional systems for various transition metal cations (Ni²⁺, Zn²⁺, Cd²⁺ and Fe²⁺) are analyzed in solution by cyclic voltammetry and UV-visible spectroscopy. In addition, a tetrahedral neutral zinc metal complex of ligand (2) formulated as (MeS)₃-TTF-SCH₂CONH-Tpy-ZnCl₂ center dot MeOH [complex (3)] and an octahedral nickel complex formulated as [{(MeS)₃-TTF-SCH₂CONH-Tpy}₂Ni]center dot (ClO₄)₂center dot 0.5(H₂O) [complex (4)] are characterized in the solid state by X-ray diffraction.</p>
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