

Reversible reduction of oxatriphyrin(3.1.1)—adjusting the coordination abilities to the central ion.

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Streszczenie

Furan-fused oxatriphyrin(3.1.1) acts as a ligand towards boron(III), phosphorous(III), and phosphorous(V) ions. The coordination abilities are adjusted by changes of the oxidation state. Two coordination modes are possible, depending on the central-ion entrapped in the oxatriphyrin(3.1.1) environment. A free base, structurally similar to the complexes, can be easily obtained by regioselective reduction. The resulting molecules are highly emissive after conversion into a phlorin-like oxatriphyrin(3.1.1) frame (NON donors), and show chiral activity caused by the presence of a tetrahedral carbon.

Słowa kluczowe

boron, fluorescence, phosphorous, subporphyrin, triphyrin

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