

New mononuclear manganese(II) complexes with 2,4,6-tris(2-pyridyl)-1,3,5-triazine (*tptz*) - selective catalyst in UHP oxidation of sulfides.

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Rok wydania

2012

Czasopismo

Polyhedron

Numer woluminu

34

Strony

202-209

DOI

10.1016/j.poly.2011.12.027

Kolekcja

Naukowa

Język

Angielski

Streszczenie

A new manganese complex of the formula $[\text{Mn}(\text{tptz})(\text{OH}_2)_3](\text{CF}_3\text{SO}_3)_2 \cdot \text{EtOH}$ (**1**, where *tptz* = (2,4,6-tris(2-pyridyl)-1,3,5-triazine) is presented, exhibiting an excellent catalytic activity and selectivity in oxidation of various sulfides to the corresponding sulfoxides with UHP (*urea hydrogen peroxide*) as oxidant under air at room temperature. A modified preparation procedure produces another new manganese complex of the formula $[\text{Mn}(\text{tptz})(\text{CH}_3\text{COO})(\text{OH}_2)_2](\text{CF}_3\text{SO}_3) \cdot 3\text{H}_2\text{O}$ (**2**). X-ray structures of both Mn(II) complexes, properties (elemental analysis, electrochemistry, EPR, IR, Raman, and UV–Vis spectra), as well as DFT studies results are reported.

Słowa kluczowe

manganese, Triflate, molecule, lanthanides, 6-Tris(2-pyridyl)-1, Ion, ,5-triazine, crystal structures, Density Functional Theory, Oxidation of sulfides

Adres publiczny

<https://doi.org/10.1016/j.poly.2011.12.027>

Strona internetowa wydawcy

<http://www.elsevier.com>

Artykuł

Plik został wygenerowany dnia 2026-10-09 07:14:15

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/Nnk5KCZ>.