

Aza-substitution, benzo-annulation effects and catalytic activity of β -octaphenyl-substituted tetrapyrrolic macroheterocyclic cobalt complexes. I. heterogeneous catalysis

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Abstract

© 2016, Springer Science+Business Media Dordrecht. The influence of the size of conjugated π -system on catalytic activity of cobalt complex with β -octaphenylporphyrin and its tetraaza-, tetrabenzo and tetrabenzotetraaza derivatives was studied in present work. It is found that catalytic activity for oxidation of sulfur-containing compounds increases under extension of conjugated macrocycle system according to the following series $\text{CoP} < \text{CoBP} \leq \text{CoPz} < \text{CoPPz} \ll \text{CoPc}$.

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Keywords

Aza-substitution, Benzo-annulation, Catalyst, Metal complex, Oxidation, Sodium N,N-carbomodithiolate, β -Octaphenylporphyrin

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