Catalytic Oxidation of a Trialkyl-Substituted Phenol and Aniline with Biomimetic Schiff Base Complexes

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The catalytic oxidation of 2,4,6-tri-tert-butylphenol and 2,4,6-tri-tert-butylaniline with molecular oxygen and tert-butylhydroperoxide was investigated using biomimetic Mn-, Fe- and Co-complexes as catalysts. The catalytic activity and product distribution were determined and compared with those observed in the reactions of the well-known Co(salen) complex.