

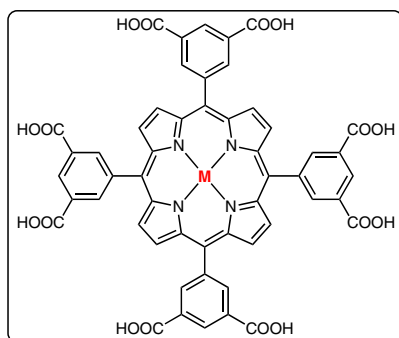
X.-L. YANG, M.-H. XIE, C. ZOU, Y. HE, B. CHEN,\* M. O'KEEFFE, C.-D. WU\* (ZHEJIANG UNIVERSITY, HANGZHOU, P. R. OF CHINA; UNIVERSITY OF TEXAS AT SAN ANTONIO AND ARIZONA STATE UNIVERSITY, TEMPE, USA)

porous Metalloporphyrinic Frameworks Constructed from Metal 5,10,15,20-Tetrakis(3,5-bis(carboxy)phenyl)-porphyrin for Highly Efficient and Selective Catalytic Oxidation of Alkylbenzenes

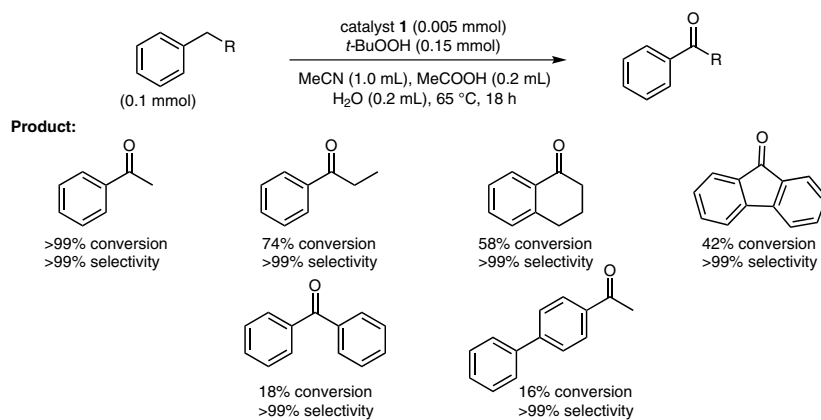
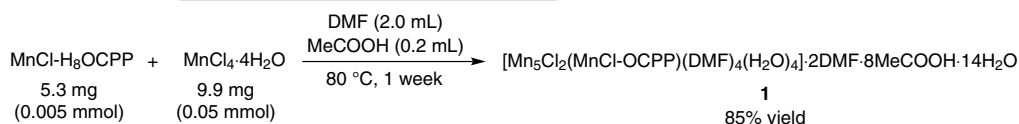
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# porous Metalloporphyrinic Frameworks for Oxidation of Alkylbenzenes

metal 5,10,15,20-tetrakis(3,5-bis(carboxy)phenyl)porphyrin = M-H<sub>8</sub>OCPP



M = Mn<sup>III</sup>Cl: MnCl-H<sub>8</sub>OCPP



**Significance:** Preparation and characterization of the porous metalloporphyrin octacarboxylate framework **1** are described. The catalytic utility of **1** was examined for the oxidation of alkyl benzenes with *tert*-butyl hydroperoxide as an oxidant to give the corresponding ketones in 16 to >99% conversion with >99% selectivity (ketones obtained as sole oxidation products from alkylbenzenes).

**Comment:** The framework **1** was recovered by centrifugation and reused 14 times without significant loss of catalytic activity. A homogeneous metalloporphyrin catalyst MnCl-Me<sub>8</sub>OCPP showed much lower catalytic activity in the oxidation of ethyl benzene under similar conditions.

**SYNFACTS Contributors:** Yasuhiro Uozumi, Yoichi M. A. Yamada, Maki Minakawa  
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