Porous Metalloporphyrinic Frameworks for Oxidation of Alkylbenzenes

**Significance:** Preparation and characterization of the porous metalloporphyrin octacarboxylate framework 1 are described. The catalytic utility of 1 was examined for the oxidation of alkylbenzenes 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-Me8OCPP showed much lower catalytic activity in the oxidation of ethyl benzene under similar conditions.

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

**SYNFACTS 2012, 8(10), 1149 Published online: 19.09.2012**

DOI: 10.1055/s-0032-1317207; Reg-No.: Y09512SF