Synthesis of New Macrocyclic Chiral Manganese(III) Schiff Bases as Catalysts for Asymmetric Epoxidation

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General experimental methods. ¹H NMR were recorded at 250 MHz in CDCl₃ as internal reference. ¹³C NMR spectra were recorded at 62.8 MHz. Mass spectrometry analyses were performed using EI, FAB⁺ or ES techniques in the positive mode. UV-visible spectra were obtained on a diode array spectrophotometer. IR spectra were recorded on a FT-IR spectrophotometer. Optical rotations were measured with a polarimeter. Gas chromatography (GC) analyses were performed on a chromatograph equipped with a flame ionization detector and a chiral capillary column (betadex 120, 30m x 0.25 mm, 0.25 μm film) and coupled to an integrator. The injector temperature was 240 °C and the column temperature 140 °C, with a column pressure of 10 psi. 1,4-Dibromobenzene was used as internal standard for the GC analyses. 2,6-Dibromo-4-*tert*-butylphenol was prepared as described in the literature.^[1] Di- and tri-ethylene glycol were di-tosylated according literature procedure.^[2] 5-allyloxy-1,3-benzenedimethyl ditosylate was synthesized in three steps from 5-hydroxyisophthalic acid.^[3] Other commercially available reagents and solvents were purchased from standard chemical suppliers and used without further purification.

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[3] Bradshaw J. S., Huszthy, P.; Wang, T.; Zhu, C.; Nazarenko, A. Y.; Izatt, R. M. *Supramolecular Chem.* **1993**, *1*, 267-273.