

Supporting Information

Bis[1,4,8,11,15,18,22,25-octa(butyloxyl)phthalocyaninato] Rare Earth Double-Decker Complexes: Synthesis, Spectroscopy, and Molecular Structure

Yingning Gao, Renjie Li, Shuai Dong, Yongzhong Bian, and Jianzhuang Jiang*

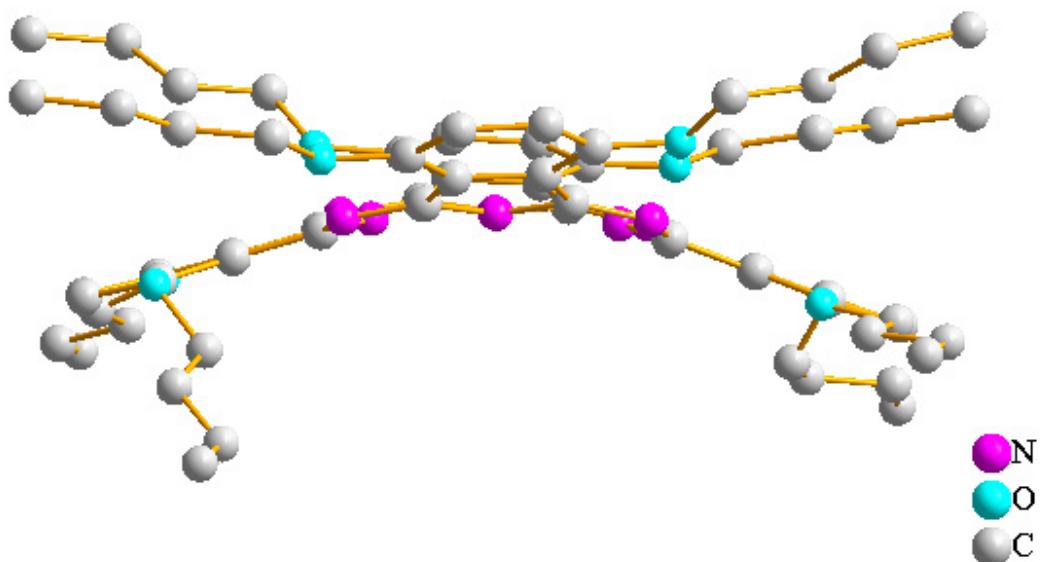


Figure S1. Molecular structure of metal-free $\text{H}_2\text{Pc}(\alpha\text{-OC}_4\text{H}_9)_8$ in the side view. Hydrogen atoms are omitted for clarity. $\text{H}_2\text{Pc}(\alpha\text{-OC}_4\text{H}_9)_8$ displays highly deformed non-planar structure.

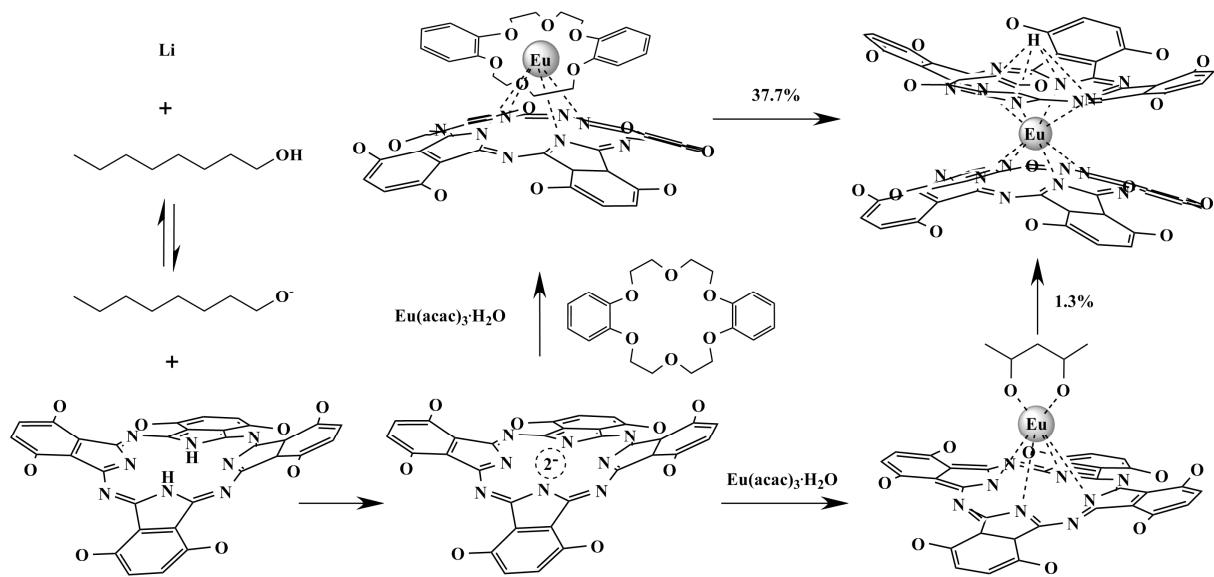


Figure S2. Formation of homoleptic bis[1,4,8,11,15,18,22,25-octa(butyloxy)phthalocyaninato]europium double-decker complex Eu^{III}H[Pc(α-OC₄H₉)₈]₂ (**1**) in the presence of Li and dibenzo-18-crown-6. Hydrogen atoms and alkyl side chains were omitted for clarity.

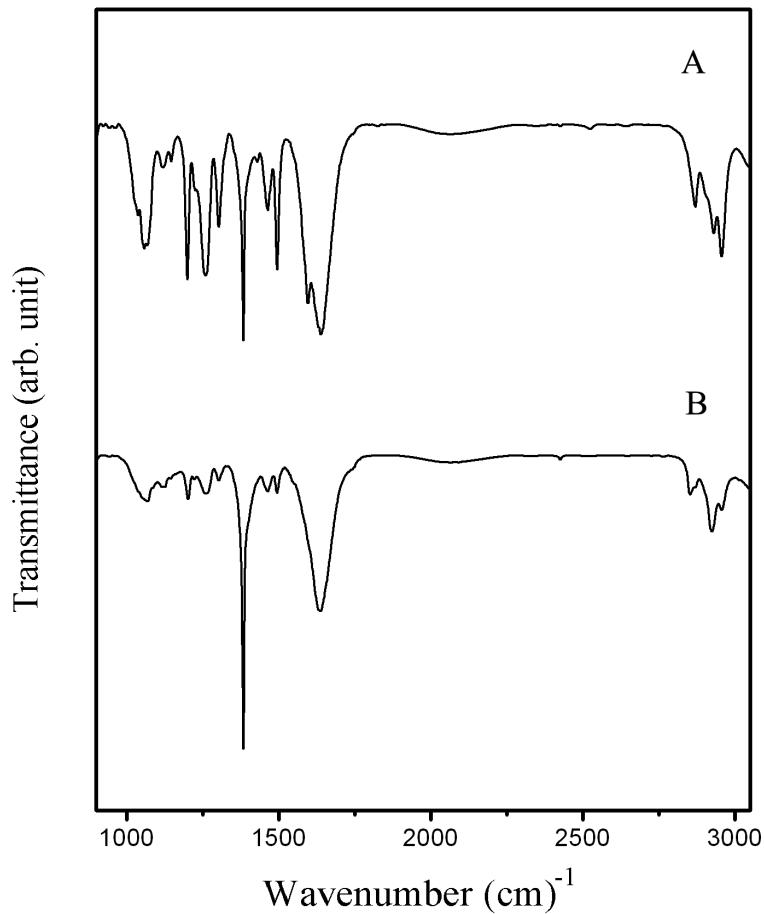


Figure S3. IR spectra of double-decker complexes **1** (A) and **2** (B) in the region 900-3050 cm⁻¹ with 2 cm⁻¹ resolution.