

Supporting materials

A unique tetramer of 4 : 5 β -cyclodextrin–ferrocene in the solid state

Yu Liu*, Rui-Qin Zhong, Heng-Yi Zhang and Hai-Bin Song

*Department of Chemistry, State Key Laboratory of Elemento-Organic
Chemistry, Nankai University, Tianjin 300071, P. R. China. E-mail:
yuliu@public.tpt.tj.cn*

Table 1S Crystal data and structure refinement for **1**.

Empirical formula	C ₁₀₉ H ₁₉₄ Fe _{2.50} O _{84.50}
Formula weight	2996.27
Crystal system	Monoclinic
Space group	C2
Unit cell dimensions (Å, °)	
<i>a</i>	19.378(5)
<i>b</i>	24.094(6)
<i>c</i>	32.776(9)
α	90
β	93.963(5)
γ	90
Volume (Å ³)	15266(7)
<i>Z</i>	4
<i>D</i> _{calcd} (g/cm ³)	1.304
μ (mm ⁻¹)	0.337
<i>F</i> (000)	6356
Range of <i>h</i> , <i>k</i> , <i>l</i>	-23/12, -28/28, -34/38
Reflections collected/unique	38848 / 25259
Max. & min. transmission	1.000000 and 0.564372
Data/restraints/parameters	25259 / 279 / 1842
Goodness-of-fit on <i>F</i> ²	1.052
<i>R</i> & <i>R</i> _w	0.1021 & 0.2424
Largest diff. Peak & hole (e/Å ³)	0.800 & -0.555

$$\overline{R} = \Sigma(|F_0| - |F_C|) / \Sigma|F_0|; \quad {}^b wR = [\Sigma w(|F_0|^2 - |F_C|^2)^2 / \Sigma w(F_0^2)]^{1/2}.$$

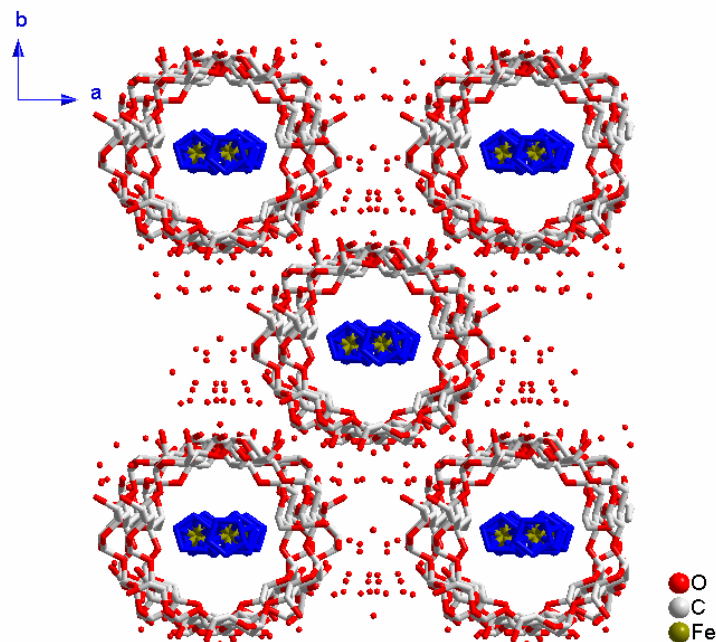


Fig. 1S Crystal structure of **1** viewed down the *c* axis showing the hexagonal array of CD channels. Water molecules are shown by red circles. Two β -CD molecules are drawn in each channel.

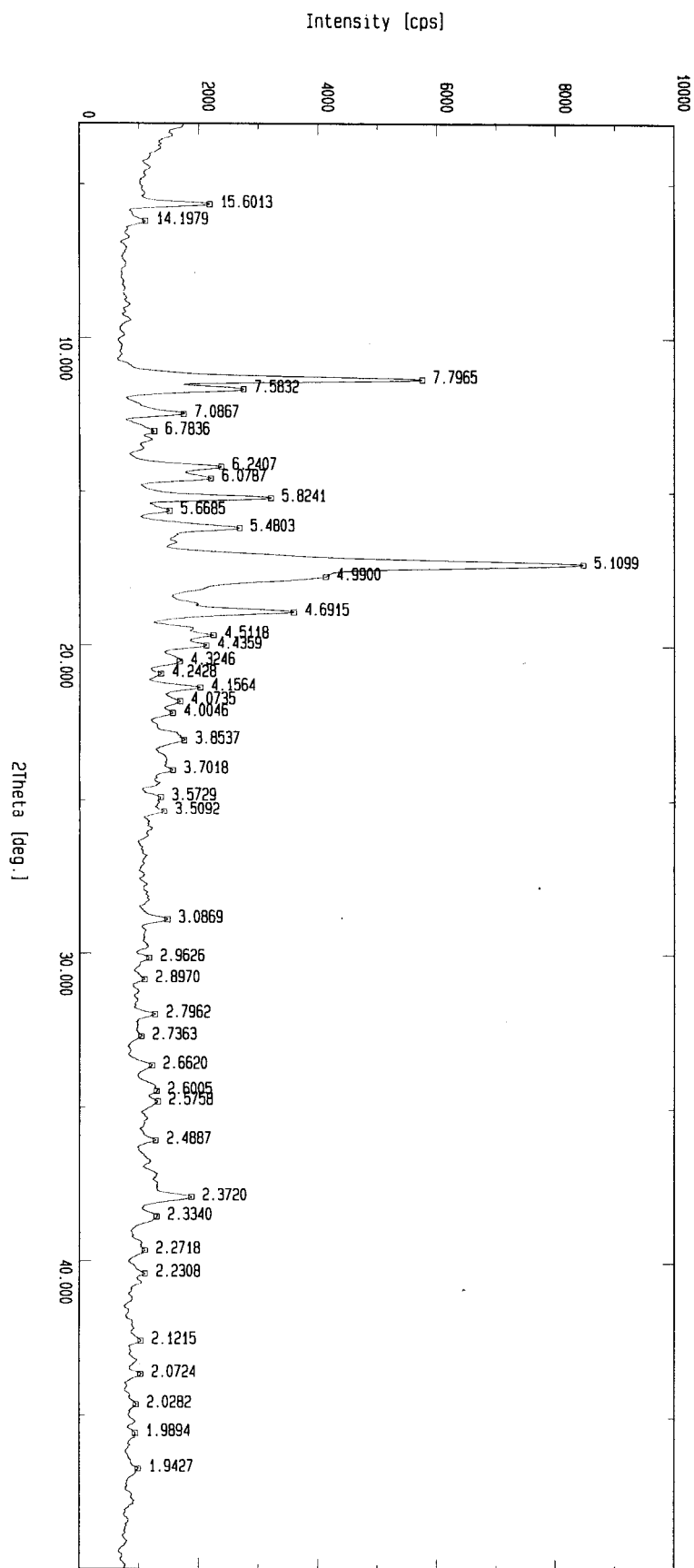


Fig. 2S XRPD pattern for **1**.