

Synthesis and X-Ray Crystal Structure of Two Novel Ester Ferrocenophanes

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Two novel ester ferrocenophanes have been prepared by esterification of 1,1'-ferrocene-di(carbonyl chloride) with glycol and 1,4-butanediol, respectively. Both of them have been characterized by IR, elemental analysis, MALDI-TOF MS and ^1H NMR spectroscopic methods, and their structures have been elucidated by X-ray diffraction. The intermolecular associations based on $\text{C-H}\cdots\text{O}$ hydrogen bonds have also been discussed. These molecules are assembled into chains, and the chains are further assembled into a 3D structure through several hydrogen bonds.

Key words: Ester Ferrocenophanes, Synthesis, X-Ray Crystal Structure, Hydrogen Bonds