

Supporting Information

A Multimetallic Iron(II)-Lithium Complex as Catalyst for ϵ -Caprolactone Polymerization

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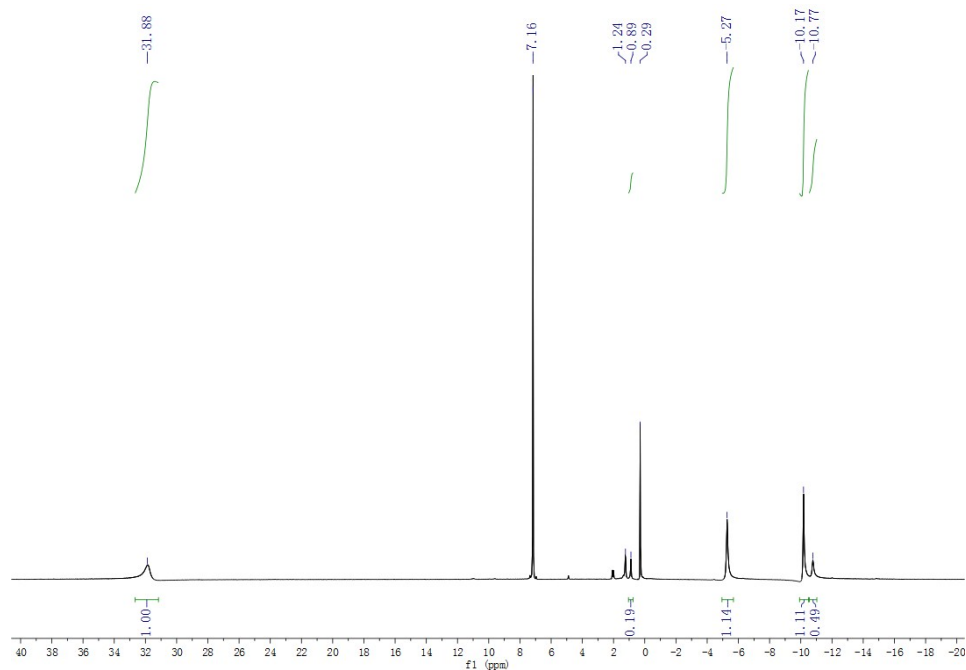


Fig. S1 ^1H NMR spectrum of complex **1**. The signals at 1.24, 0.89 ppm attribute to the protons of co-crystallized hexane molecule.

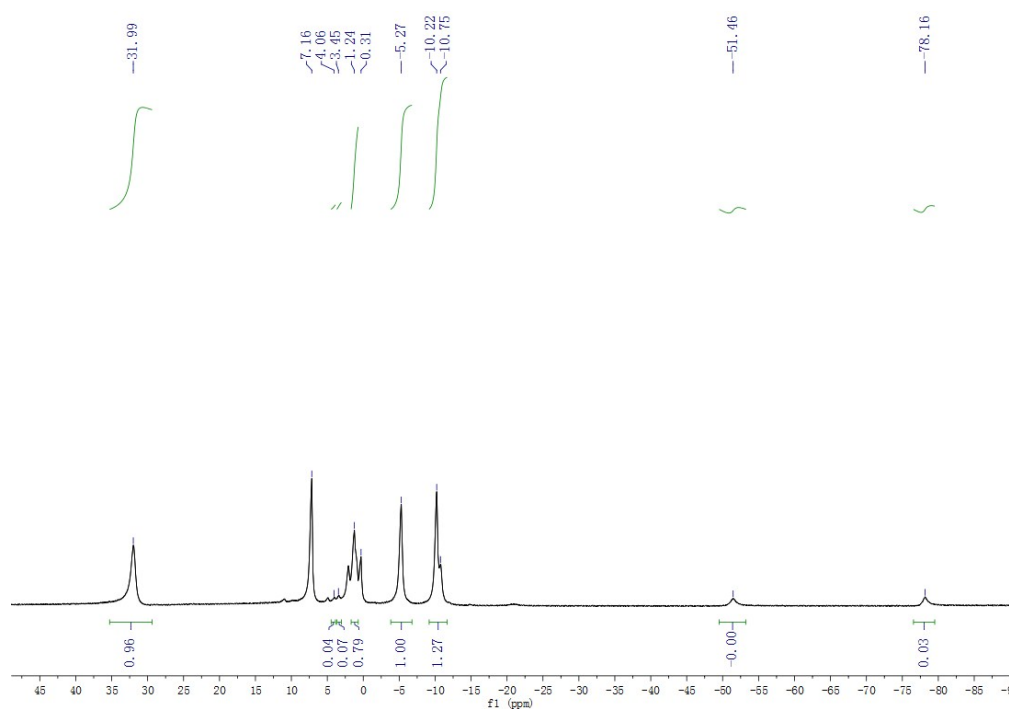


Fig. S2 ^1H NMR spectrum for reaction of **1** + ϵ -CL after 20 min in C_6D_6 at 50 °C. The signals at 4.06, 3.45 ppm attribute to the protons of PCL and ϵ -CL respectively.

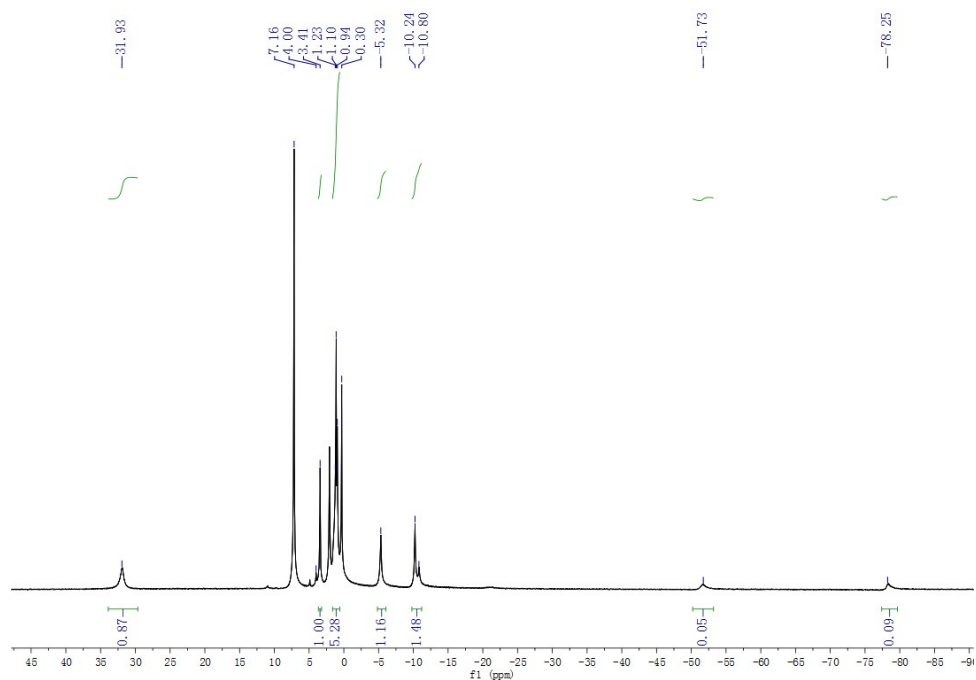


Fig. S3 ^1H NMR spectrum for reaction of **1** + 10 ϵ -CL after 6 min in C_6D_6 at 50°C . The signals at 4.00, 3.41, 1.10 ppm attribute to the protons of PCL and ϵ -CL respectively, and the signals at 1.23, 0.94 ppm attribute to the protons of co-crystallized hexane molecule.

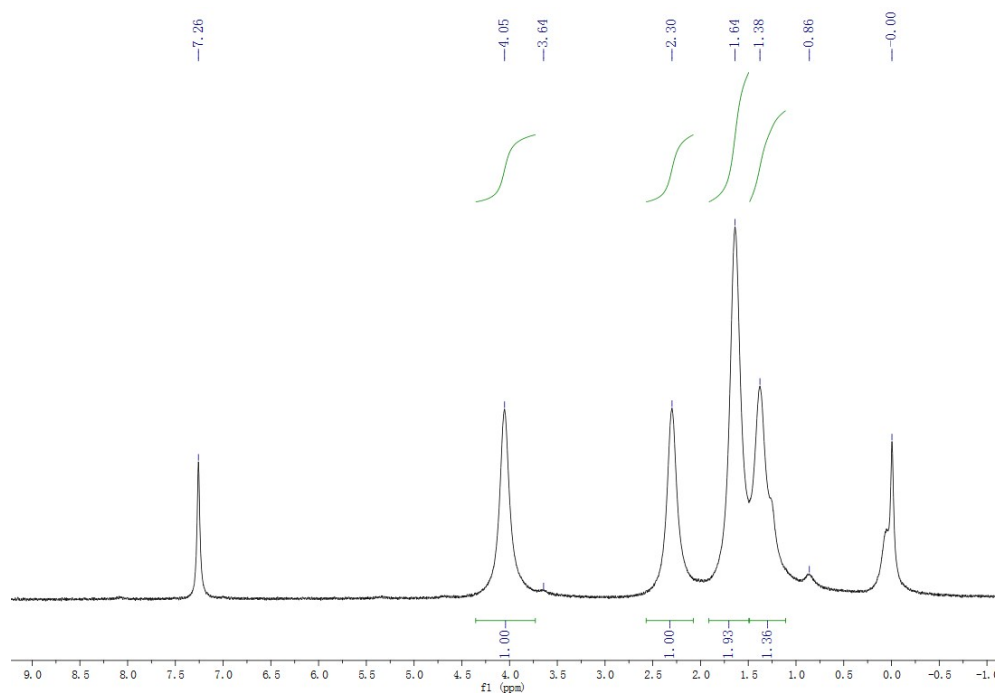


Fig. S4 ^1H NMR spectrum of PCL catalyzed by complex **1** in toluene at 50°C after 30 min, and quenched by 10% HCl/EtOH .

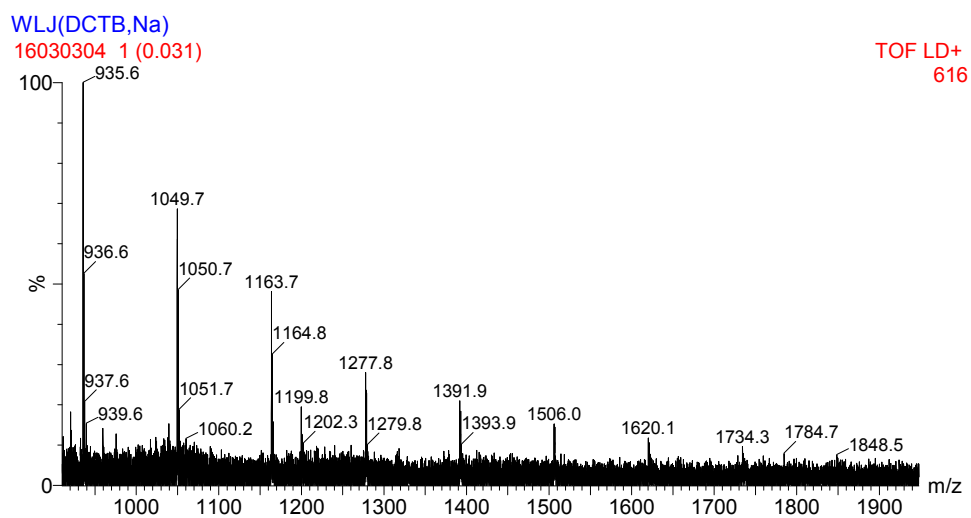


Fig. S5 MALDI-TOF mass spectrum of PCL catalyzed by complex **1** with 10 : 1 [ε-CL] / [Fe] ratio after 20 min in toluene at 25 °C.

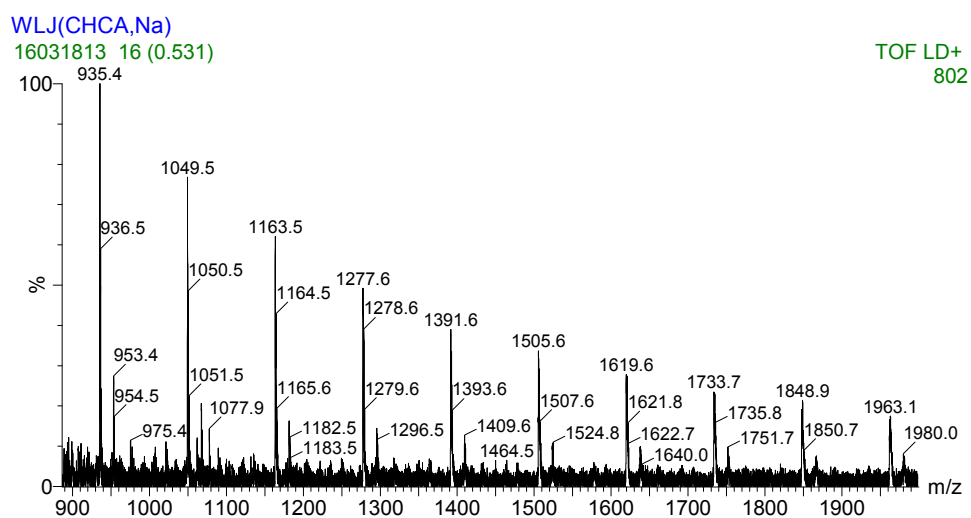


Fig. S6 MALDI-TOF mass spectrum of PCL catalyzed by complex **1** with 10 : 1 [ε-CL] / [Fe] ratio after 30 min in toluene at 50 °C, and quenched by 10% HCl/EtOH.