
Supplementary Information

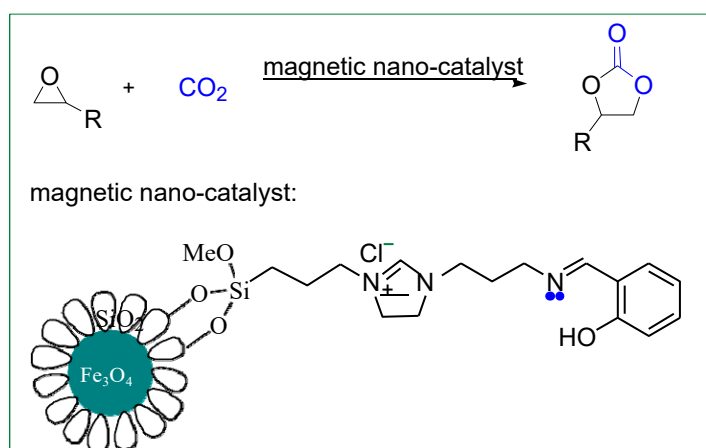
Preparation of Magnetic Nano-Catalyst Containing Schiff Base Unit and Its Application in the Chemical Fixation of CO₂ into Cyclic Carbonates

Na Kang ¹, Yindi Fan ^{1,2}, Dan Li ¹, Xiaoli Jia ¹ and Sanhu Zhao ^{1,2,*}

¹ Department of Chemistry, Xinzhou Normal University, Xinzhou 034000, China

² School Chemistry and Material Science, Shanxi Normal University, Taiyuan 030000, China

* Correspondence: sanhuzhao@163.com or sanhuzhao@xztnu.edu.cn



NMR spectra of ionic liquids and cyclic carbamate.

Figure S1. NMR spectrum of 1-butyl-3-methylimidazolium chloride ([Bmim]Cl)

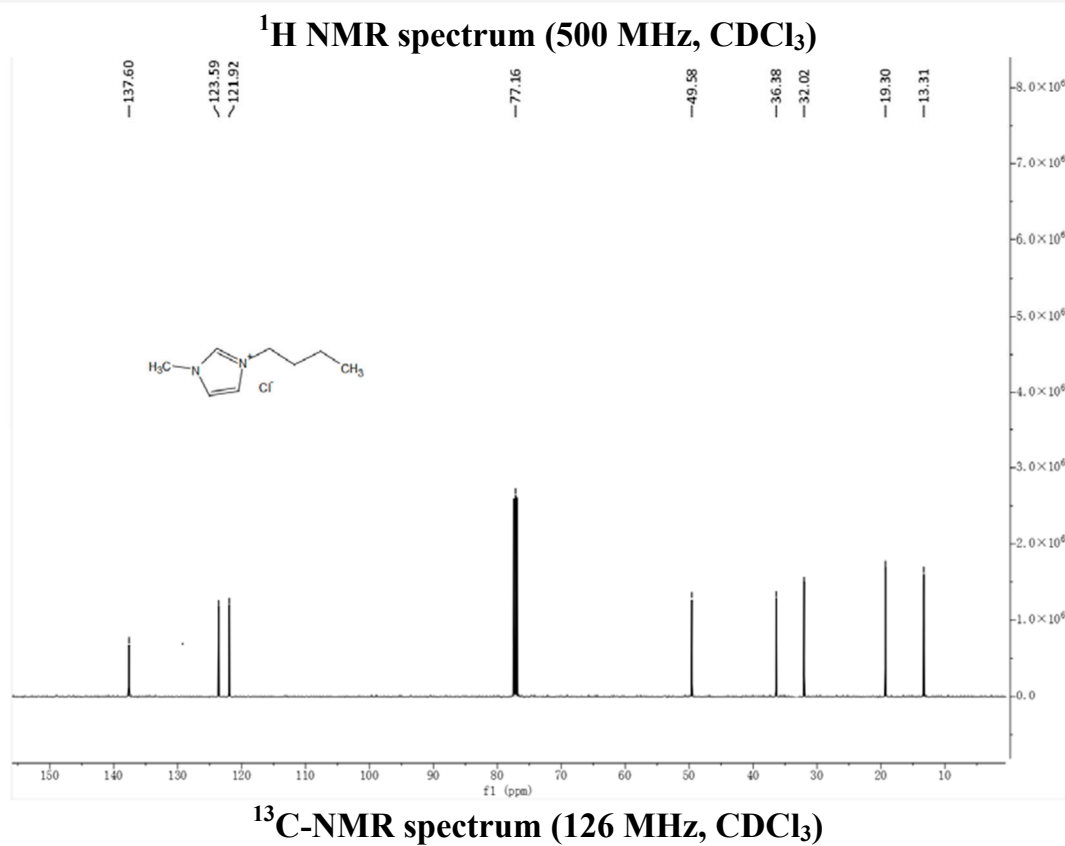
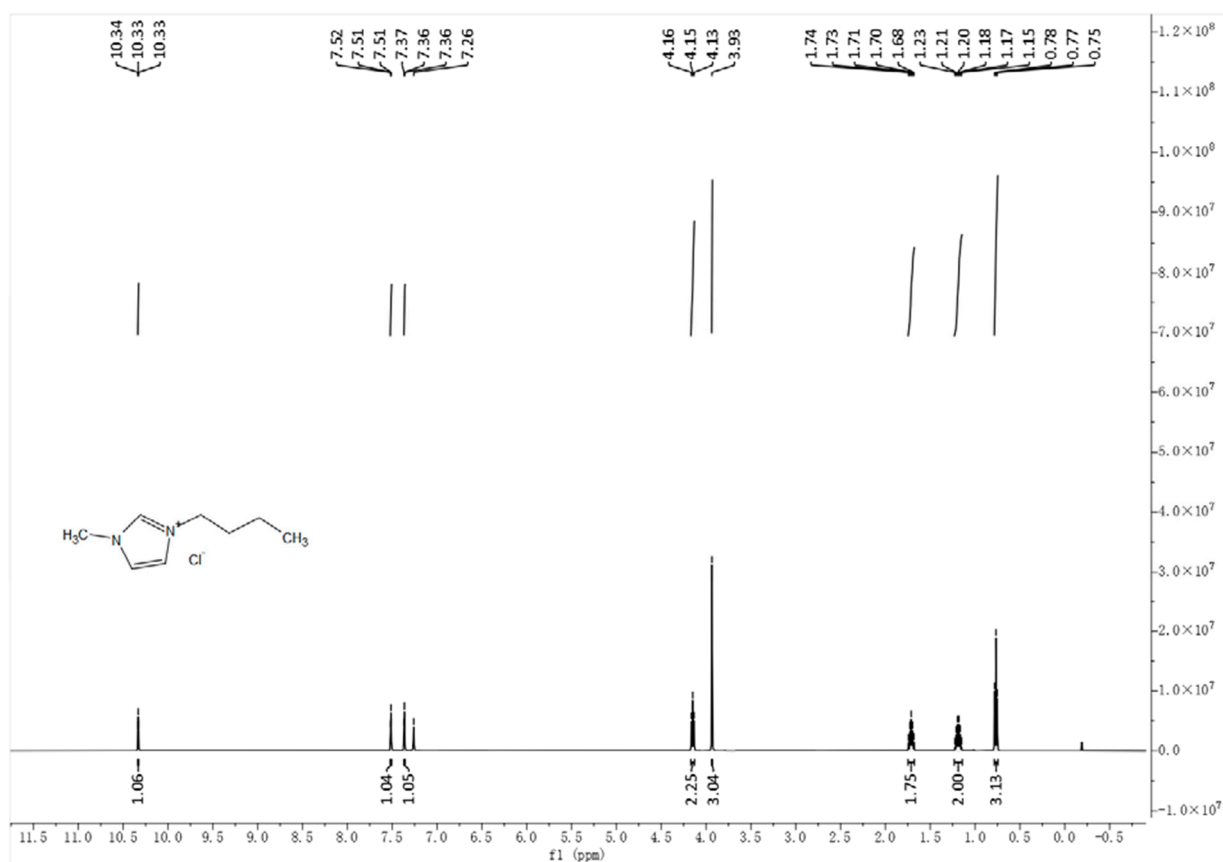


Figure S2. NMR spectrum of the Schiff base containing imidazole ring

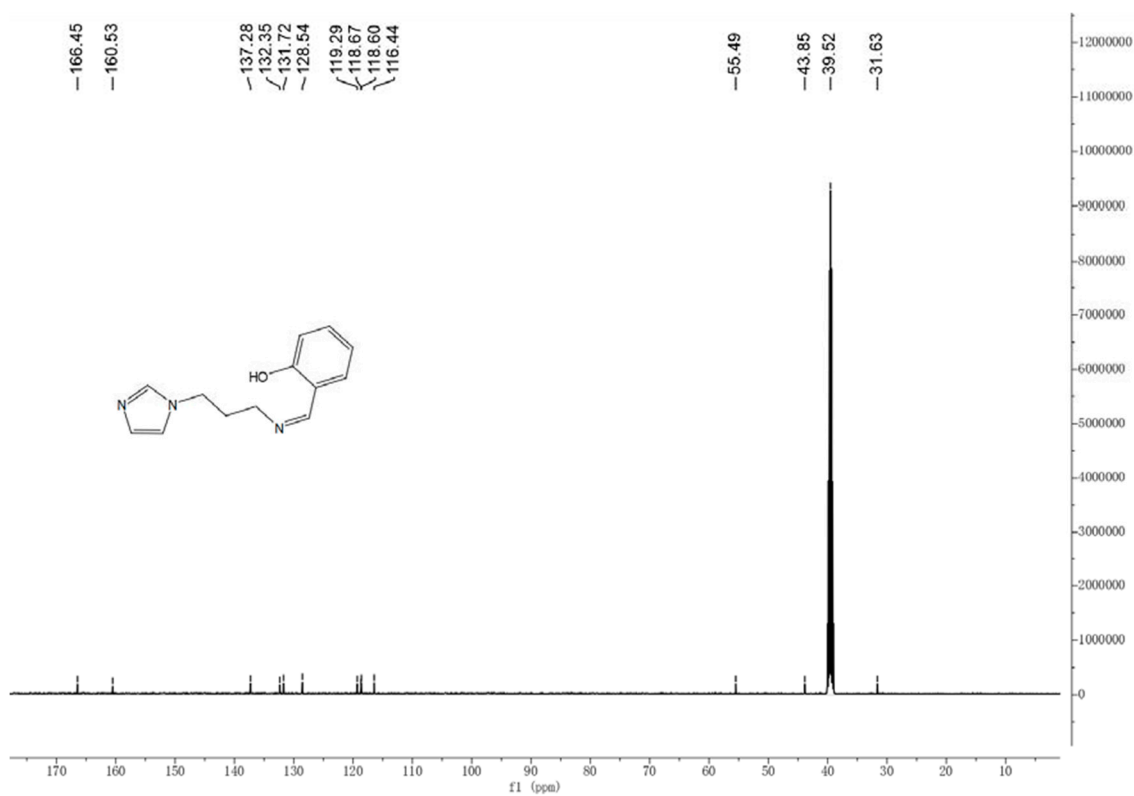
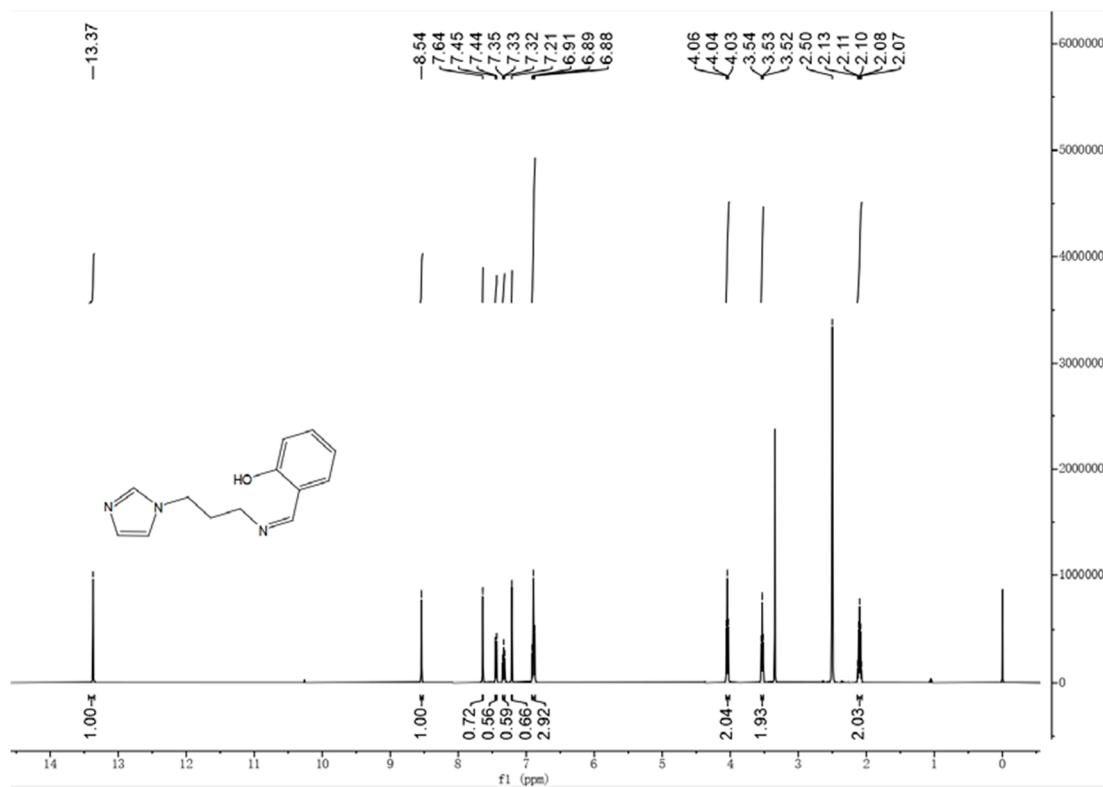


Figure S3. NMR spectrum of the ionic liquid containing Schiff base unit

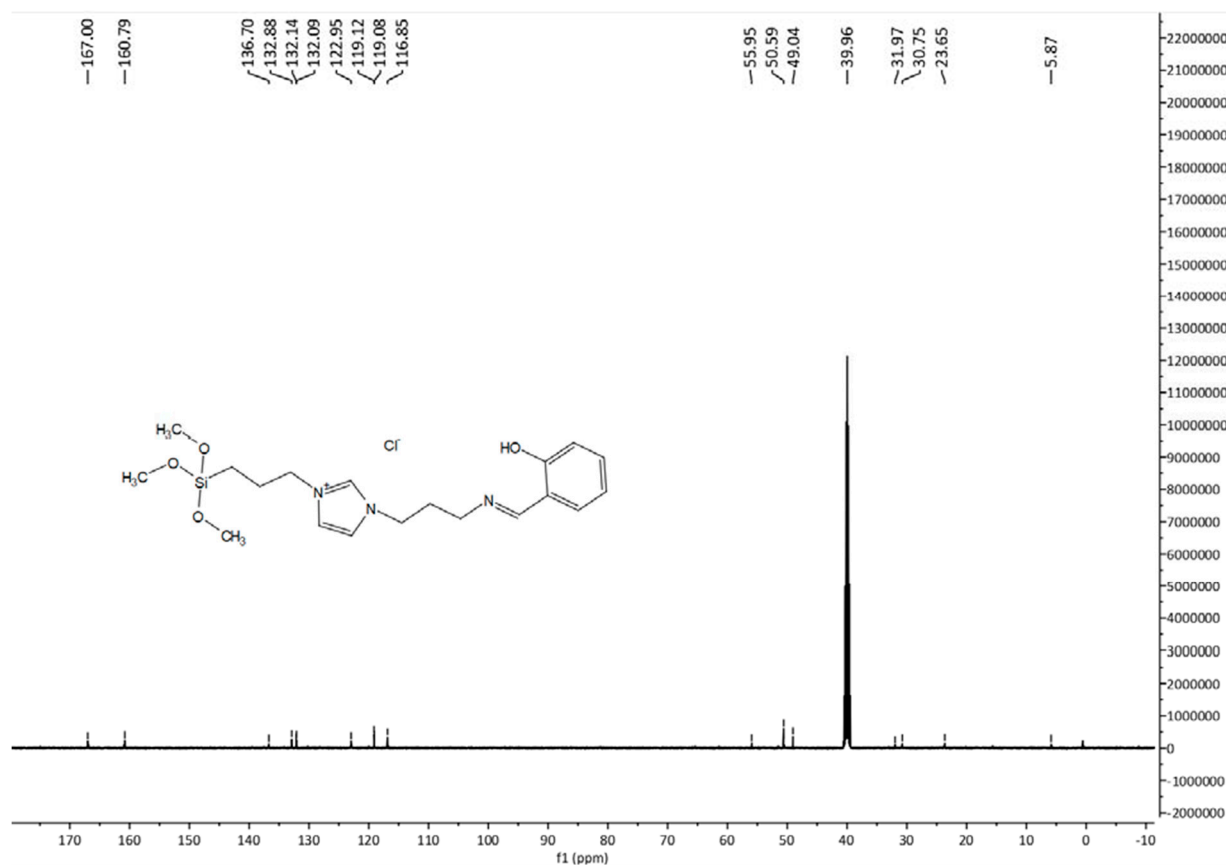
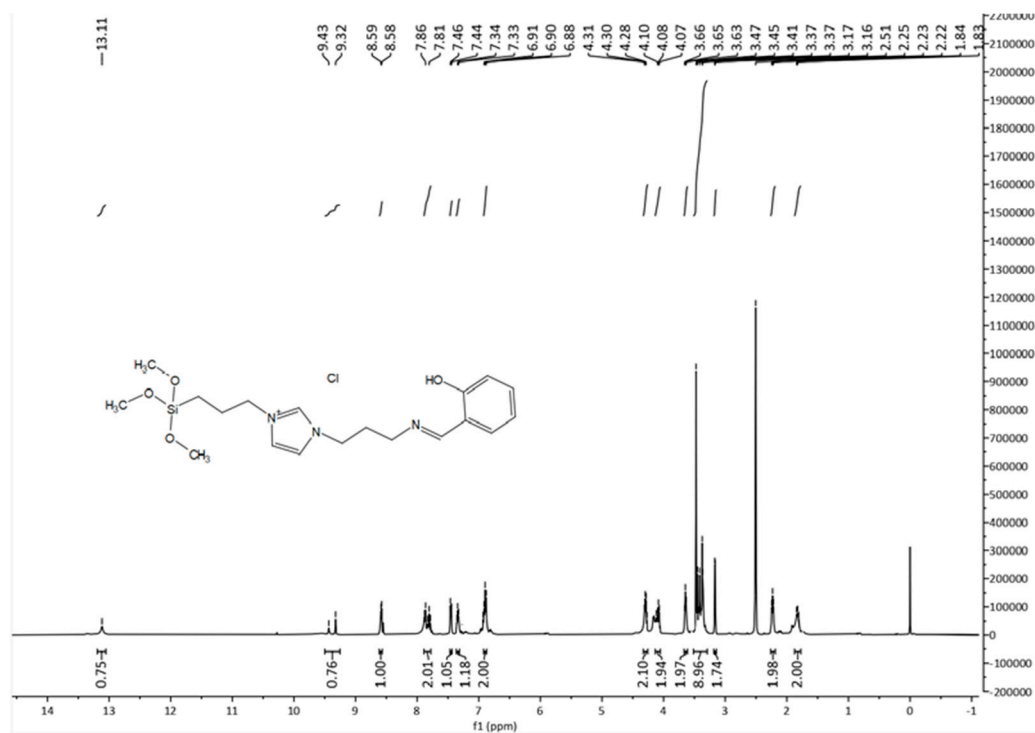
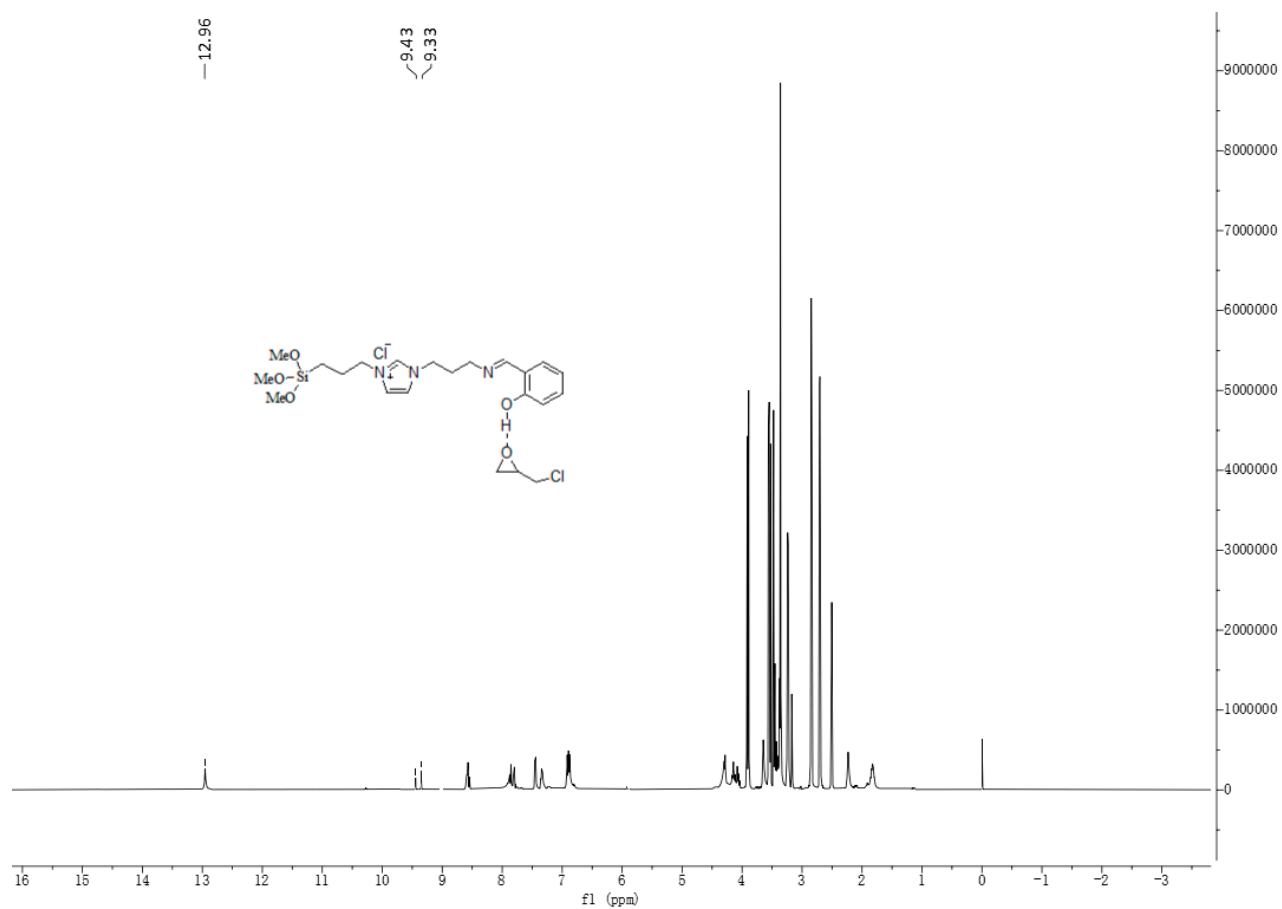
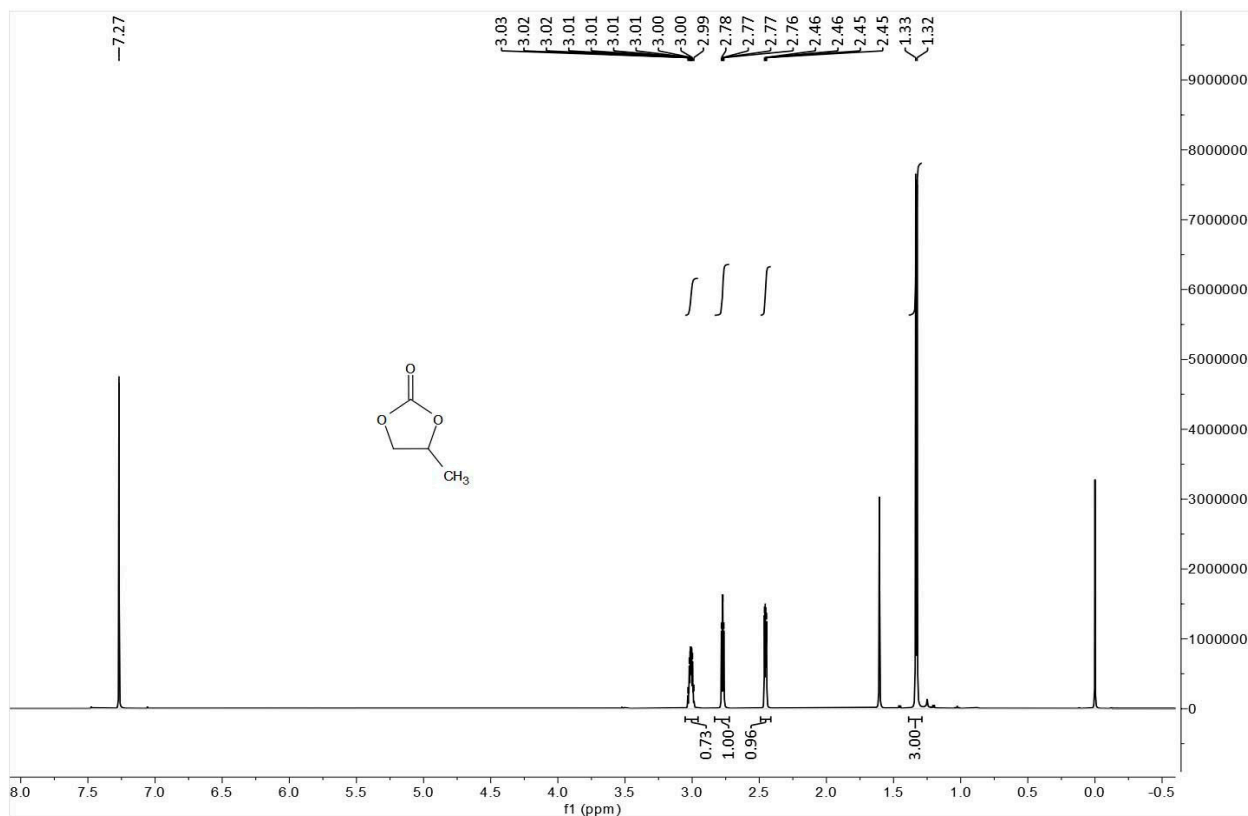


Figure S4. NMR spectrum of a mixture of ionic liquid containing Schiff base unit and epichlorohydrin

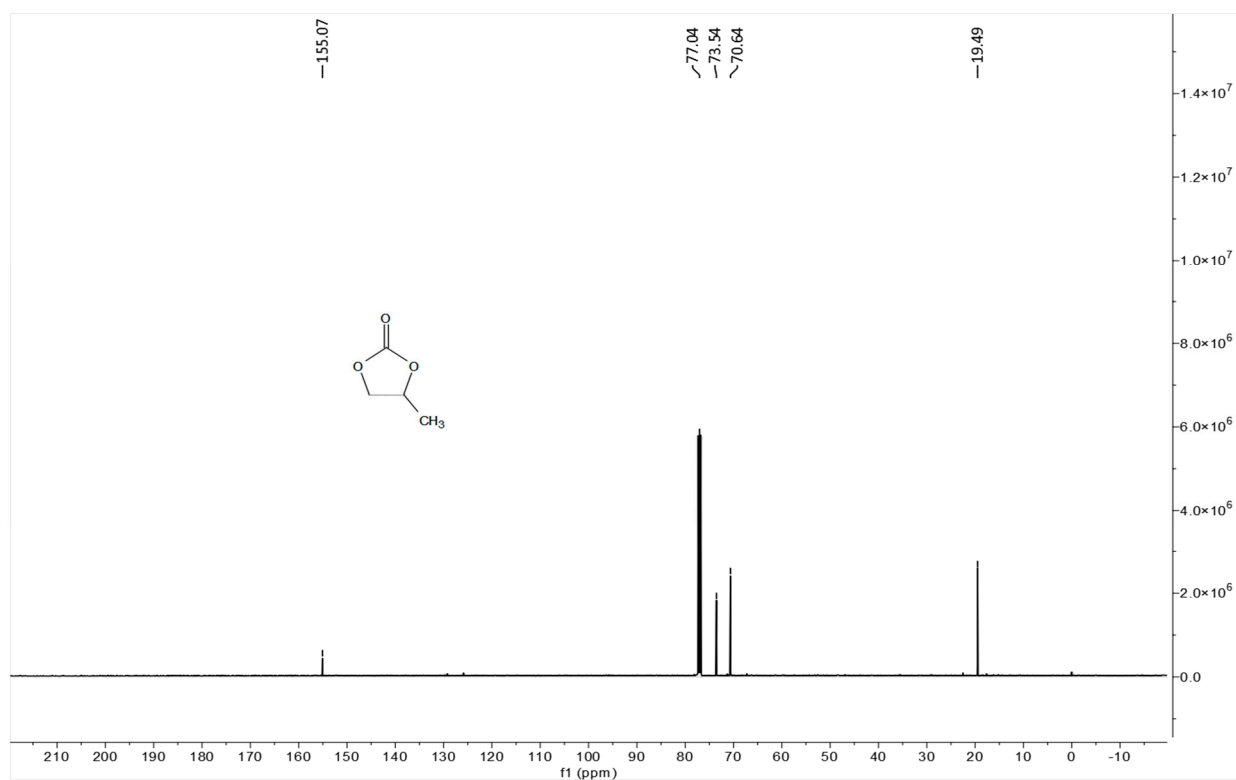


^1H NMR spectrum (500 MHz, $\text{DMSO}-d_6$)

Figure S5. NMR spectrum of 4-methyl-[1,3]dioxolan-2-one



¹H NMR spectrum (500 MHz, CDCl₃)



¹³C-NMR spectrum (126 MHz, CDCl₃)

Figure S6. NMR spectrum of 4-butyl-[1,3]dioxolan-2-one

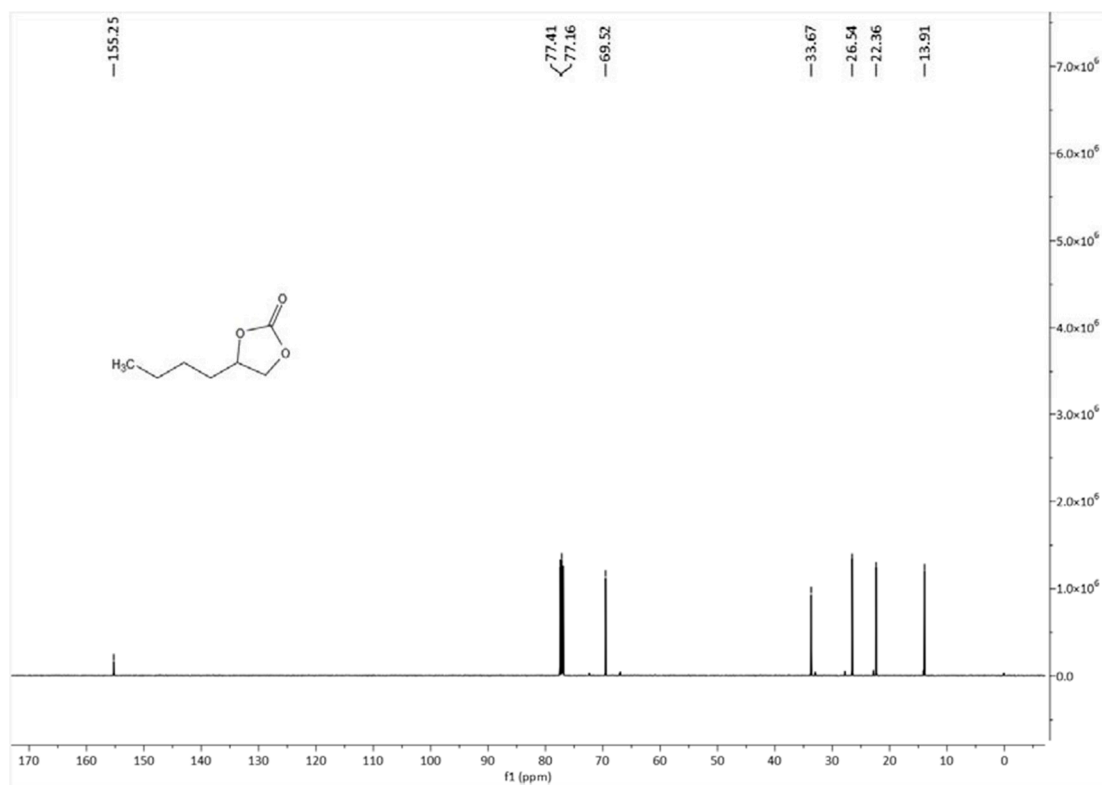
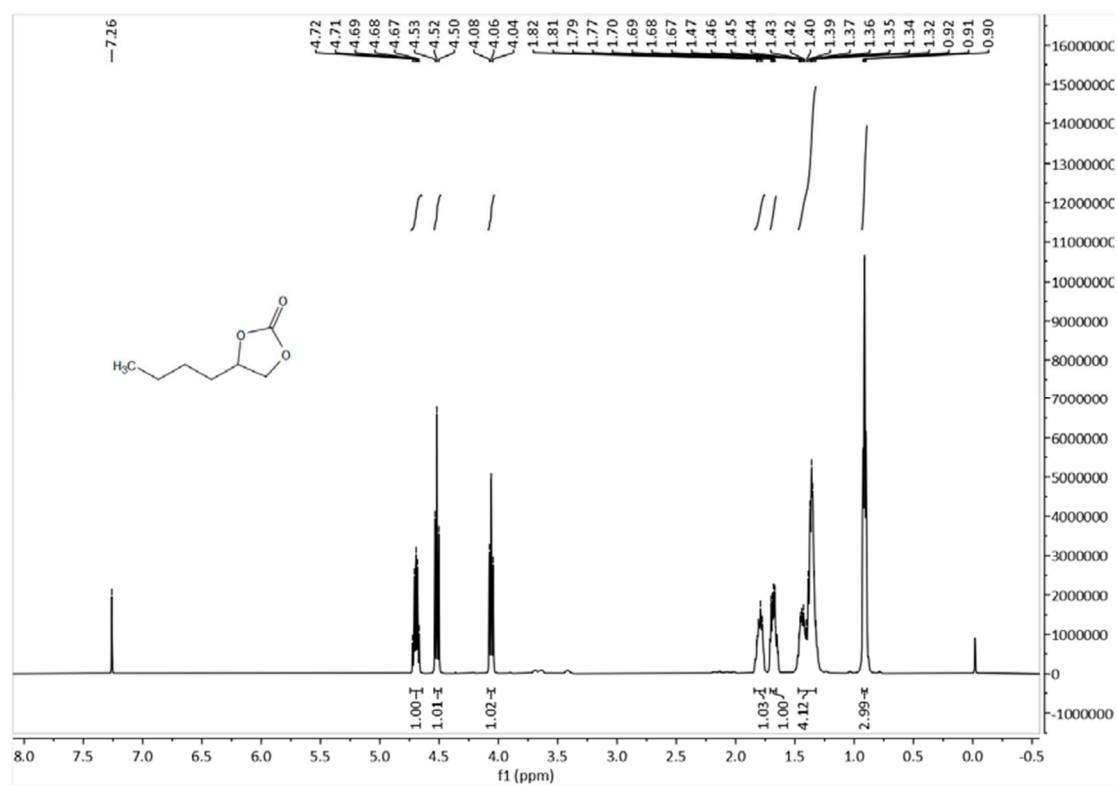


Figure S7. NMR spectrum of 4-chloromethyl-[1,3]dioxolan-2-one

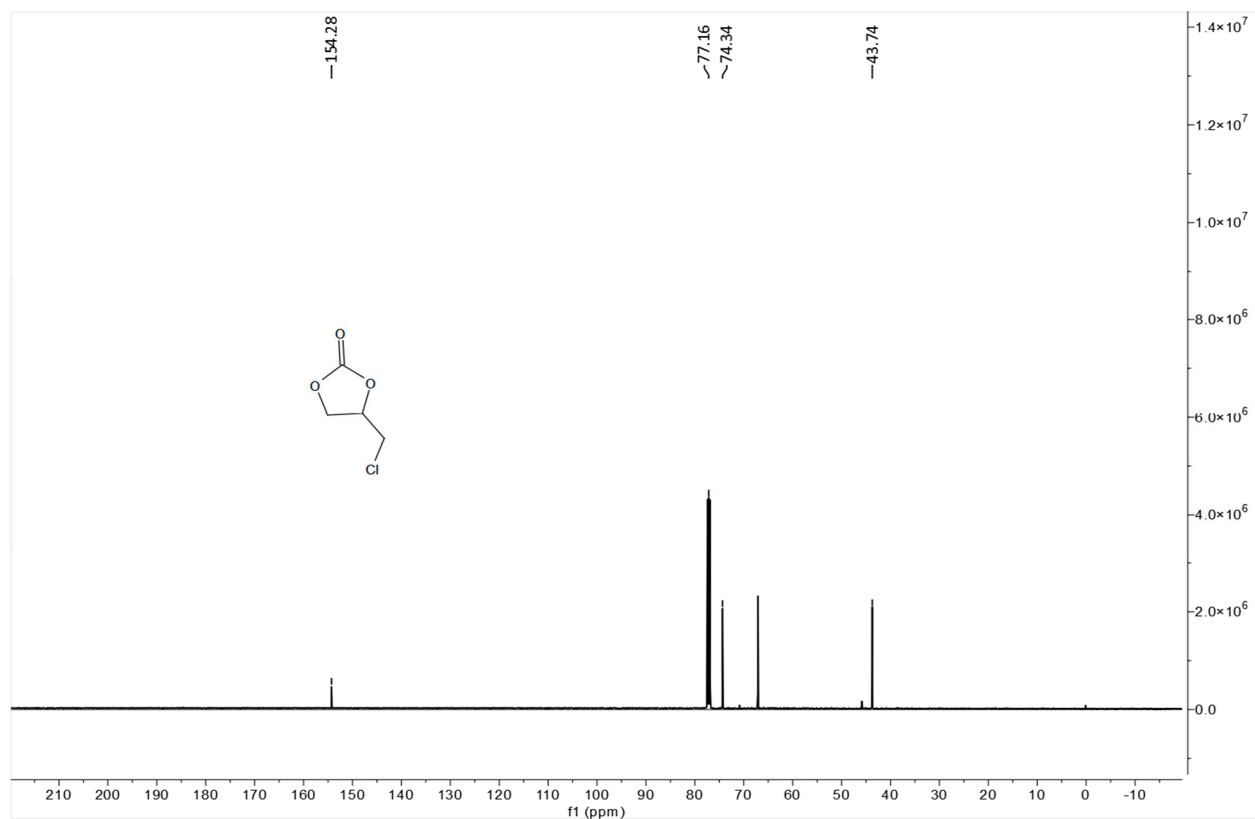
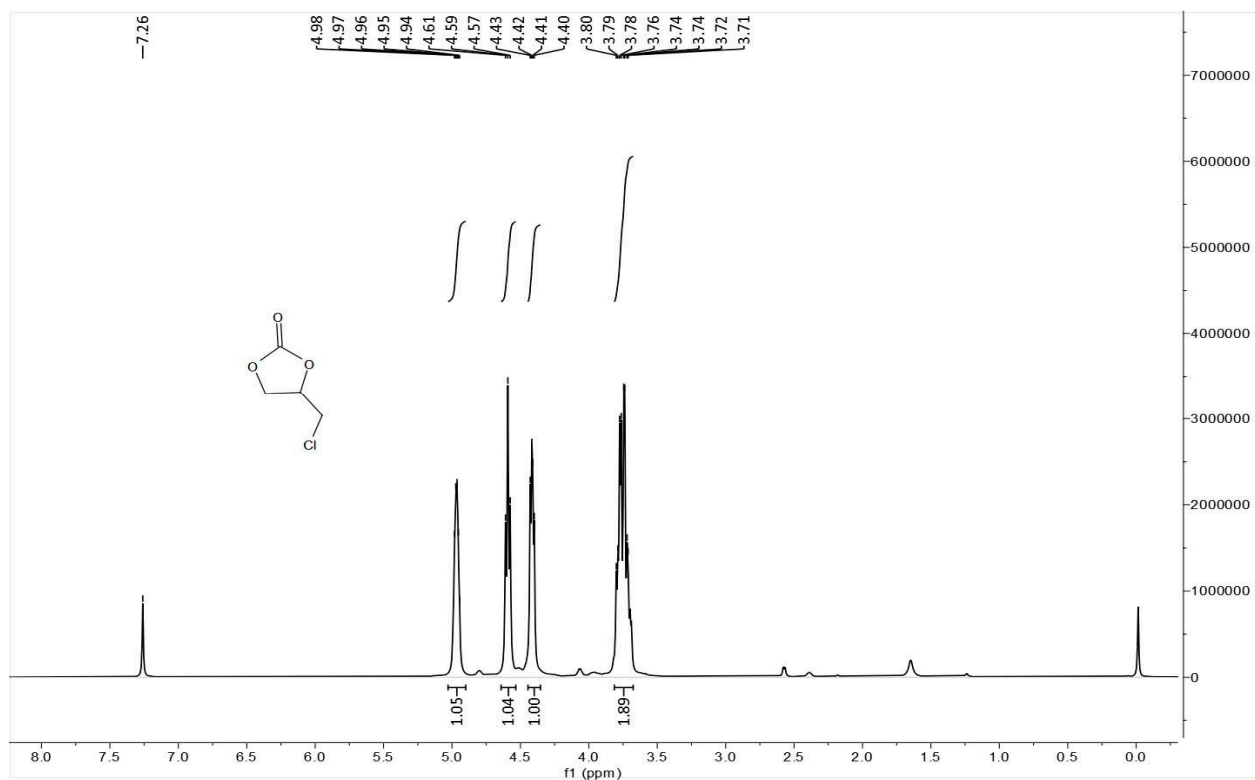
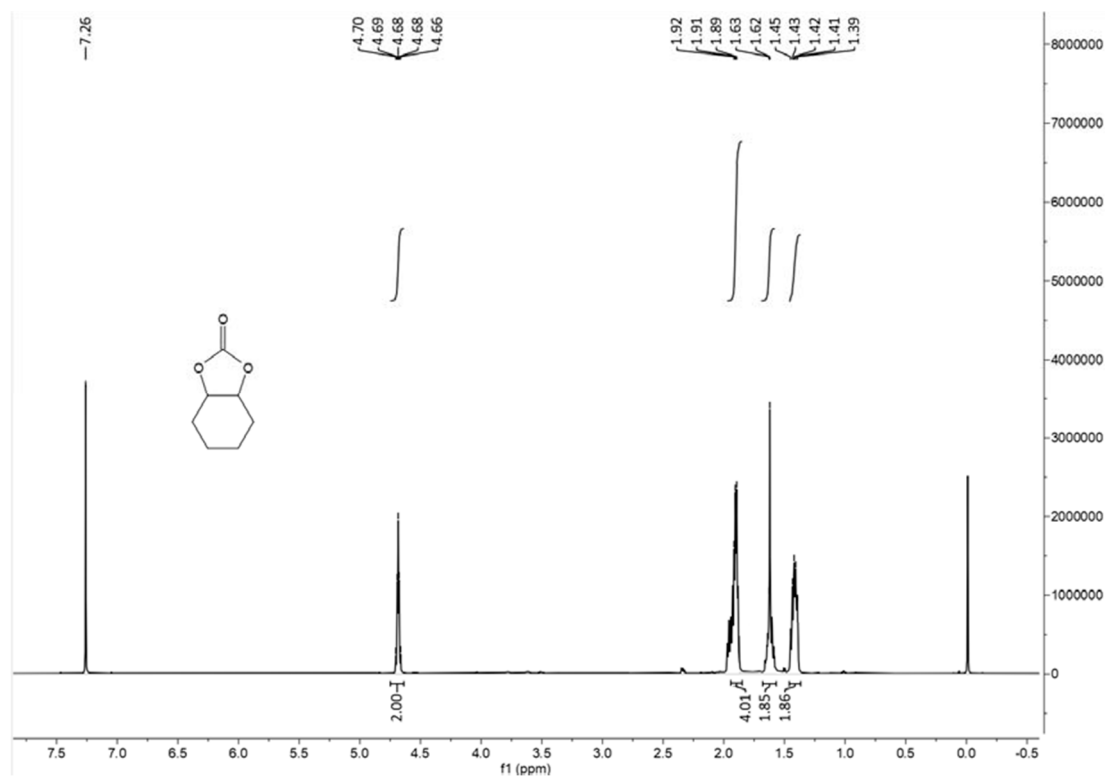
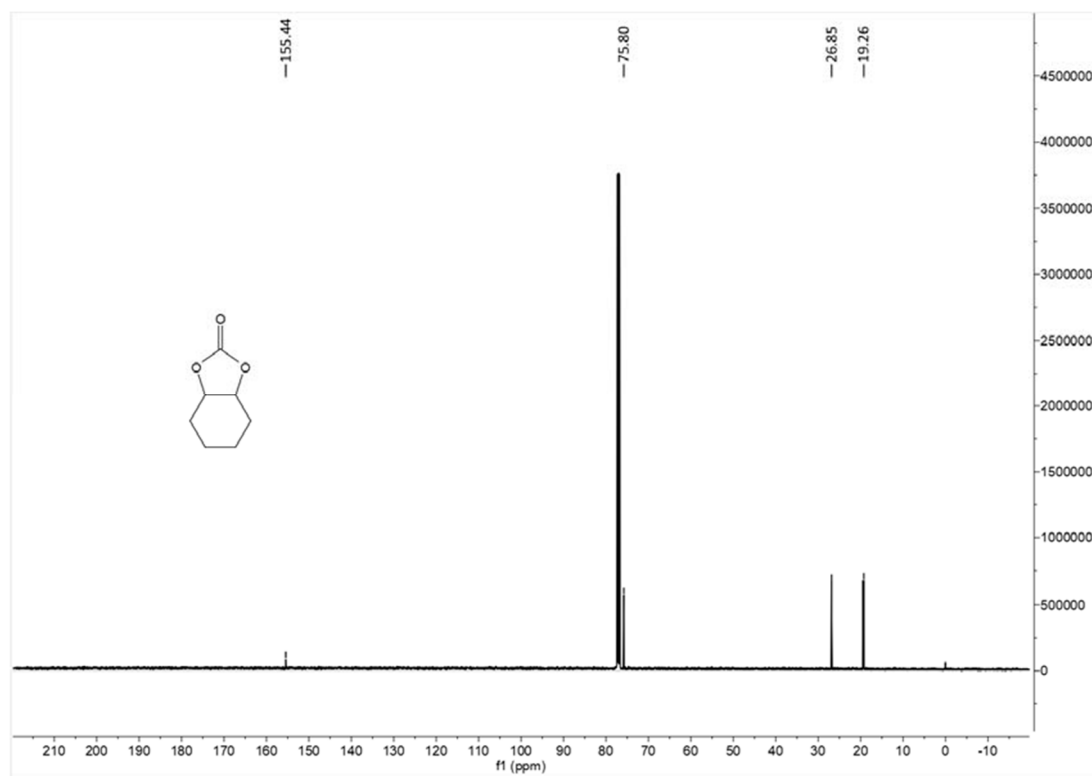


Figure S8. NMR spectrum of hexahydro-benzo[1,3]dioxol-2-one

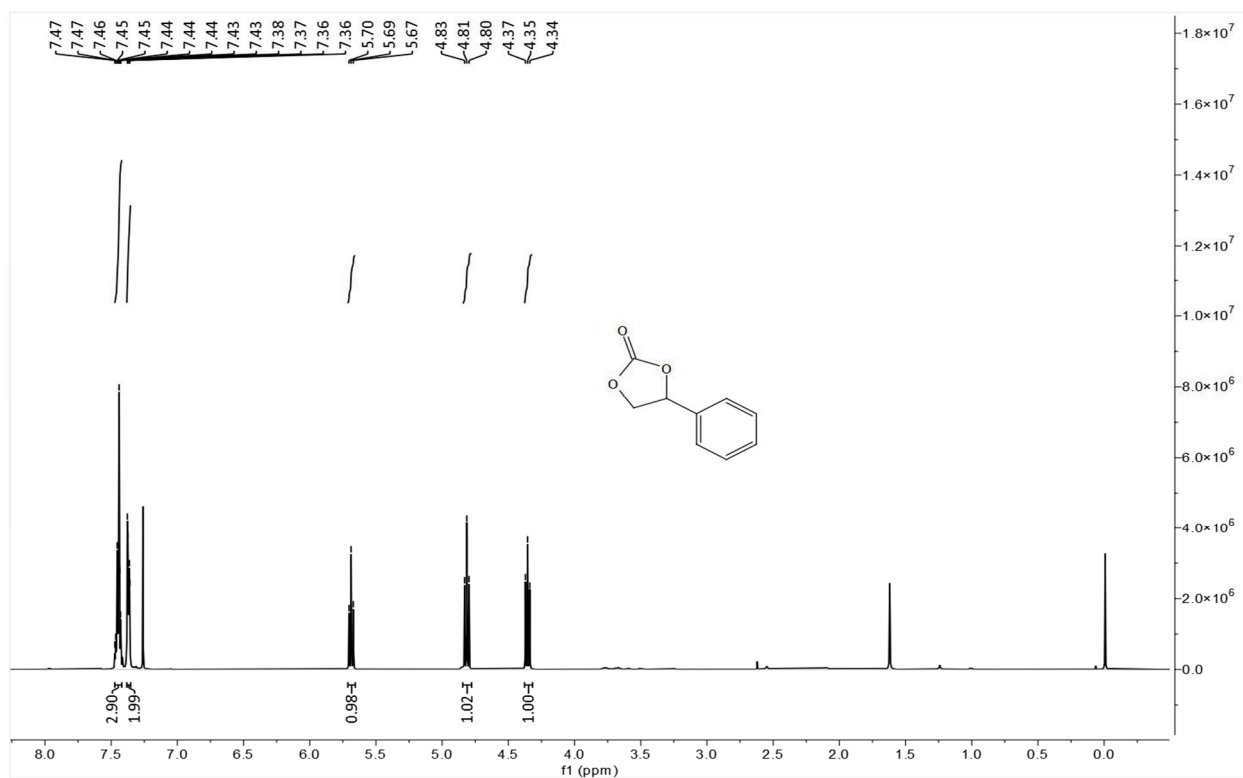


¹H NMR spectrum (500 MHz, CDCl₃)

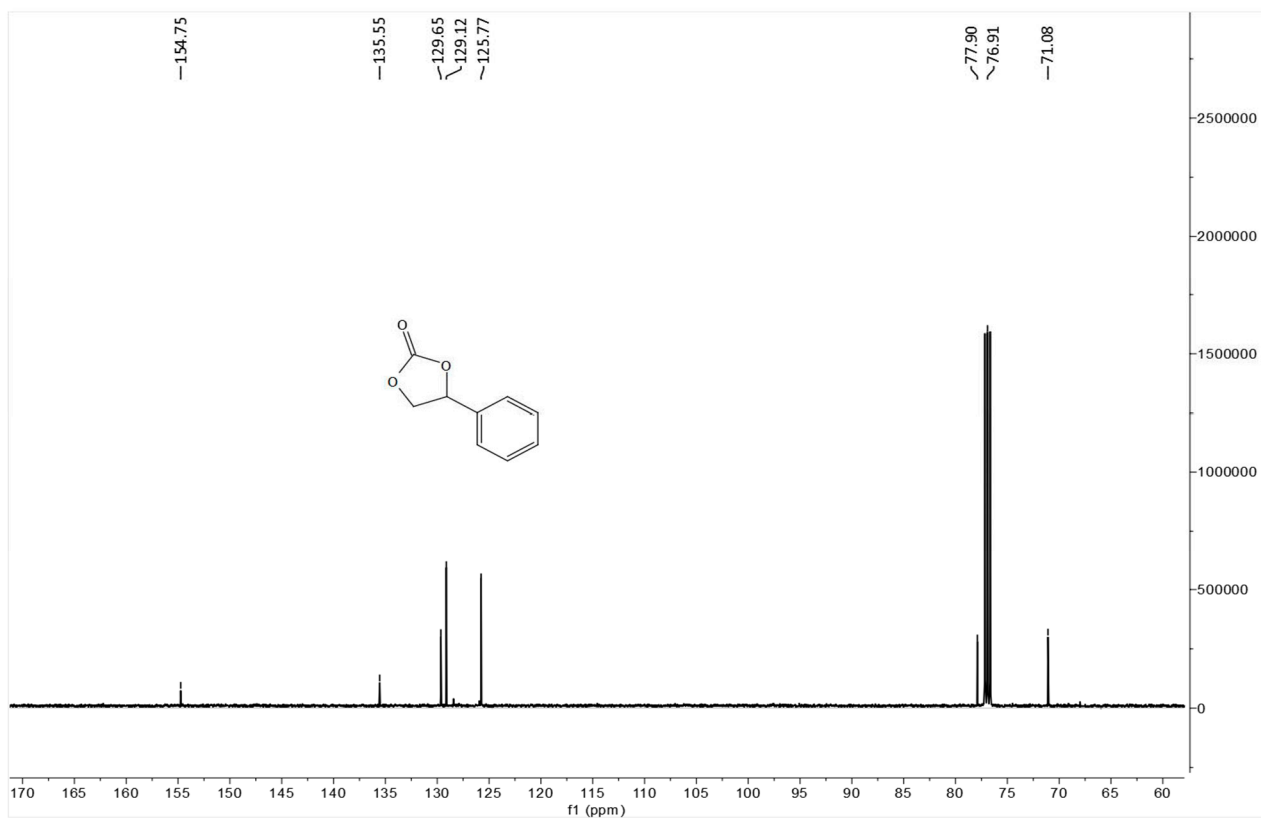


¹³C-NMR spectrum (126 MHz, CDCl₃)

Figure S9. NMR spectrum of 4-phenyl-[1,3]dioxolan-2-one



¹H NMR spectrum (500 MHz, CDCl₃)



¹³C-NMR spectrum (126 MHz, CDCl₃)