http://dx.doi.org/10.5012/bkcs.2011.32.12.1

Supplementary Materials

Kinetics and Mechanism of the Pyridinolysis of Diisopropyl Thiophosphinic Chloride in Acetonitrile

Md. Ehtesham Ul Hoque and Hai Whang Lee*

*Department of Chemistry, Inha University, Incheon 402-751, Korea. *E-mail: hwlee@inha.ac.kr*
Received October 5, 2011, Accepted October 24, 2011

Product : $[(i\text{-Pr})_2P(=S)NC_5H_4(3\text{-Cl})]^+Cl^-$

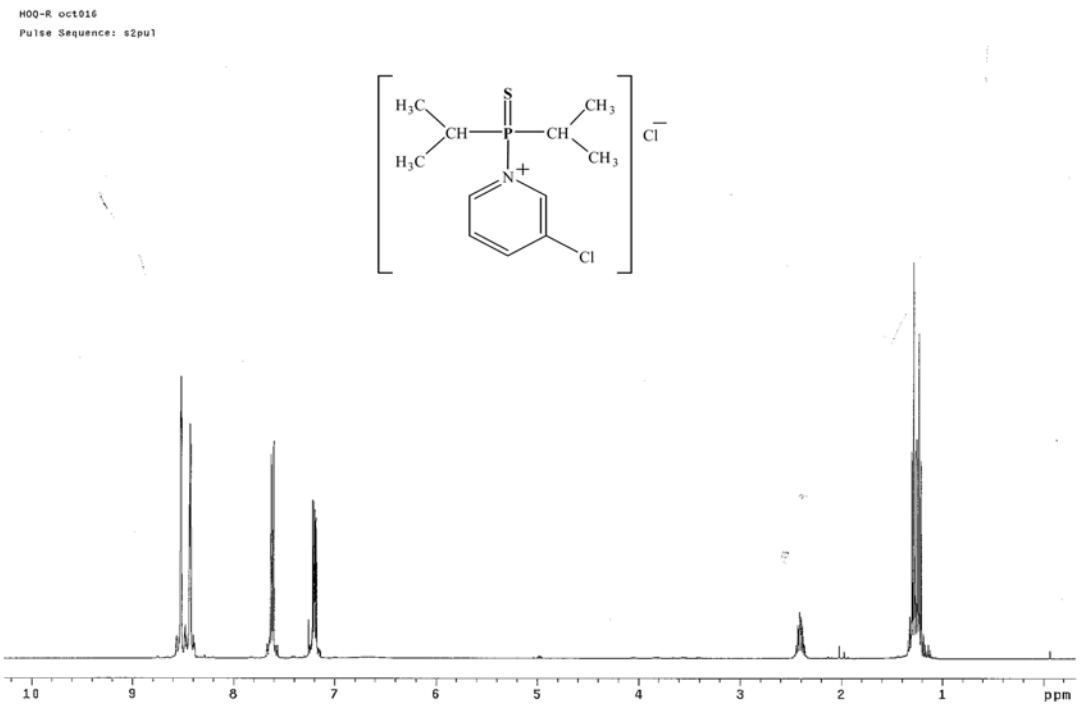

Figure S1. The ^{1}H-NMR spectrum of $[(i\text{-Pr})_2P(=S)NC_5H_4(3\text{-Cl})]^+Cl^-$

Product : [(*i*-Pr)$_2$P(=S)NC$_5$H$_4$(3-Cl)]$^+$Cl$^-$

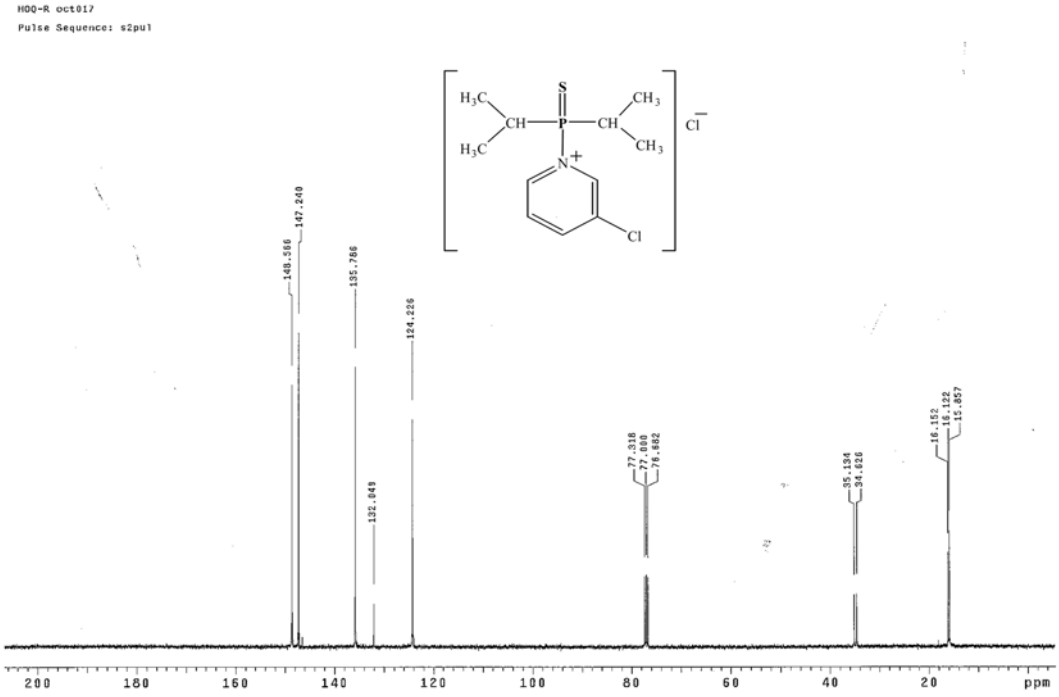

Figure S2. The ^{13}C-NMR spectrum of [(*i*-Pr)$_2$P(=S)NC$_5$H$_4$(3-Cl)]$^+$Cl$^-$

Product : [(*i*-Pr)$_2$P(=S)NC$_5$H$_4$(3-Cl)]$^+$Cl$^-$

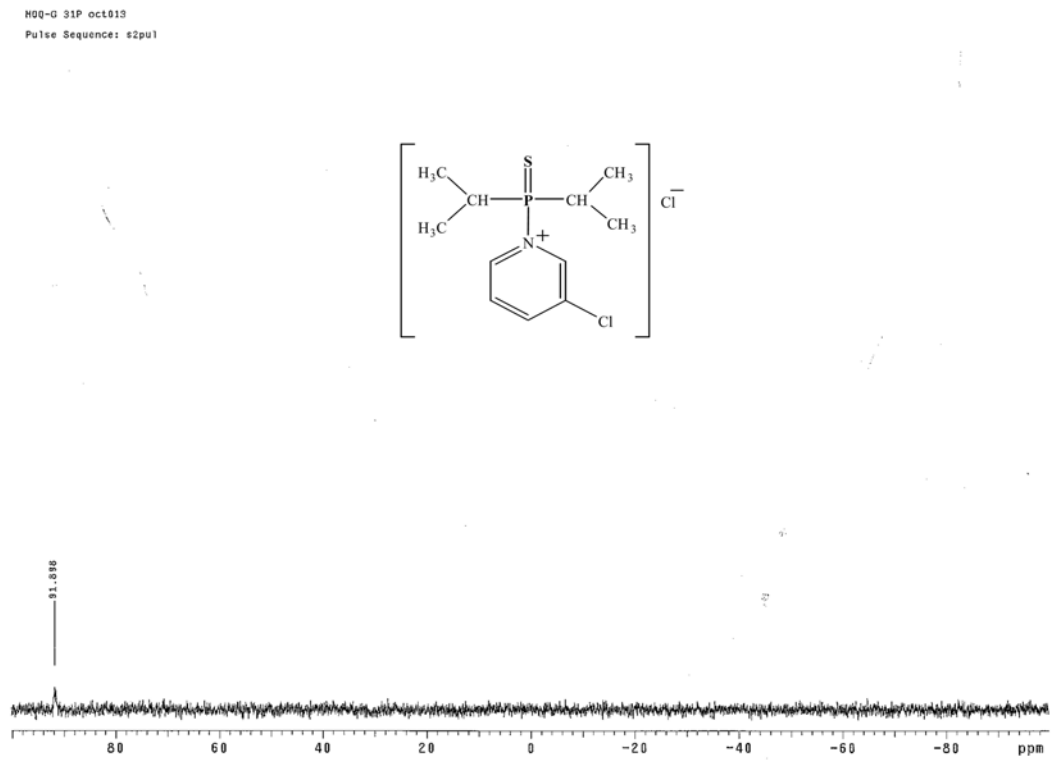

Figure S3. The ^{31}P-NMR spectrum of [(*i*-Pr)$_2$P(=S)NC$_5$H$_4$(3-Cl)]$^+$Cl$^-$

Product : $[(i\text{-Pr})_2P(=S)NC_5H_4(3\text{-Cl})]^+Cl^-$

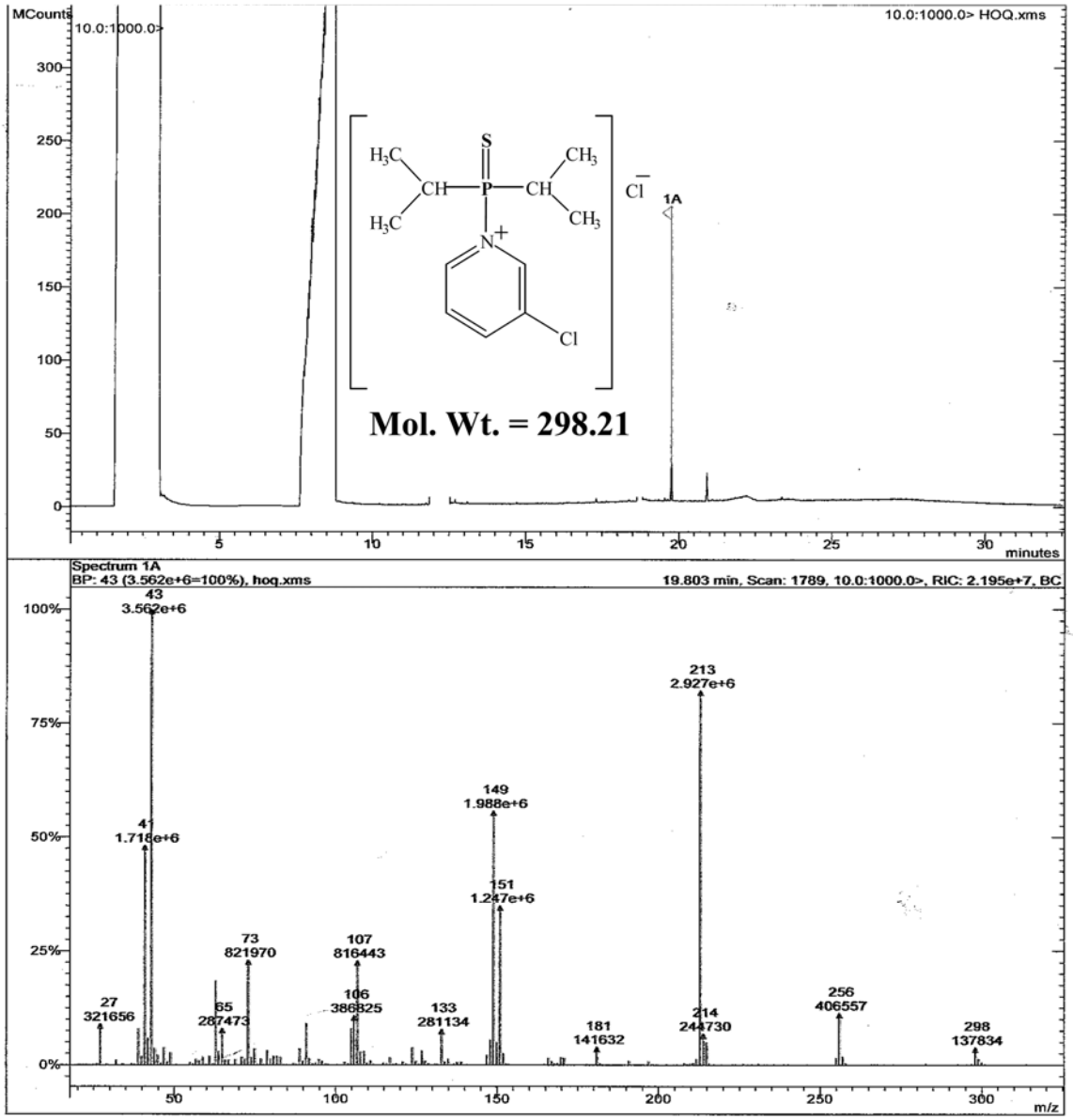

Figure S4. The GC-MS spectrum of $[(i\text{-Pr})_2P(=S)NC_5H_4(3\text{-Cl})]^+Cl^-$