

**Supporting Information for:**

**Air-Initiated Radical Polymerization of Lithium Salts of**  
 **$\omega$ -(Undecamethylcarba-*closo*-dodecaboran-1'-yl)alk-1-enes,  $\text{CH}_2=\text{CH}(\text{CH}_2)_{n-2}\text{C}(\text{BMe})_{11}^- \text{Li}^+$**

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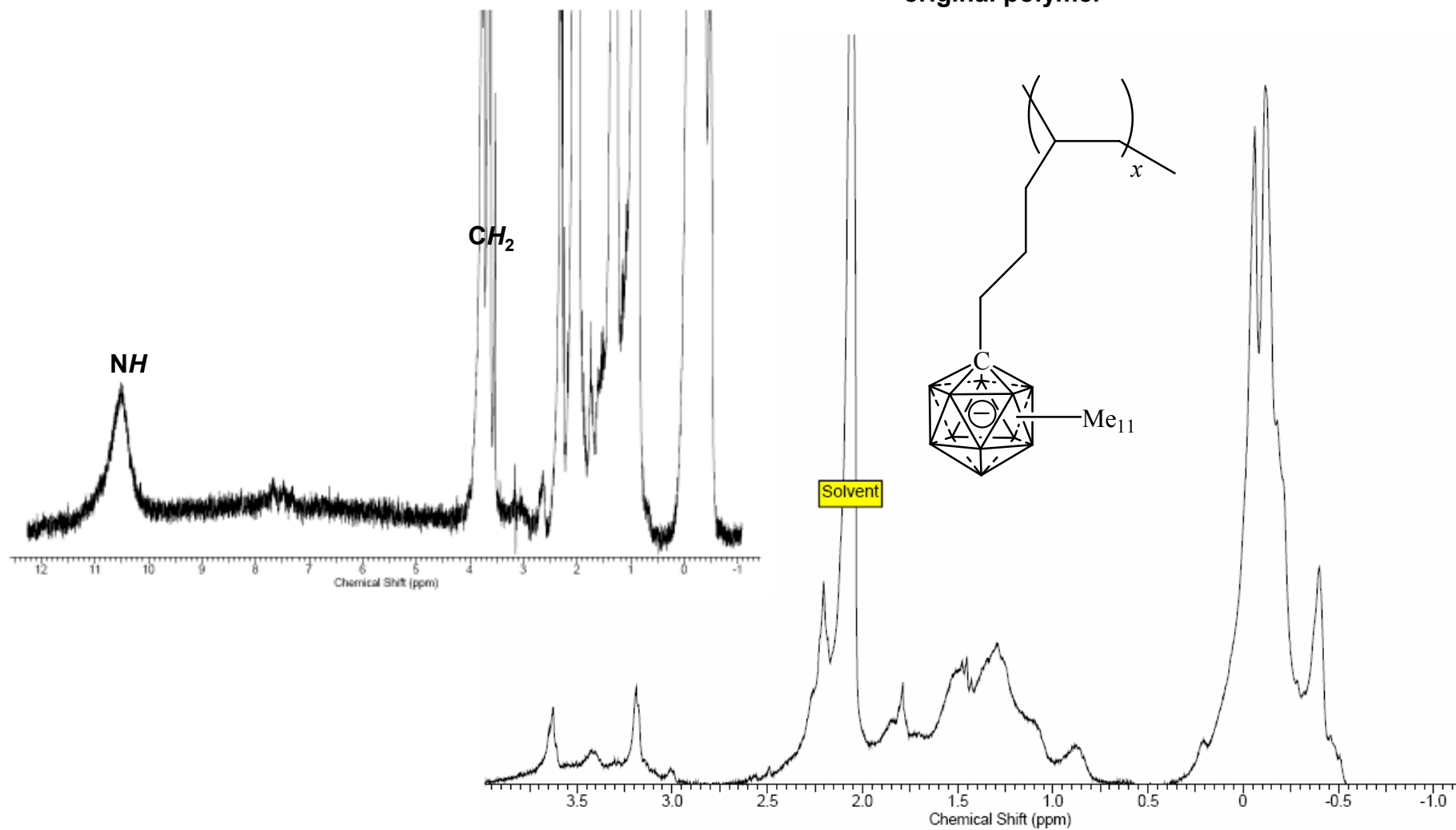
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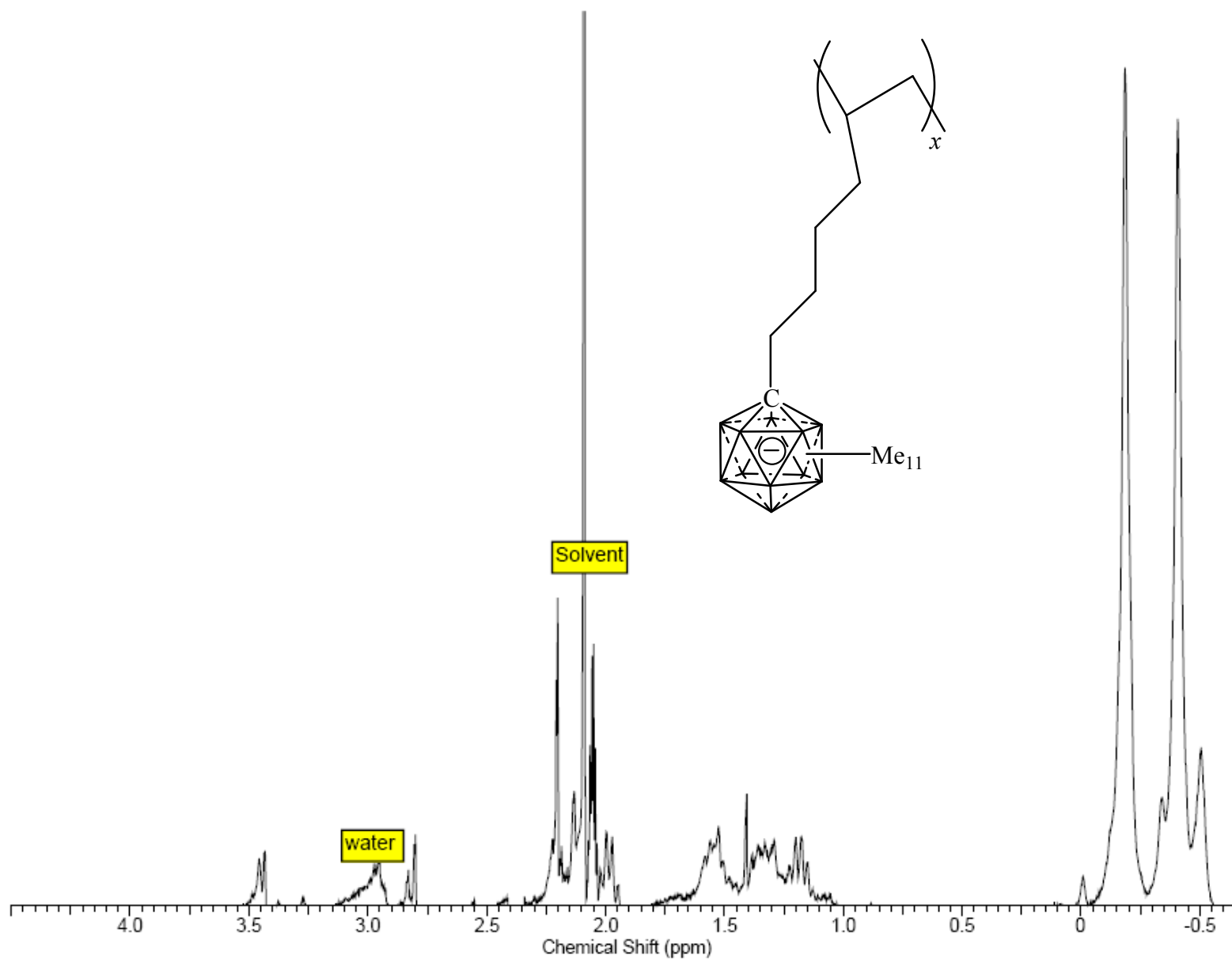
# $^1\text{H}$ NMR spectrum in acetone: poly-5[2] prepared with air initiation

after trichloroacetyl isocyanate treatment

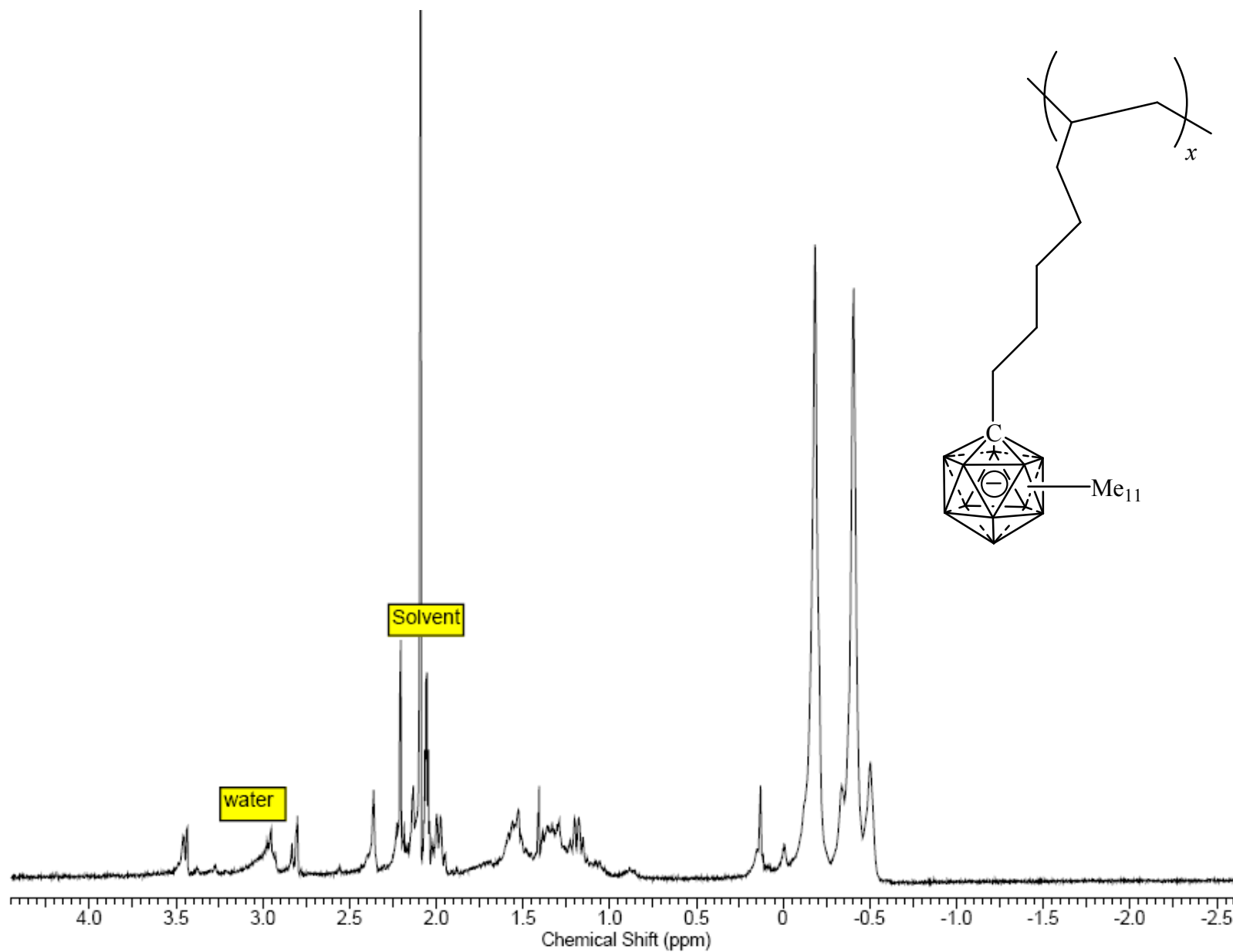
original polymer



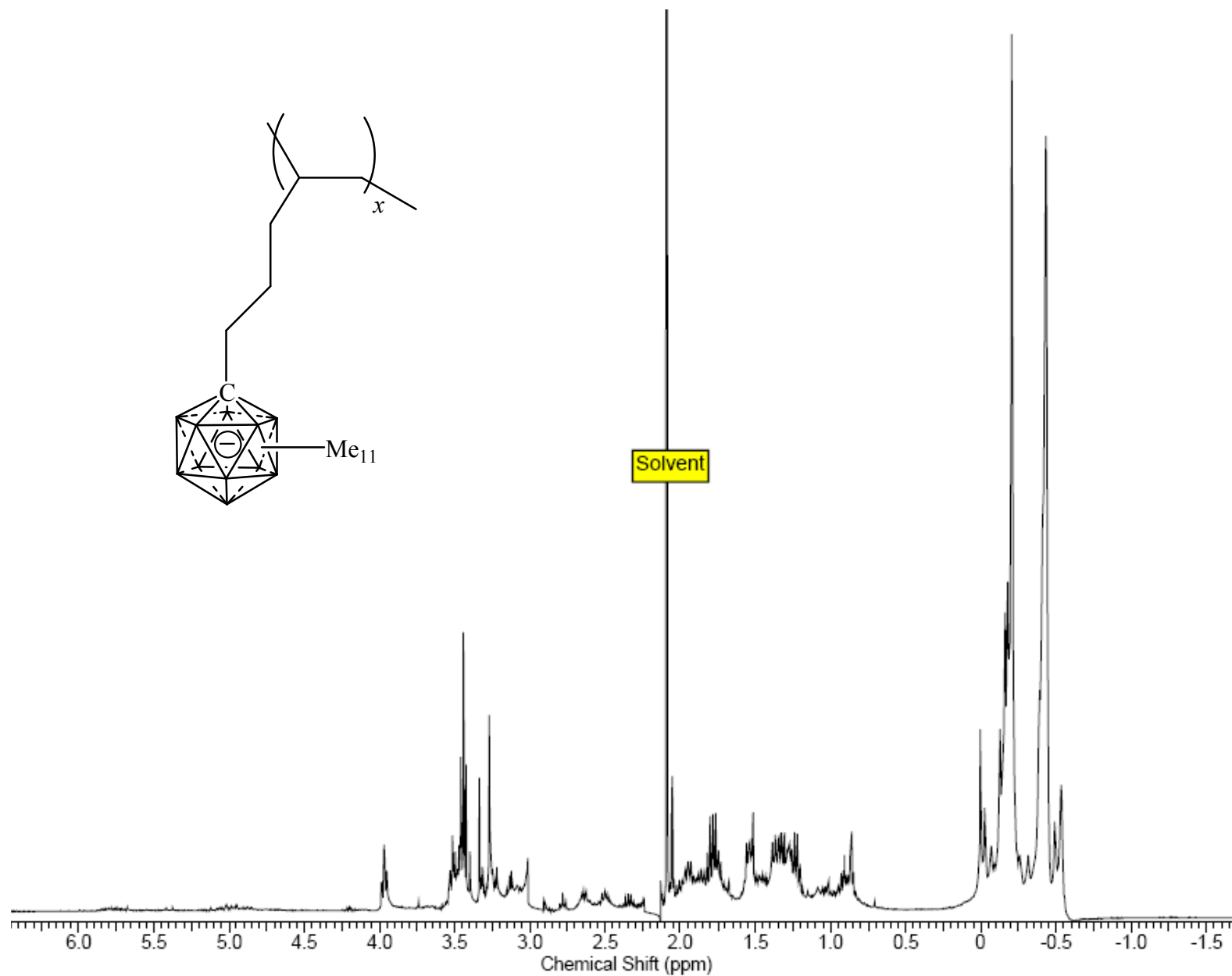
# $^1\text{H}$ NMR spectrum in acetone: poly-6[2] prepared with air initiation



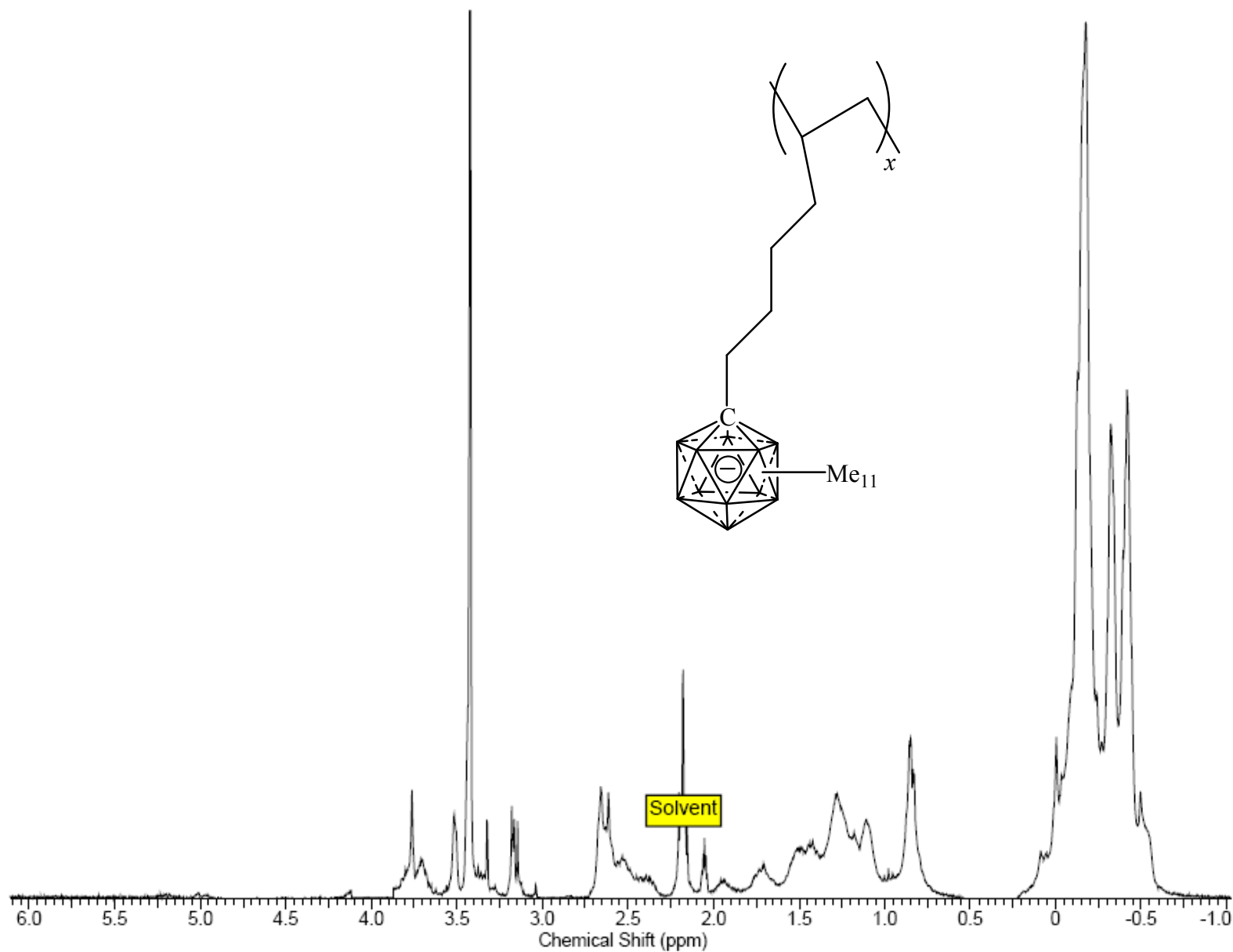
**$^1\text{H}$  NMR spectrum in acetone: poly-7[2] prepared with air initiation**



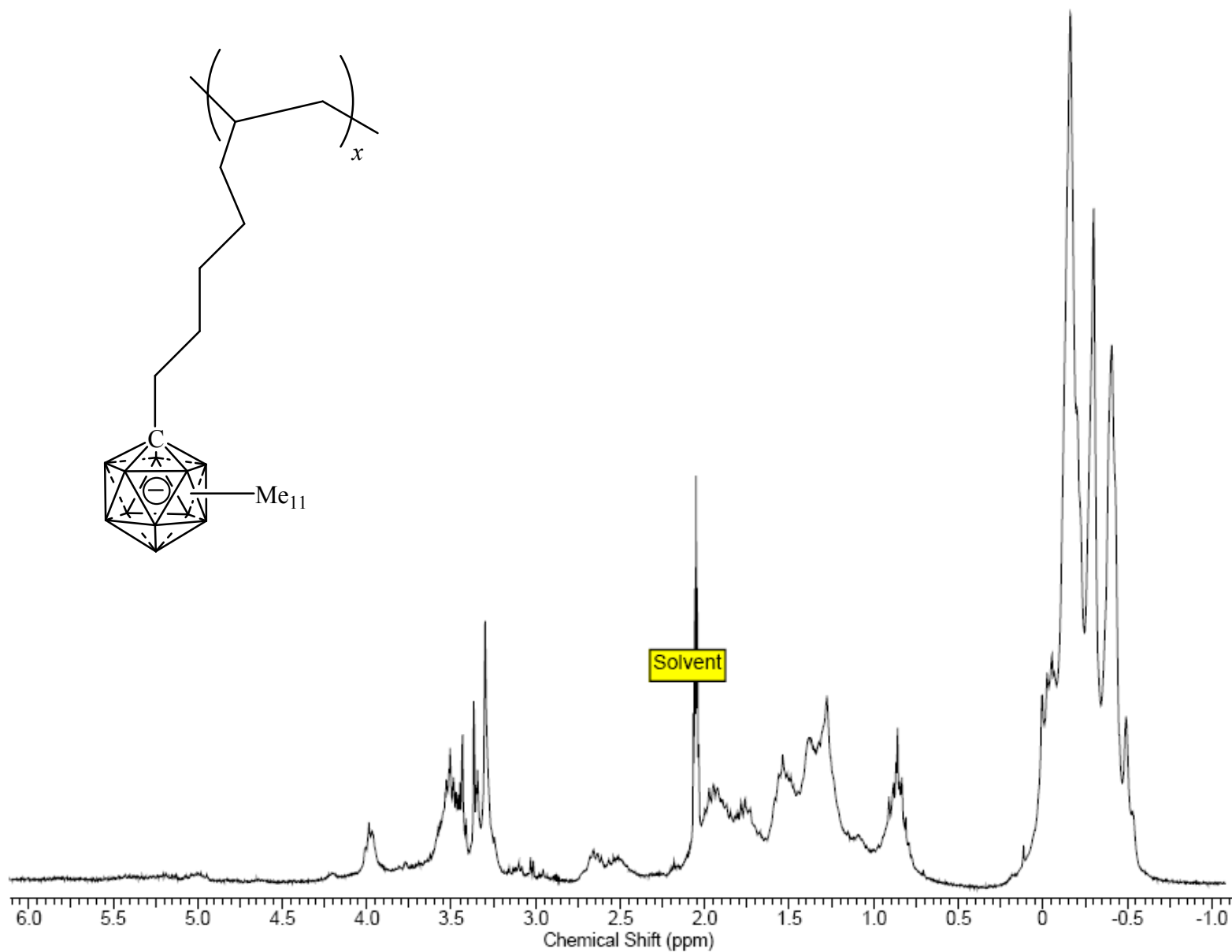
**$^1\text{H}$  NMR spectrum in acetone: poly-5[2] prepared with AIBN initiation**



**$^1\text{H}$  NMR spectrum in acetone: poly-6[2] prepared with AIBN initiation**

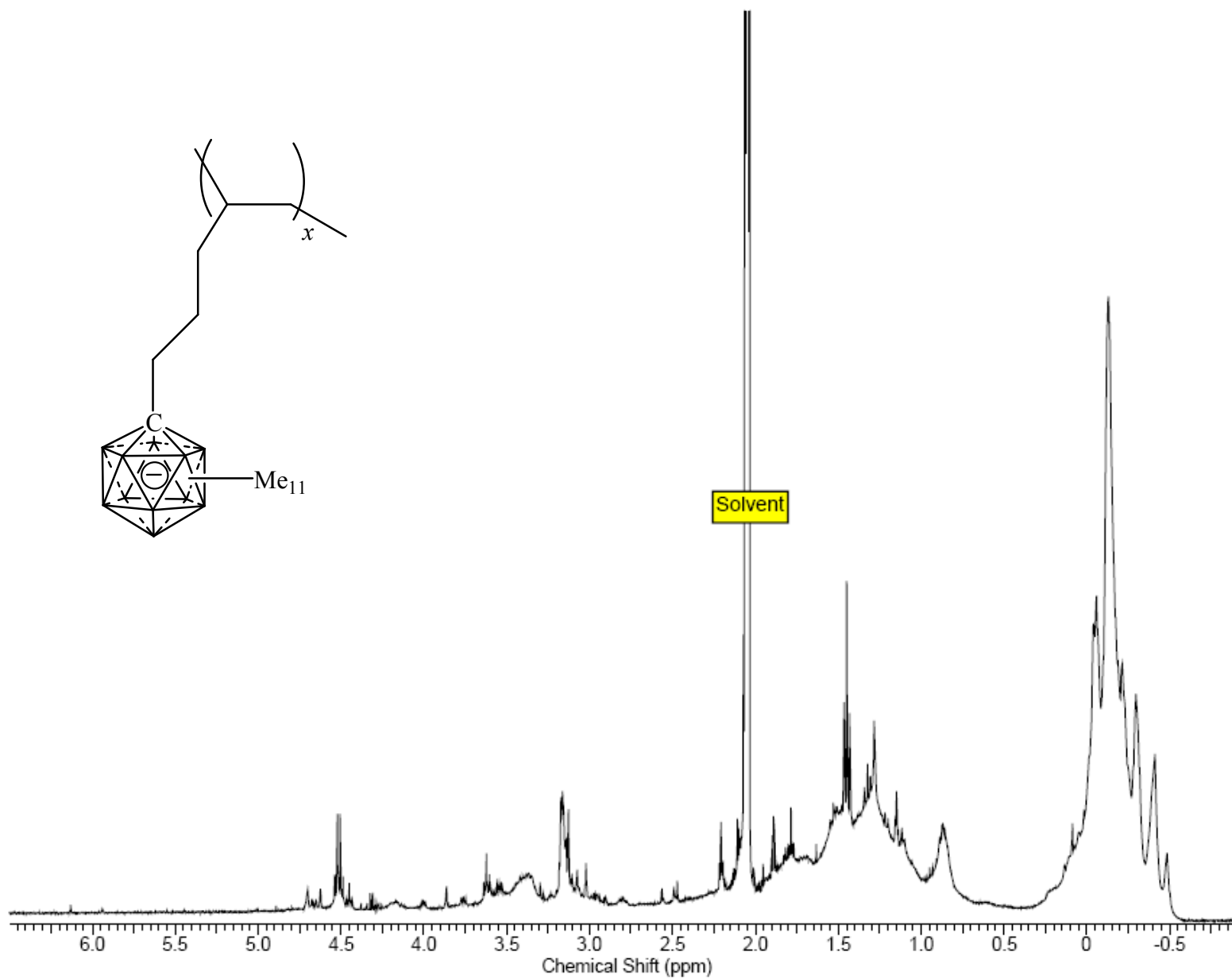


**$^1\text{H}$  NMR spectrum in acetone: poly-7[2] prepared with AIBN initiation**

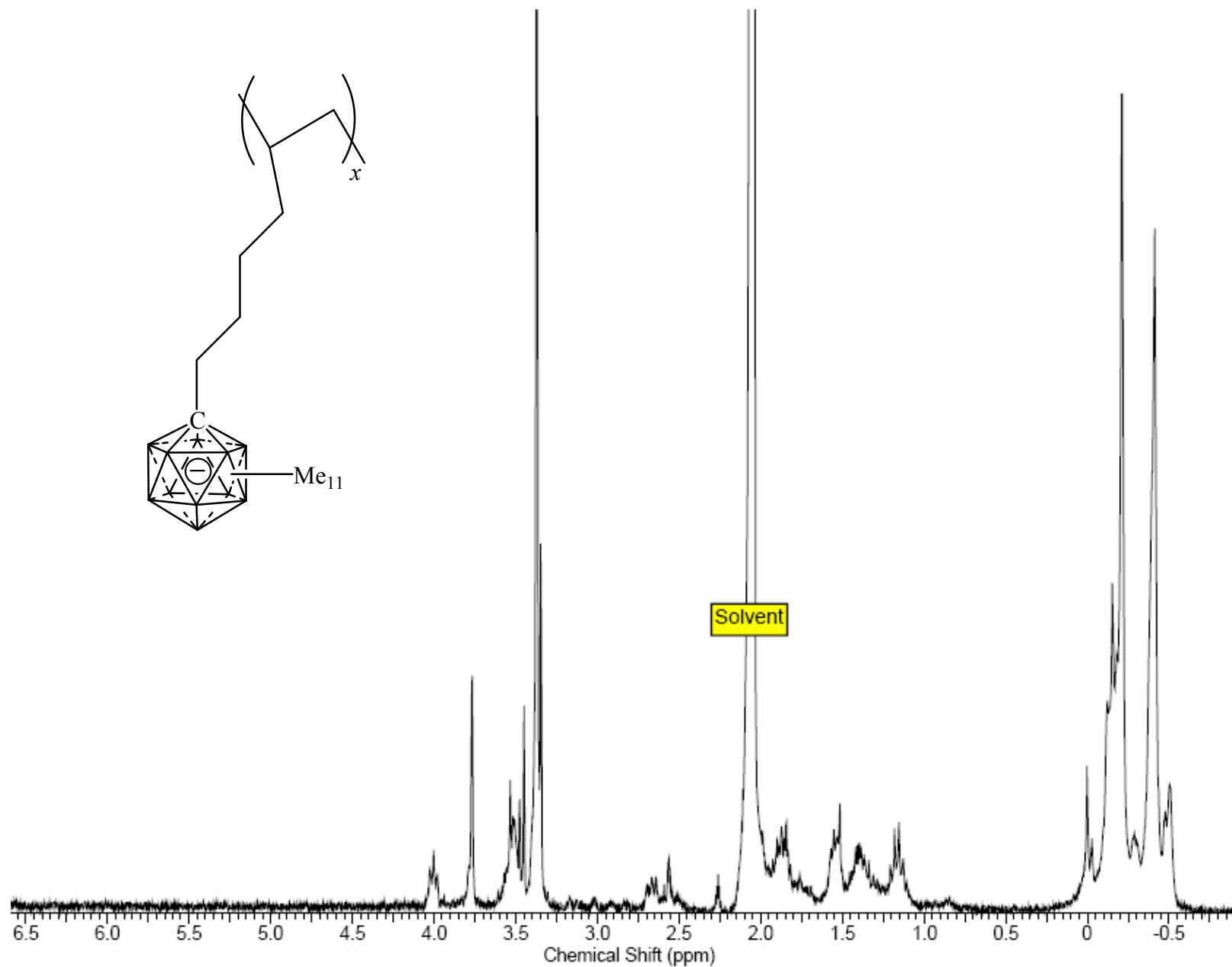




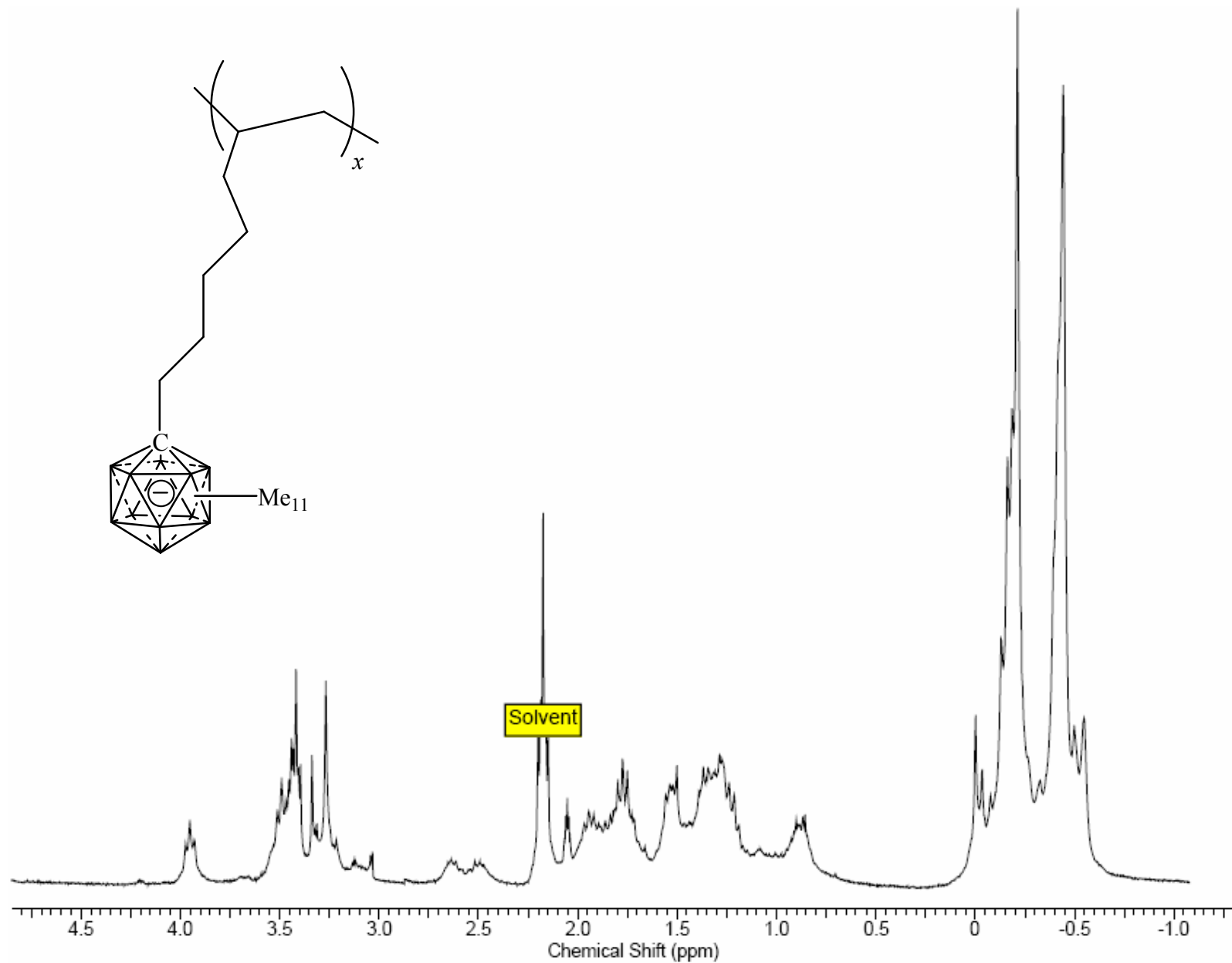
**$^1\text{H}$  NMR spectrum in acetone: poly-5[2] prepared with DTBP initiation**



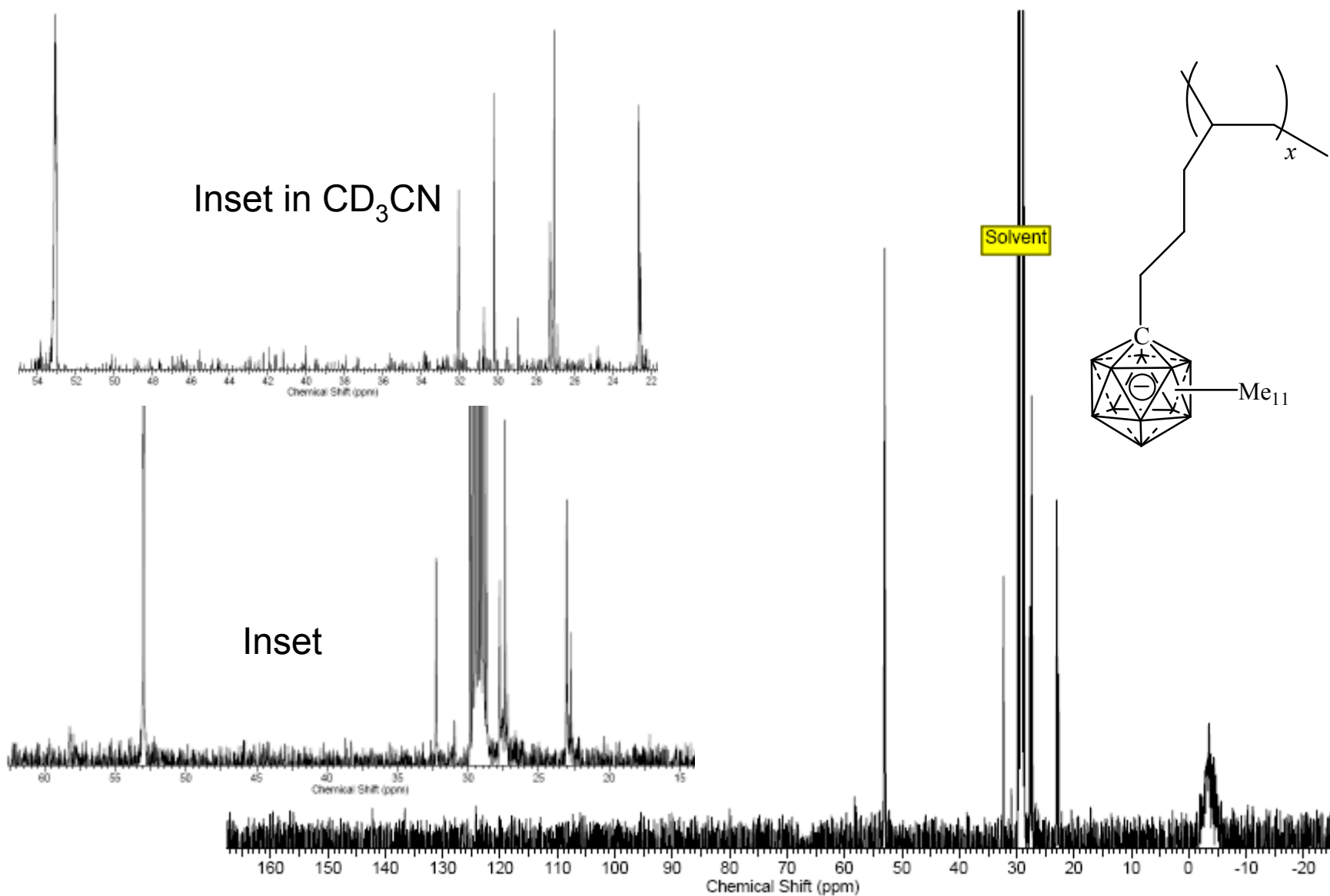
# $^1\text{H}$ NMR spectrum in acetone: poly-6[2] prepared with DTBP initiation



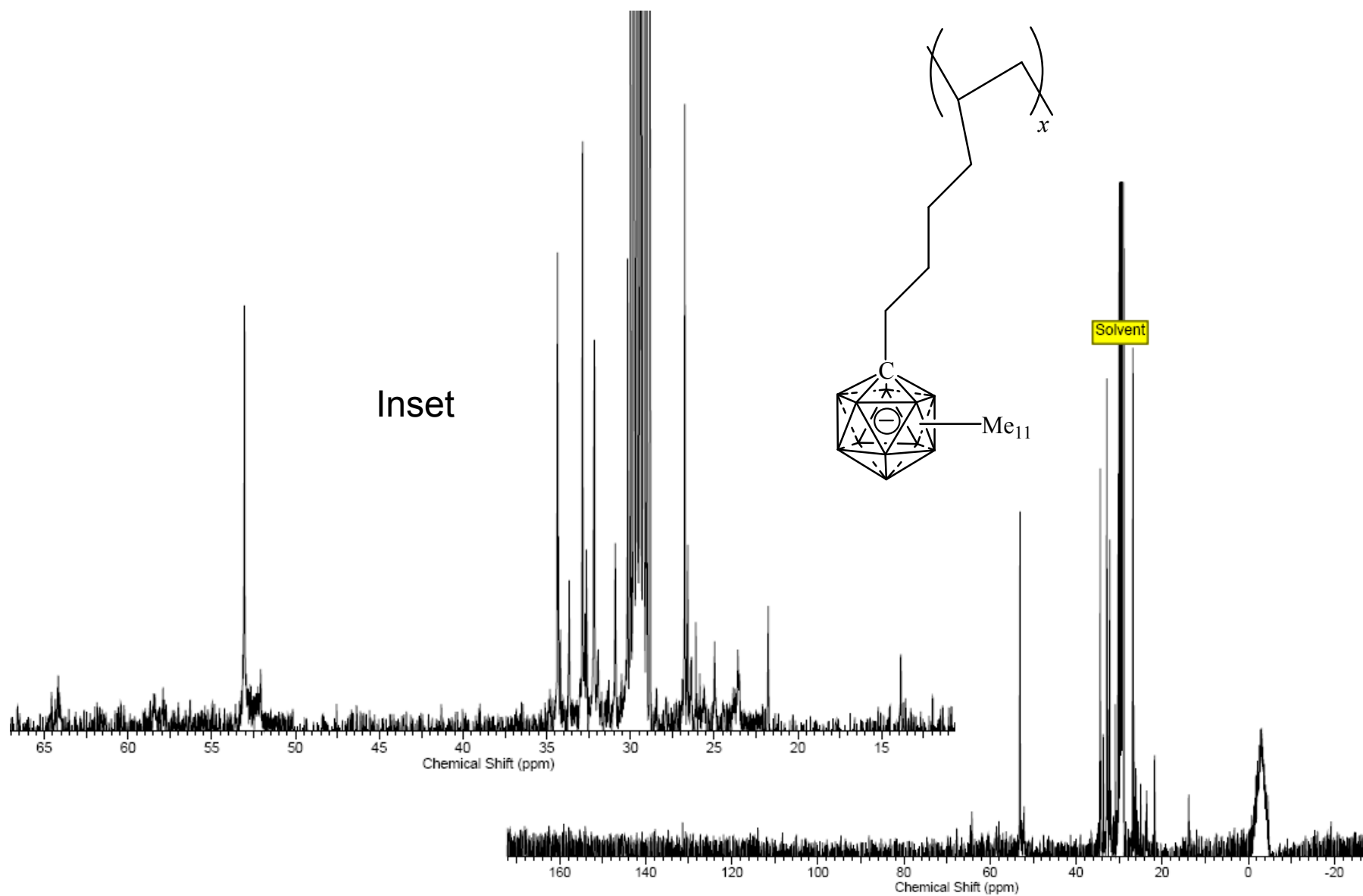
**$^1\text{H}$  NMR spectrum in acetone: poly-7[2] prepared with DTBP initiation**



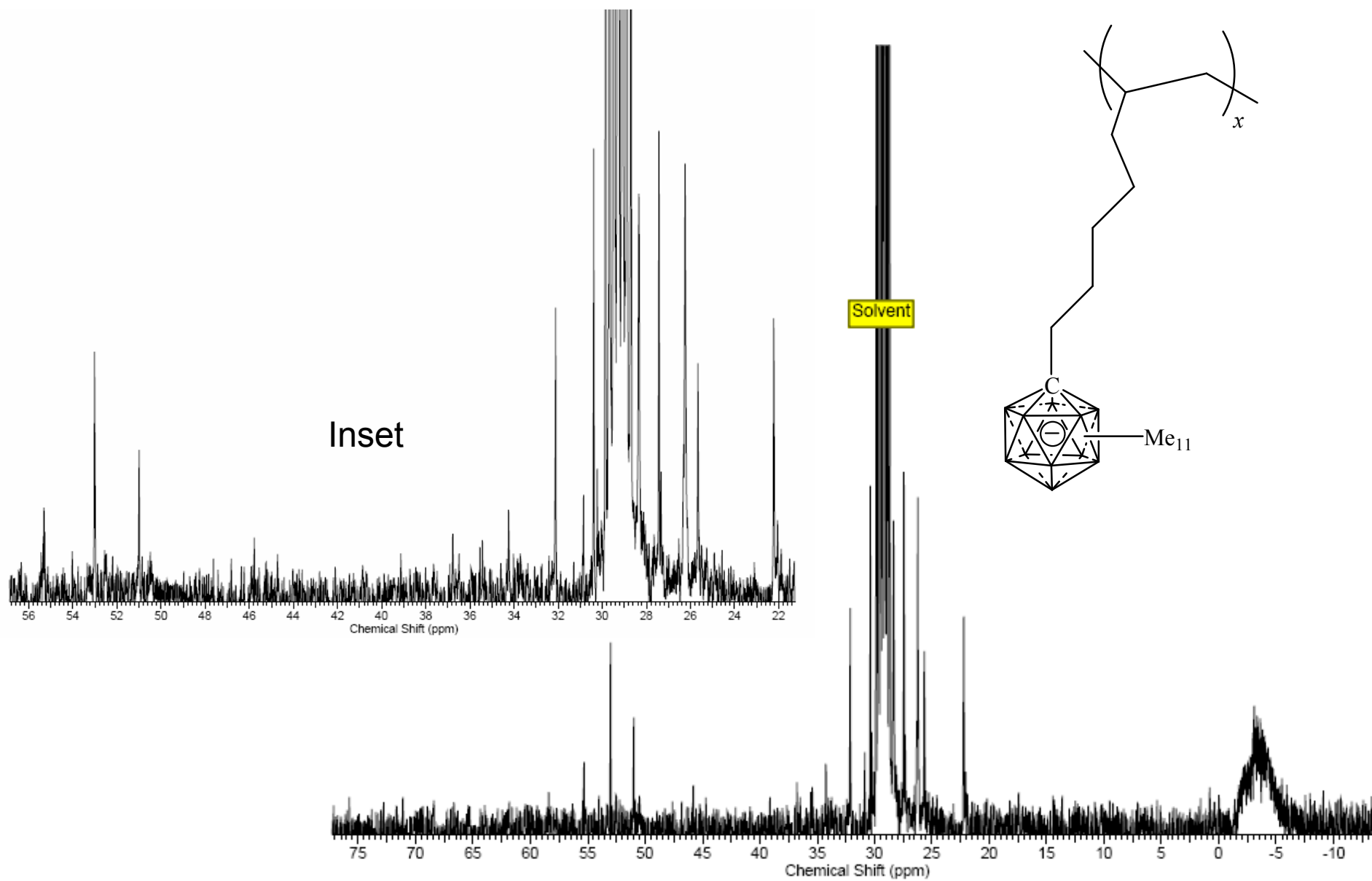
**$^{13}\text{C}$  NMR spectrum in acetone: poly-5[2] prepared with air initiation**



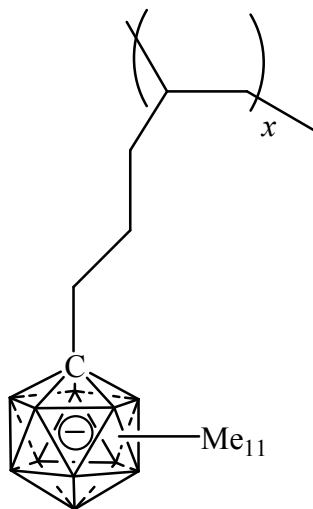
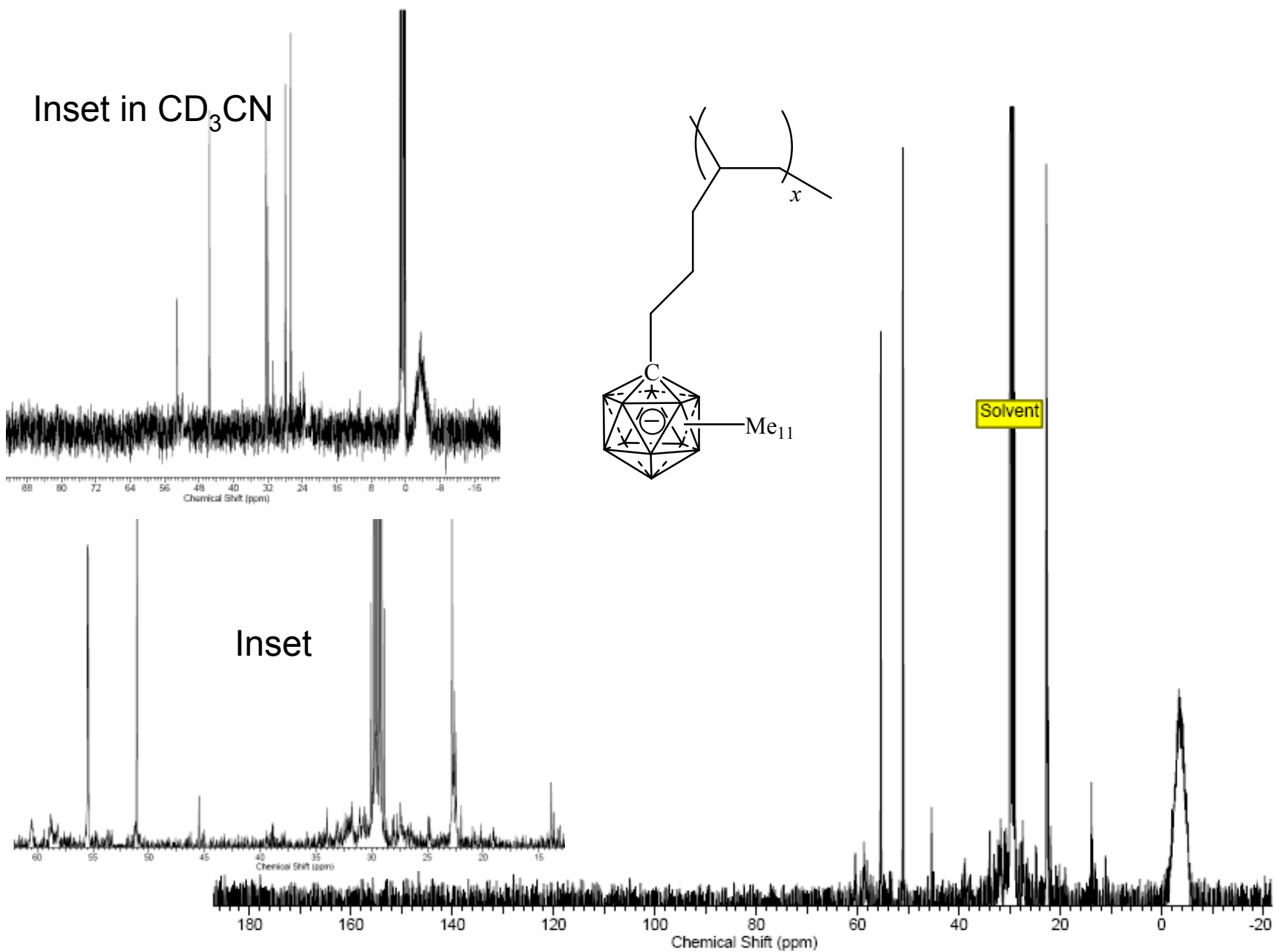
# $^{13}\text{C}$ NMR spectrum in acetone: poly-6[2] prepared with air initiation



# $^{13}\text{C}$ NMR spectrum in acetone: poly-7[2] prepared with air initiation



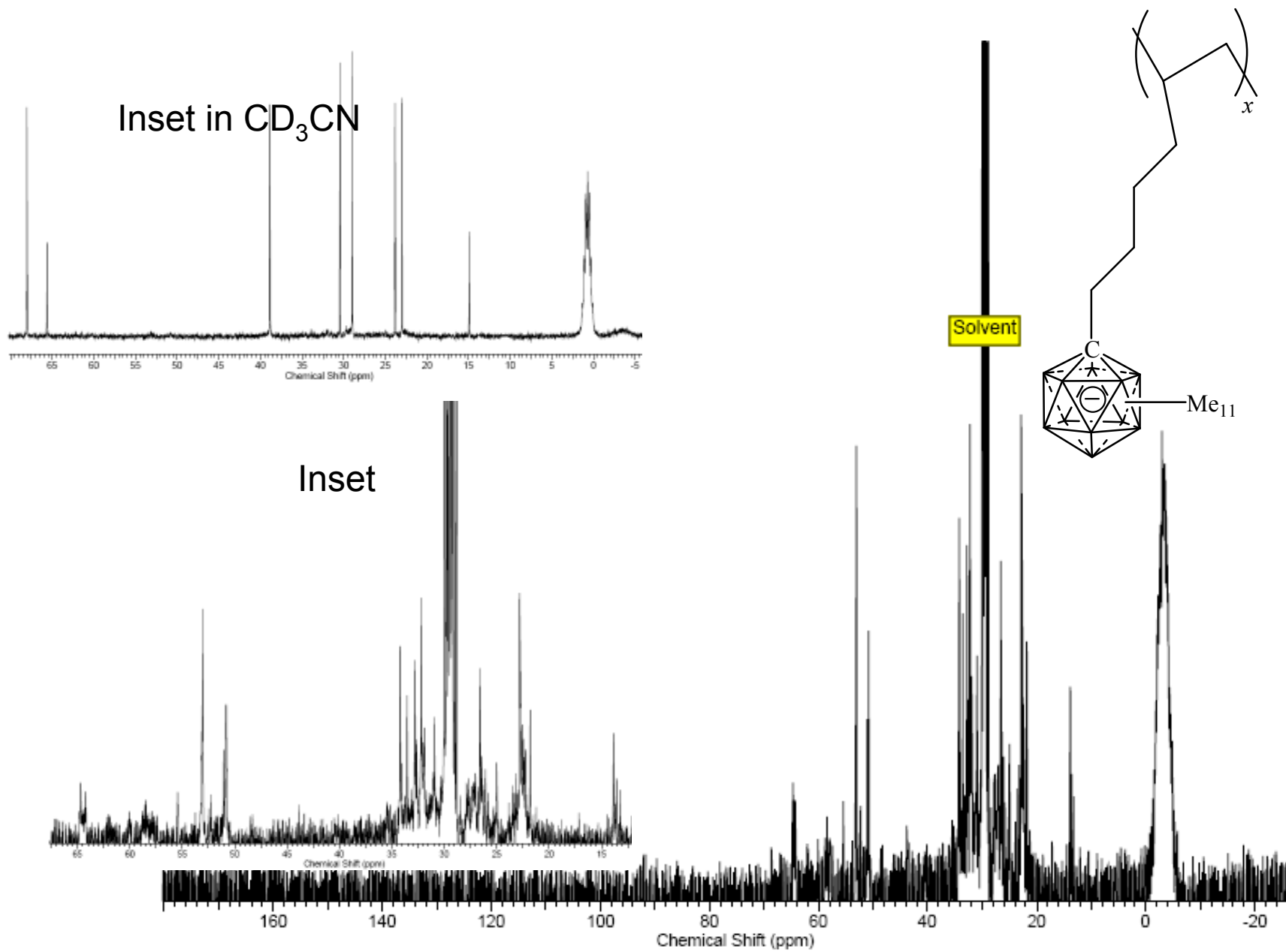
**<sup>13</sup>C NMR spectrum in acetone: poly-5[2] prepared with DTBP initiation**



Solvent

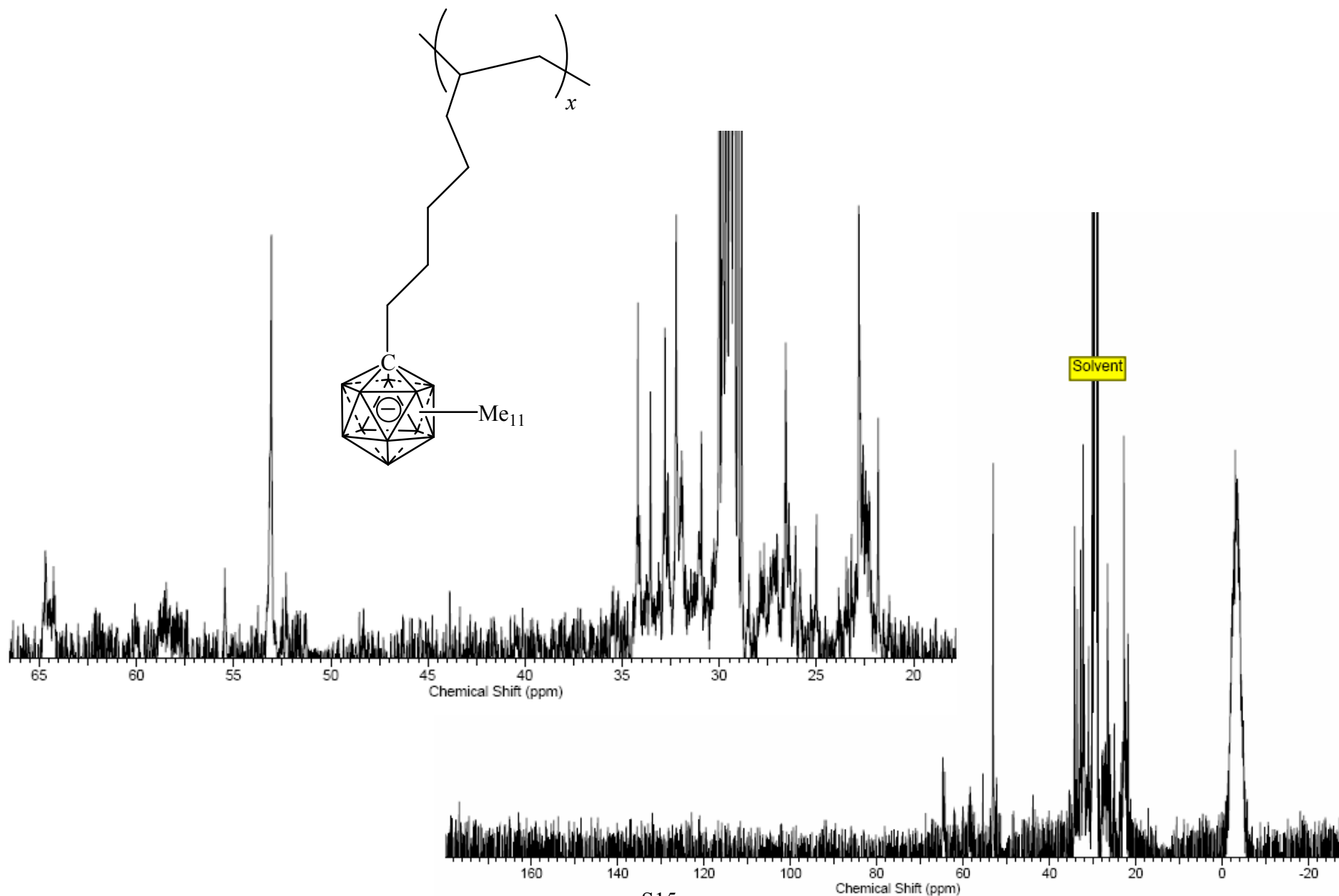
## Inset

# $^{13}\text{C}$ NMR spectrum in acetone: poly-6[2] prepared with DTBP initiation

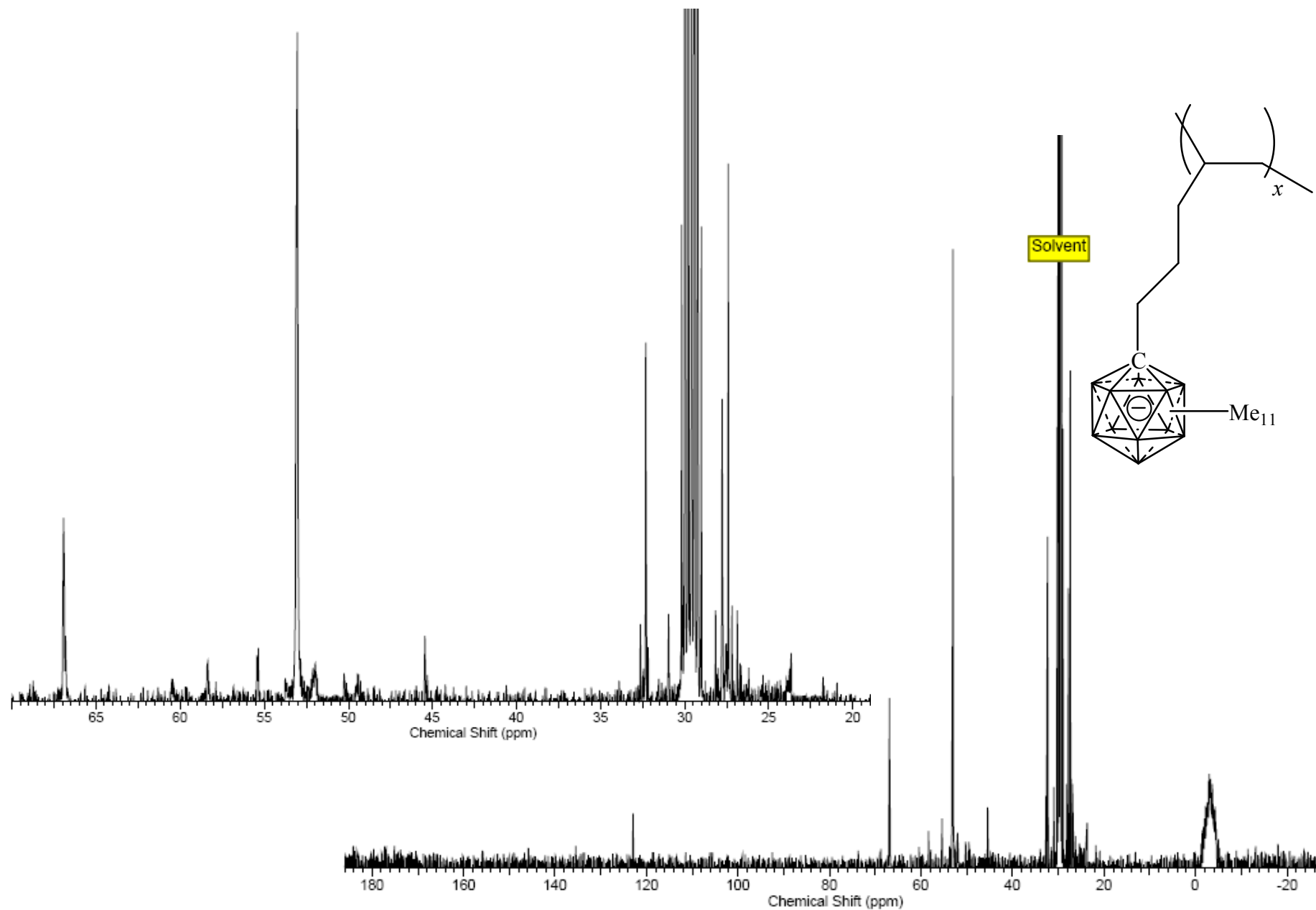




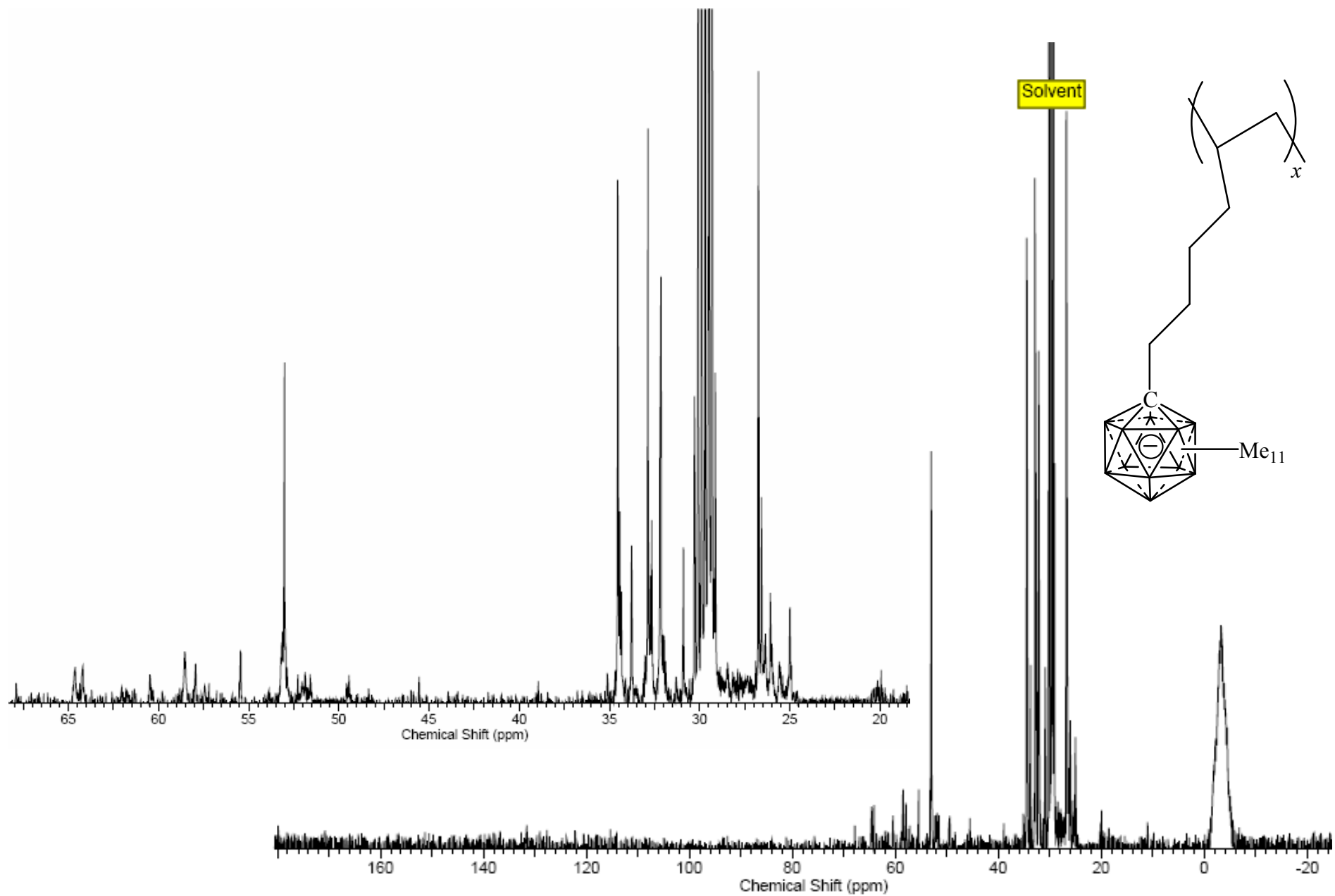
# $^{13}\text{C}$ NMR spectrum in acetone: poly-7[2] prepared with DTBP initiation



**$^{13}\text{C}$  NMR spectrum in acetone: poly-5[2] prepared with AIBN initiation**



# $^{13}\text{C}$ NMR spectrum in acetone: poly-6[2] prepared with AIBN initiation



**$^{13}\text{C}$  NMR spectrum in acetone: poly-7[2] prepared with AIBN initiation**

