

SUPPORTING INFORMATION

for

**A general protocol for the synthesis of Pt-NHC (NHC = N-heterocyclic carbene)
hydrosilylation catalysts**

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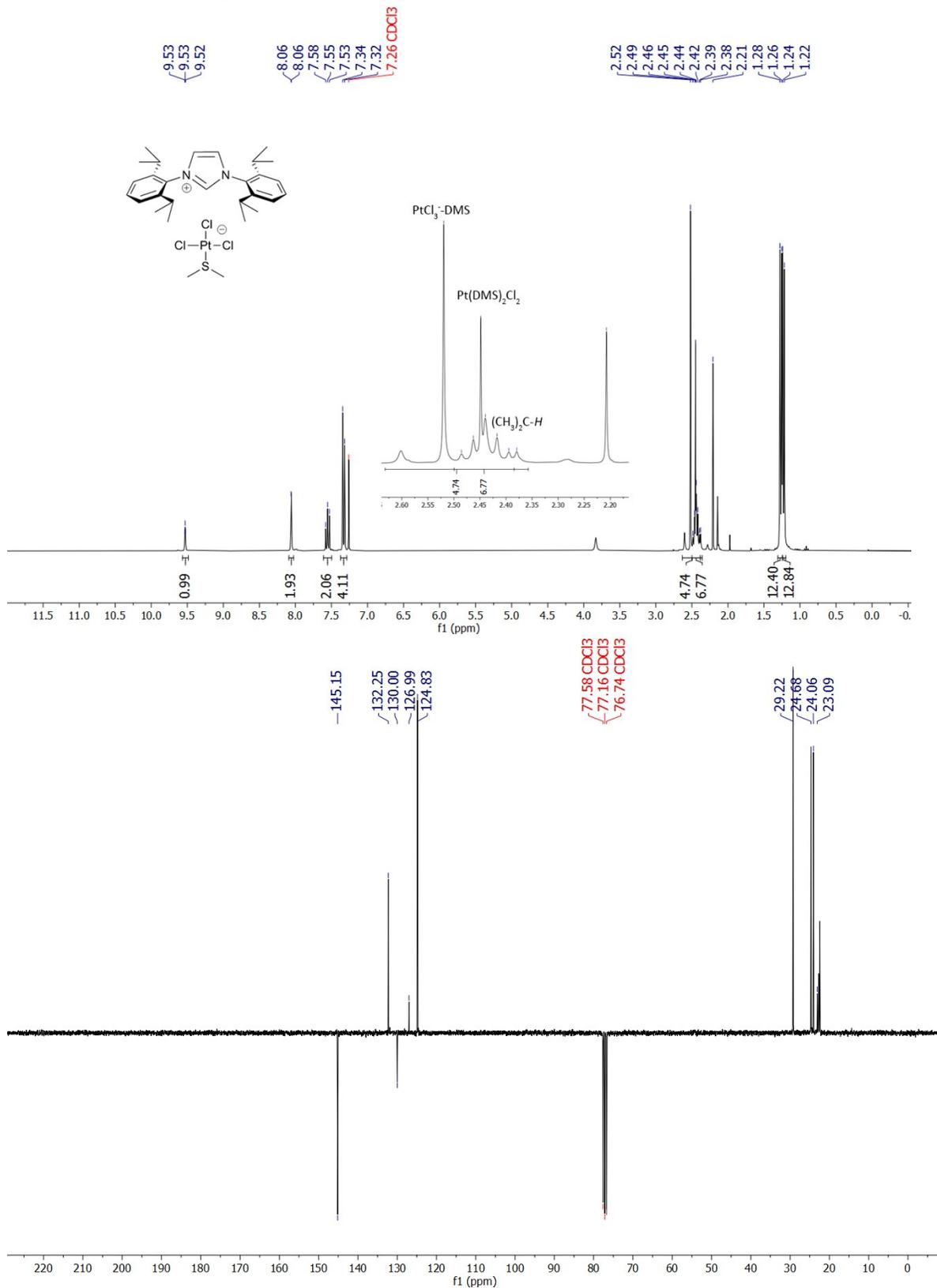
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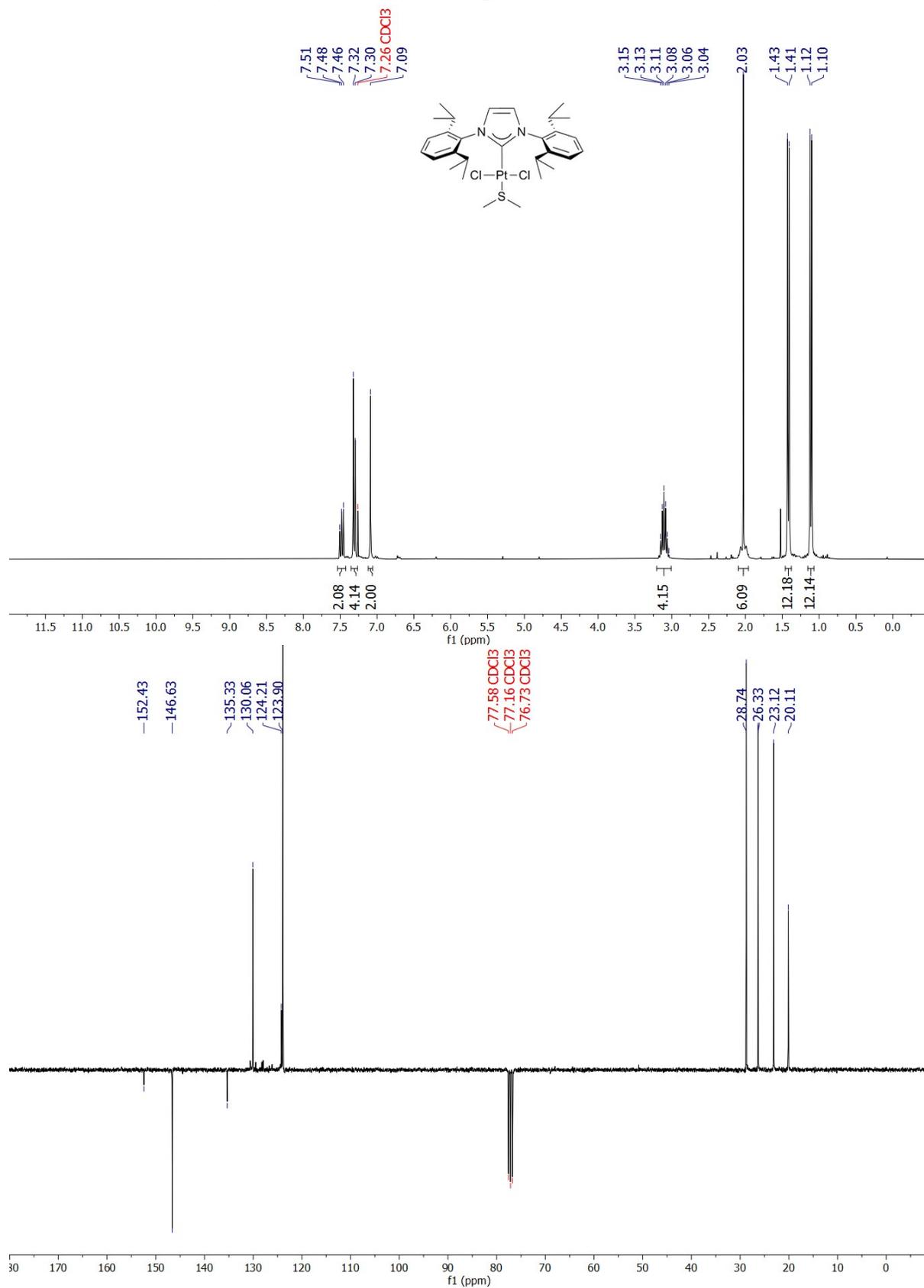
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1. NMR spectra

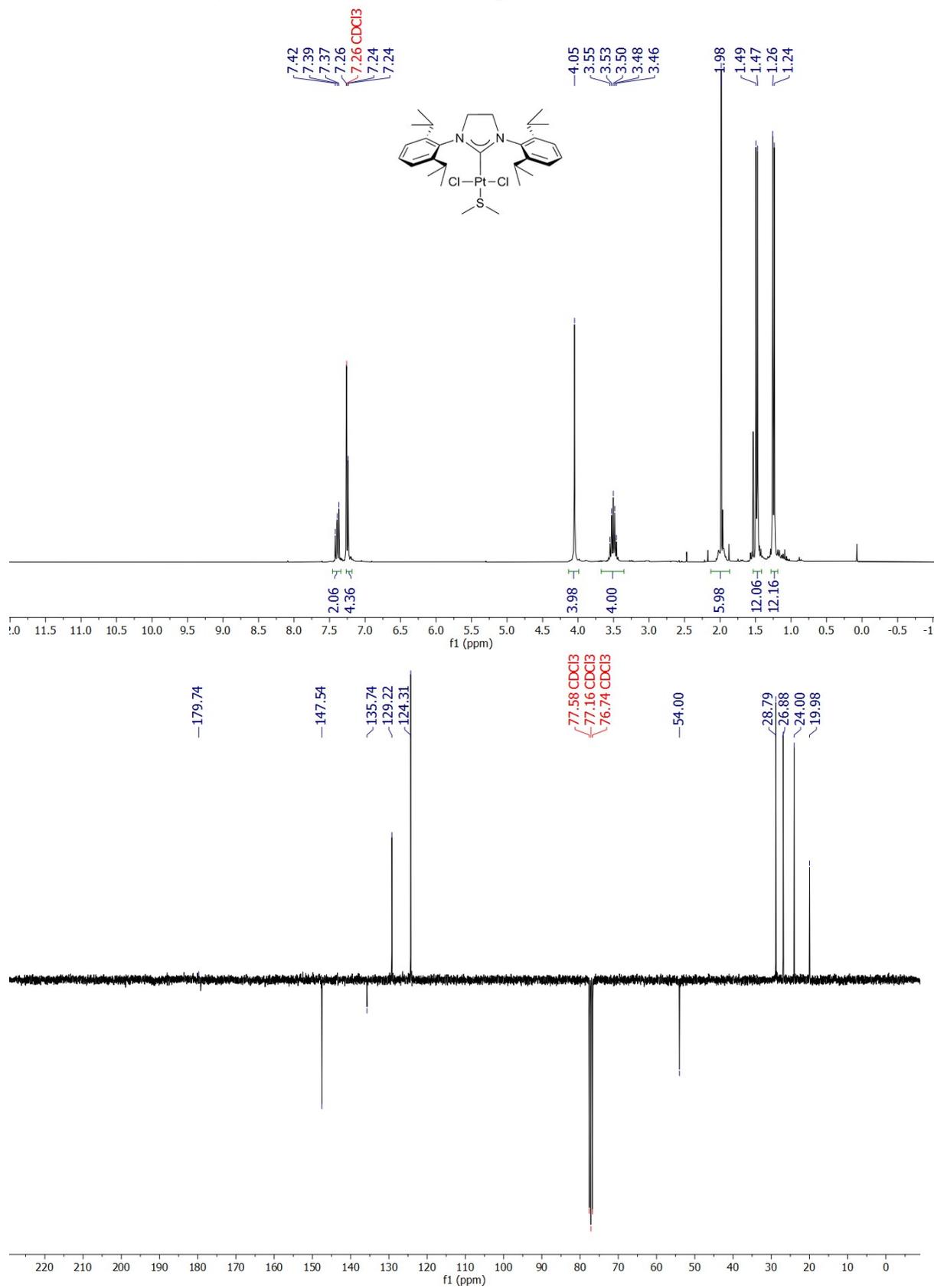
1.1. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{IPrH}][\text{Pt}(\text{DMS})\text{Cl}_3]$ (2)



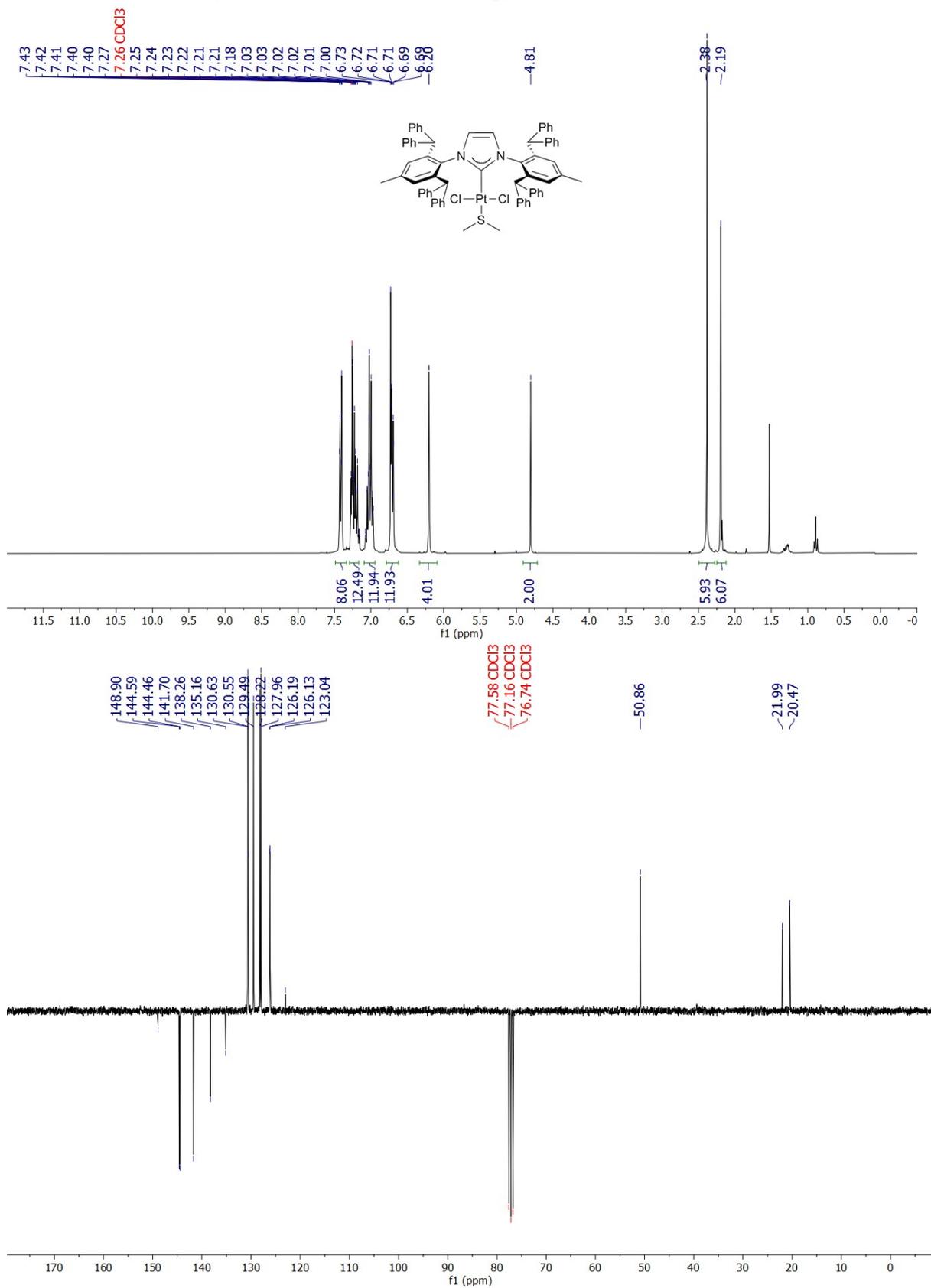
1.2. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{IPr})(\text{DMS})\text{Cl}_2]$ (3a)



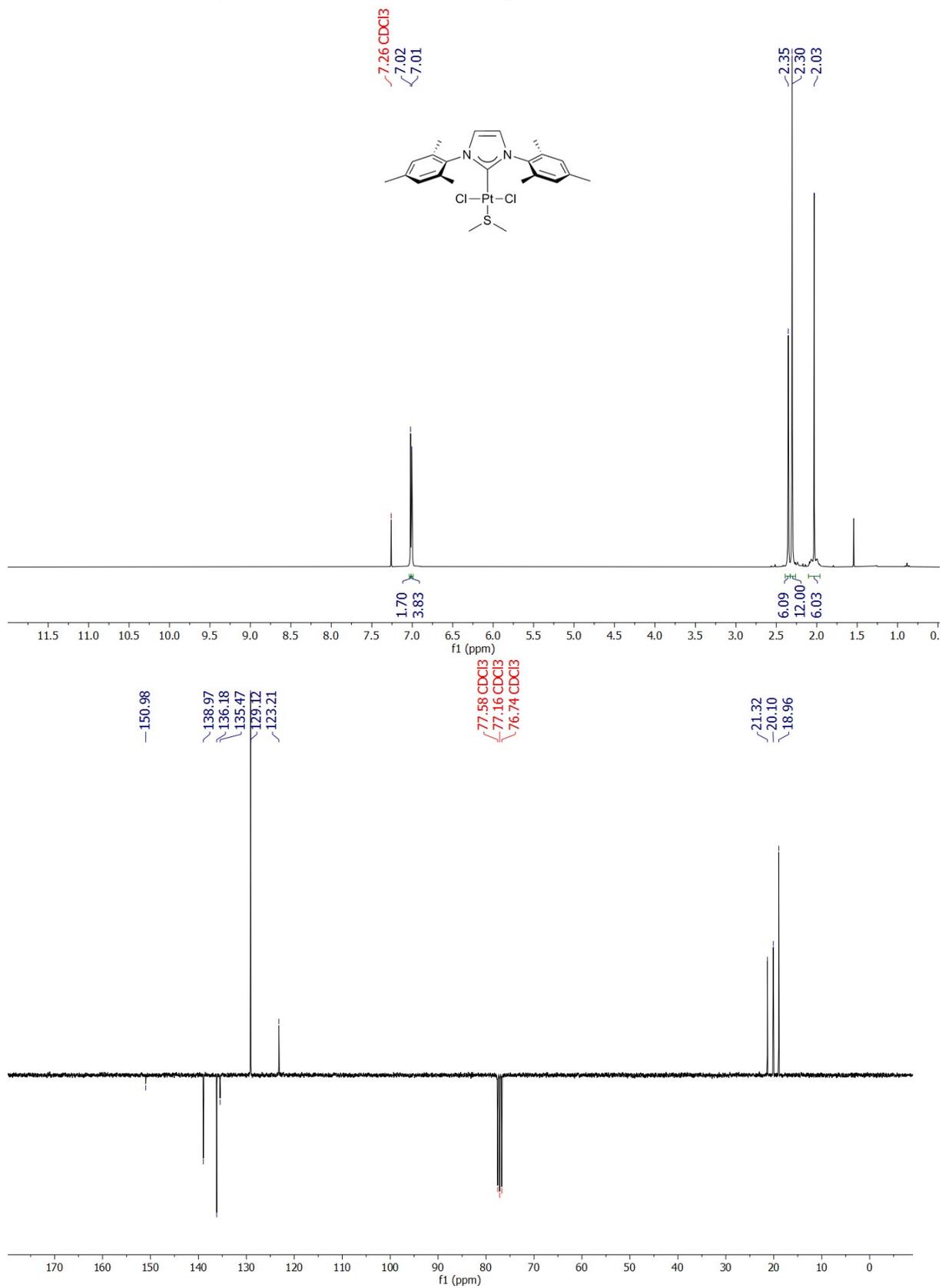
1.3. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{SIPr})(\text{DMS})\text{Cl}_2]$ (**3b**)



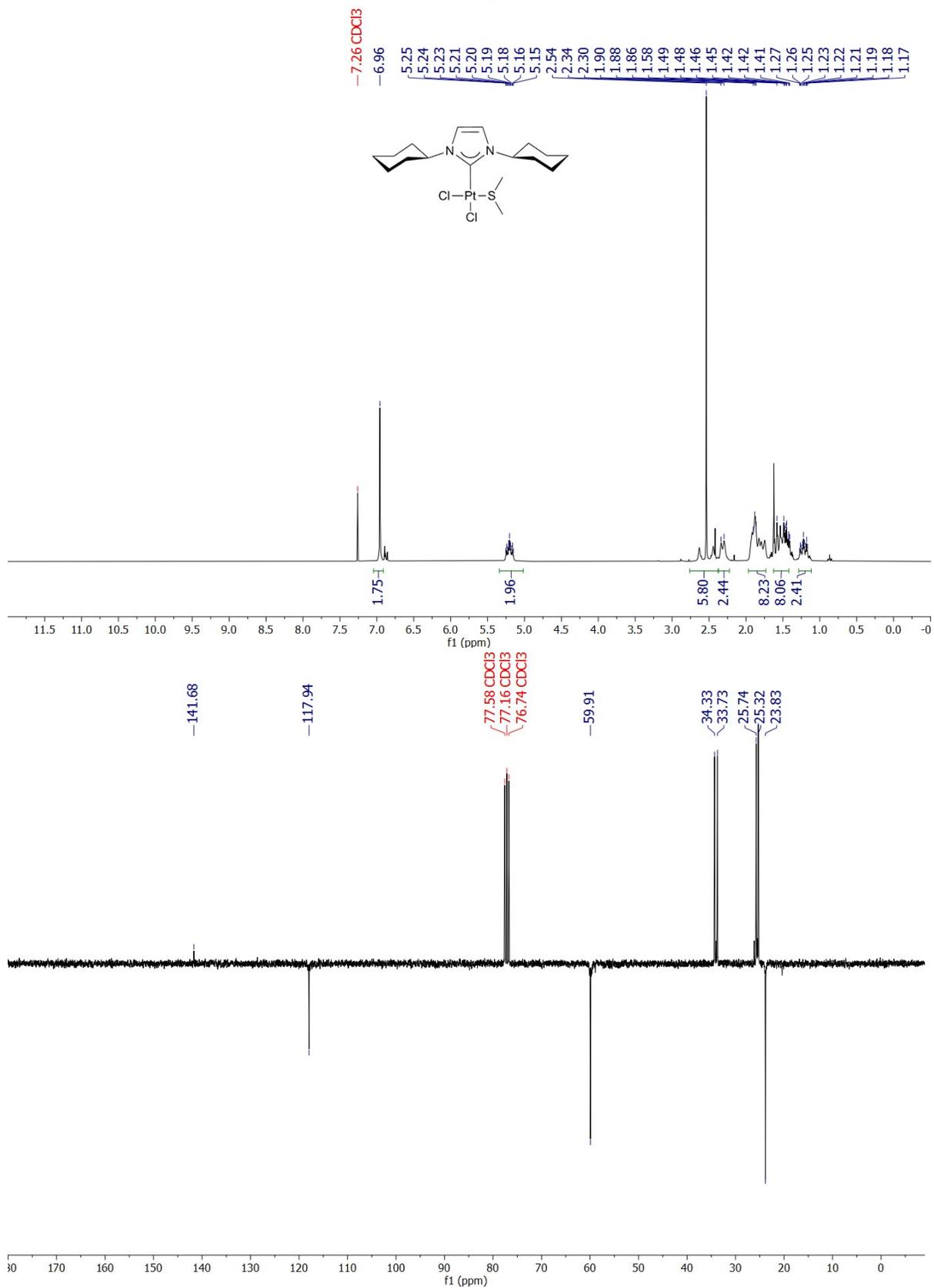
1.4. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{IPr}^*)(\text{DMS})\text{Cl}_2]$ (**3c**)



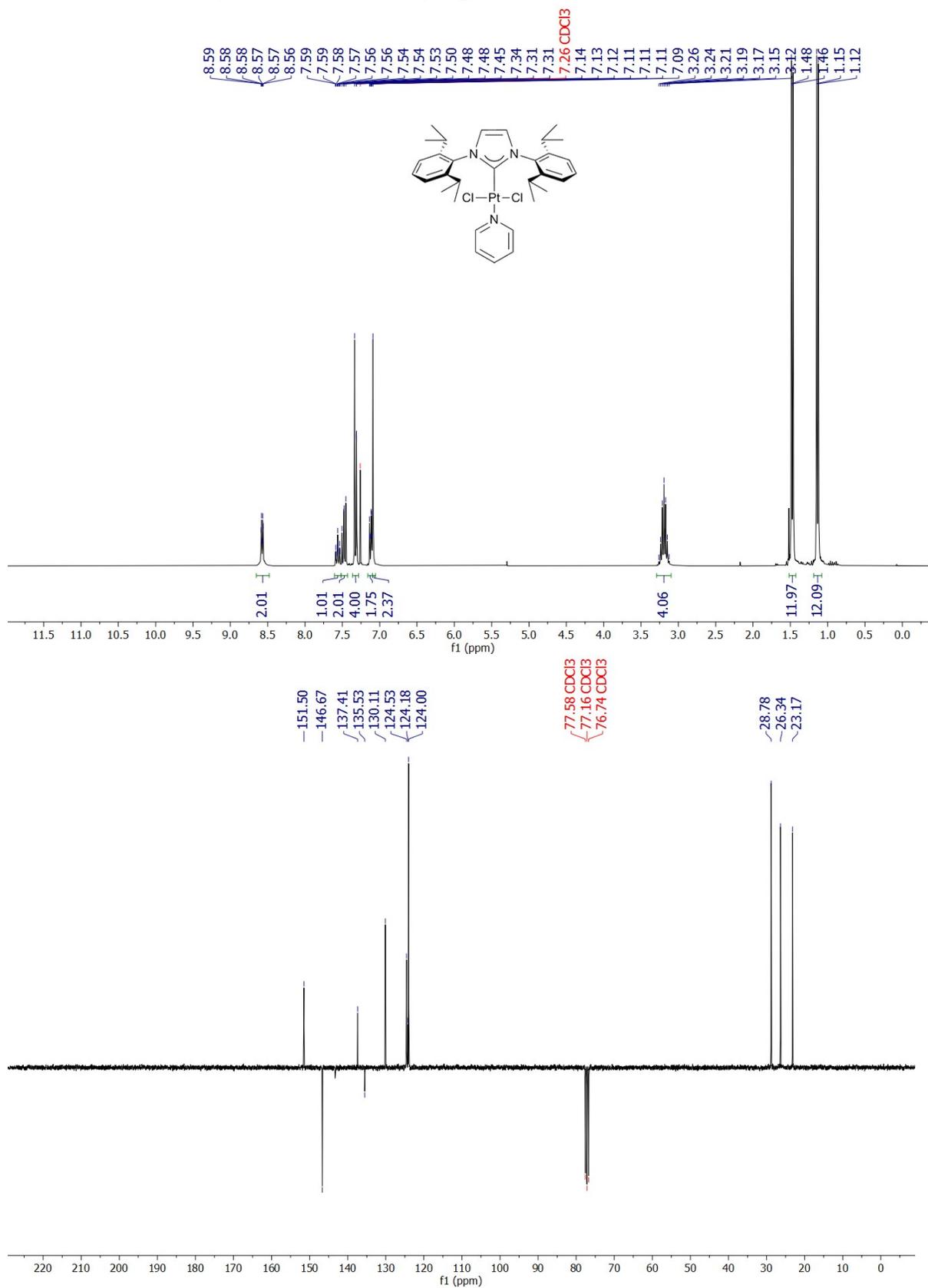
1.5. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{IMes})(\text{DMS})\text{Cl}_2]$ (3d)



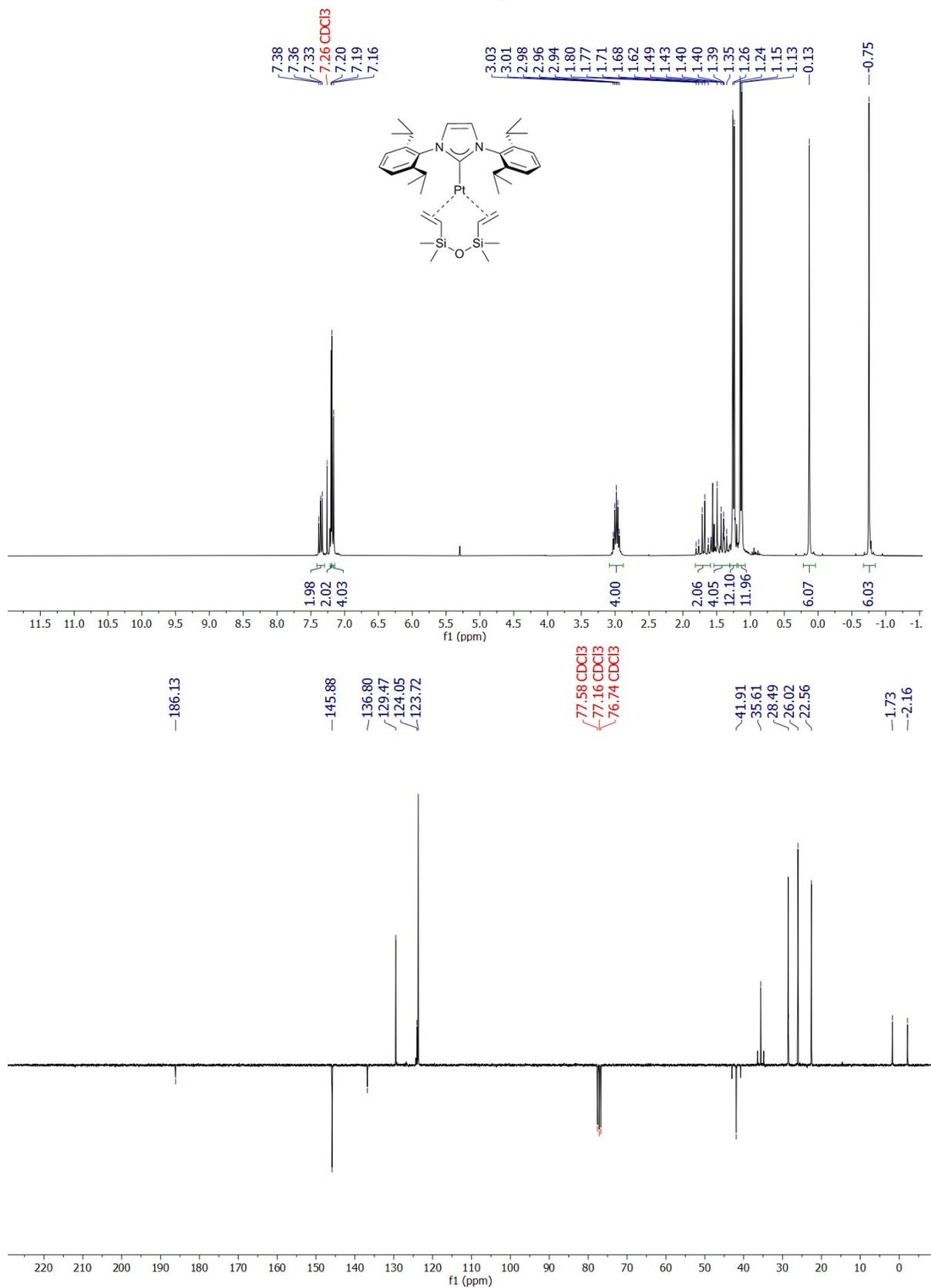
1.6. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{ICy})(\text{DMS})\text{Cl}_2]$ (3e)



1.7. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{IPr})(\text{Py})\text{Cl}_2]$ (7a)



1.8. ^1H and $^{13}\text{C}\{^1\text{H}\}$ apt NMR of $[\text{Pt}(\text{IPr})(\text{dvtms})\text{Cl}_2]$ (**8a**)



1.9. ^1H and $^{13}\text{C}\{^1\text{H}\}$ NMR of 1,1,1,3,5,5,5-heptomethyl-3-octyltrisiloxane (9)

