

Supporting Information

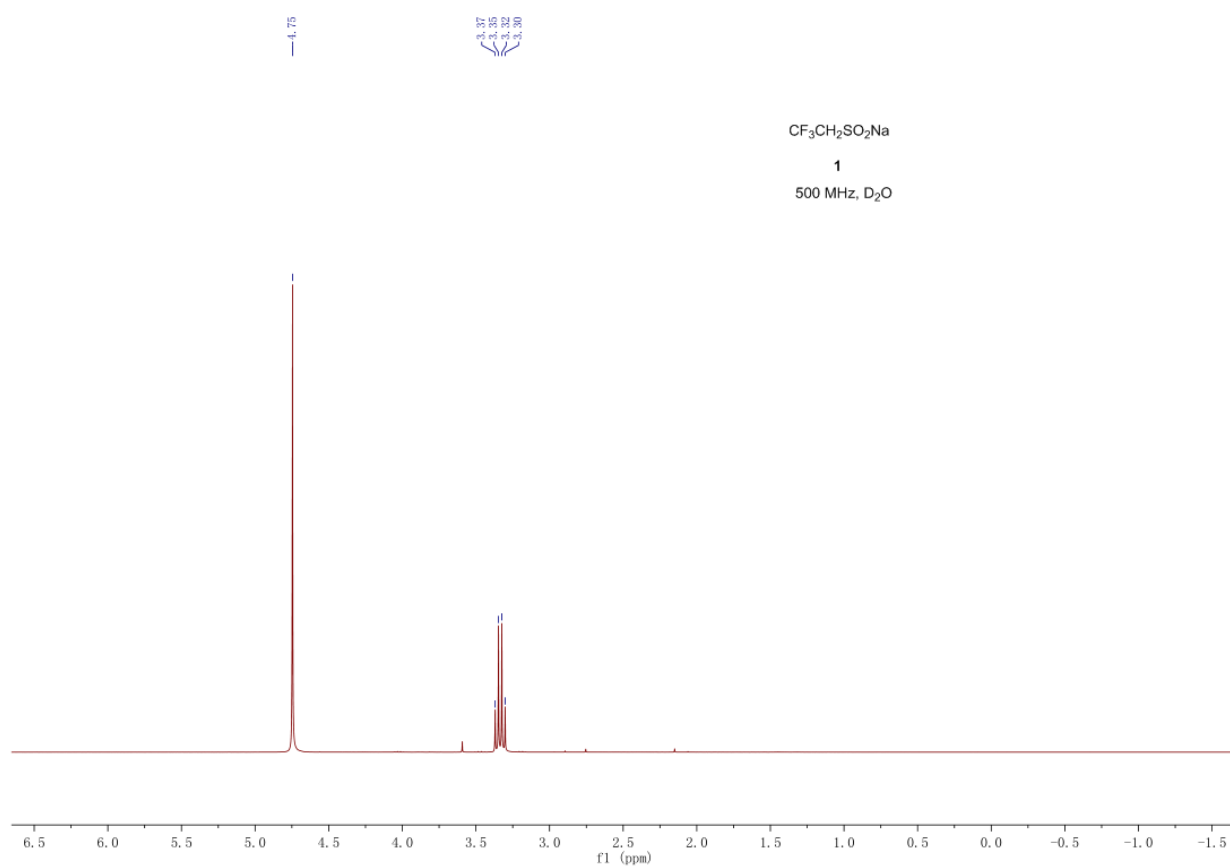
Metal-Free electrophilic Trifluoroethylthiolation with $\text{NaSO}_2\text{CH}_2\text{CF}_3$

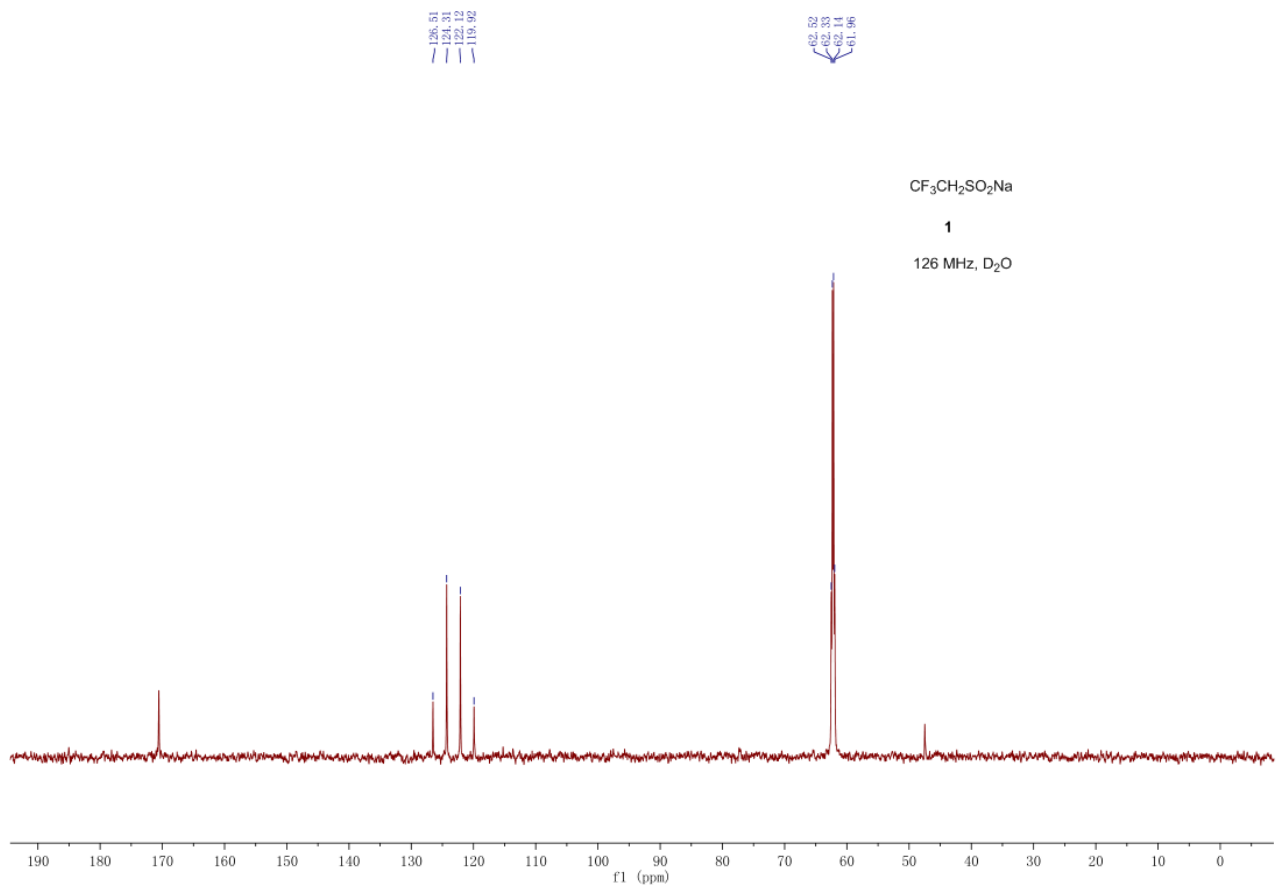
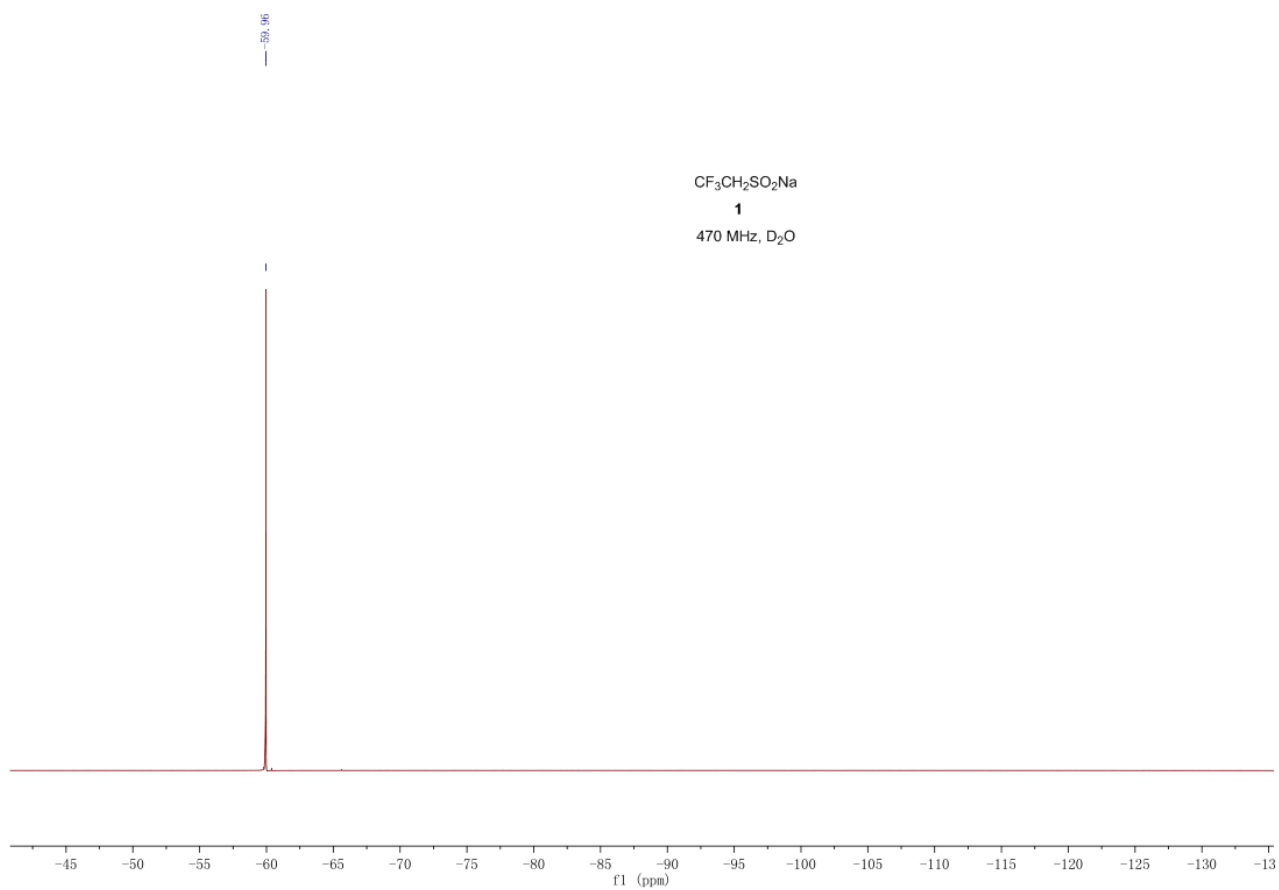
Rongkang Wang[‡], Lvqi Jiang[‡], Wenbin Yi*

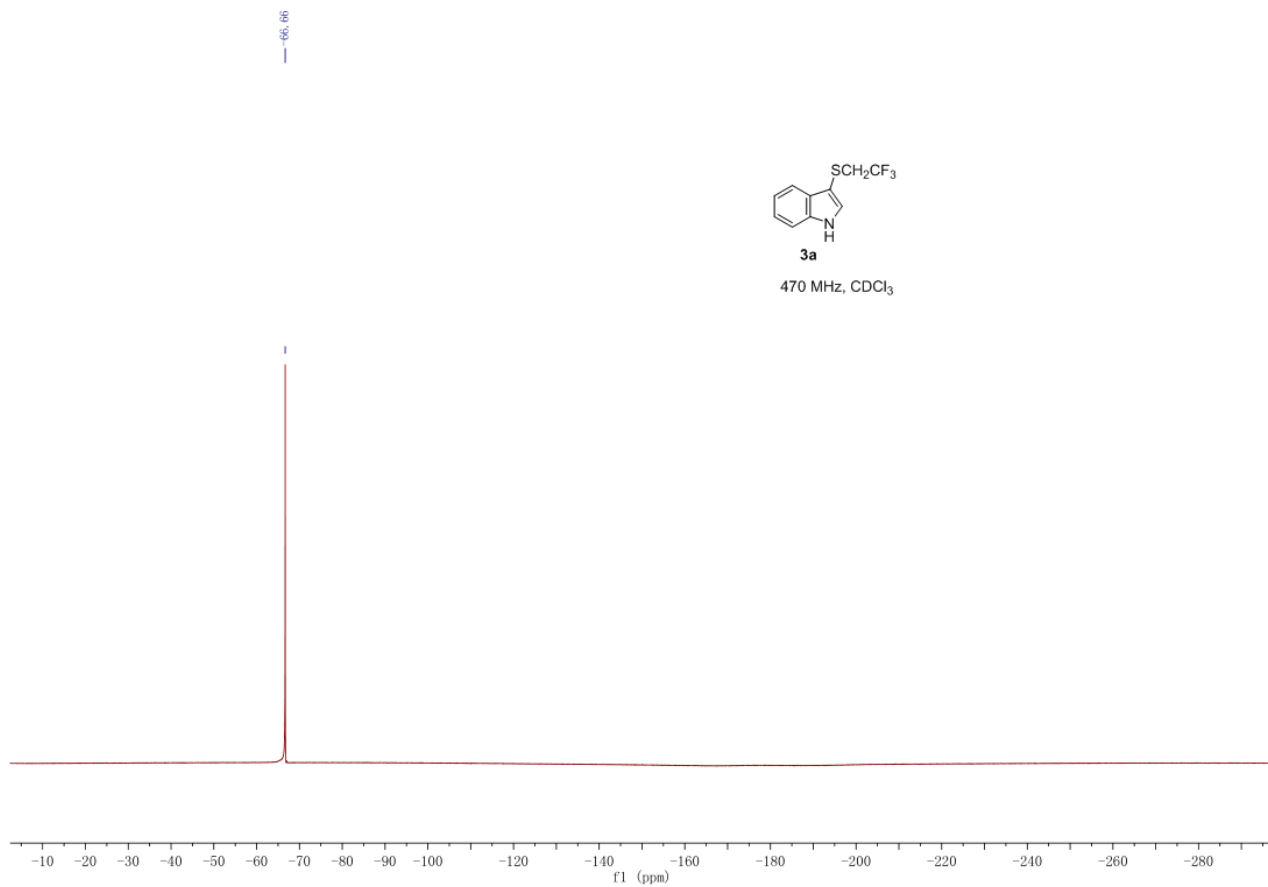
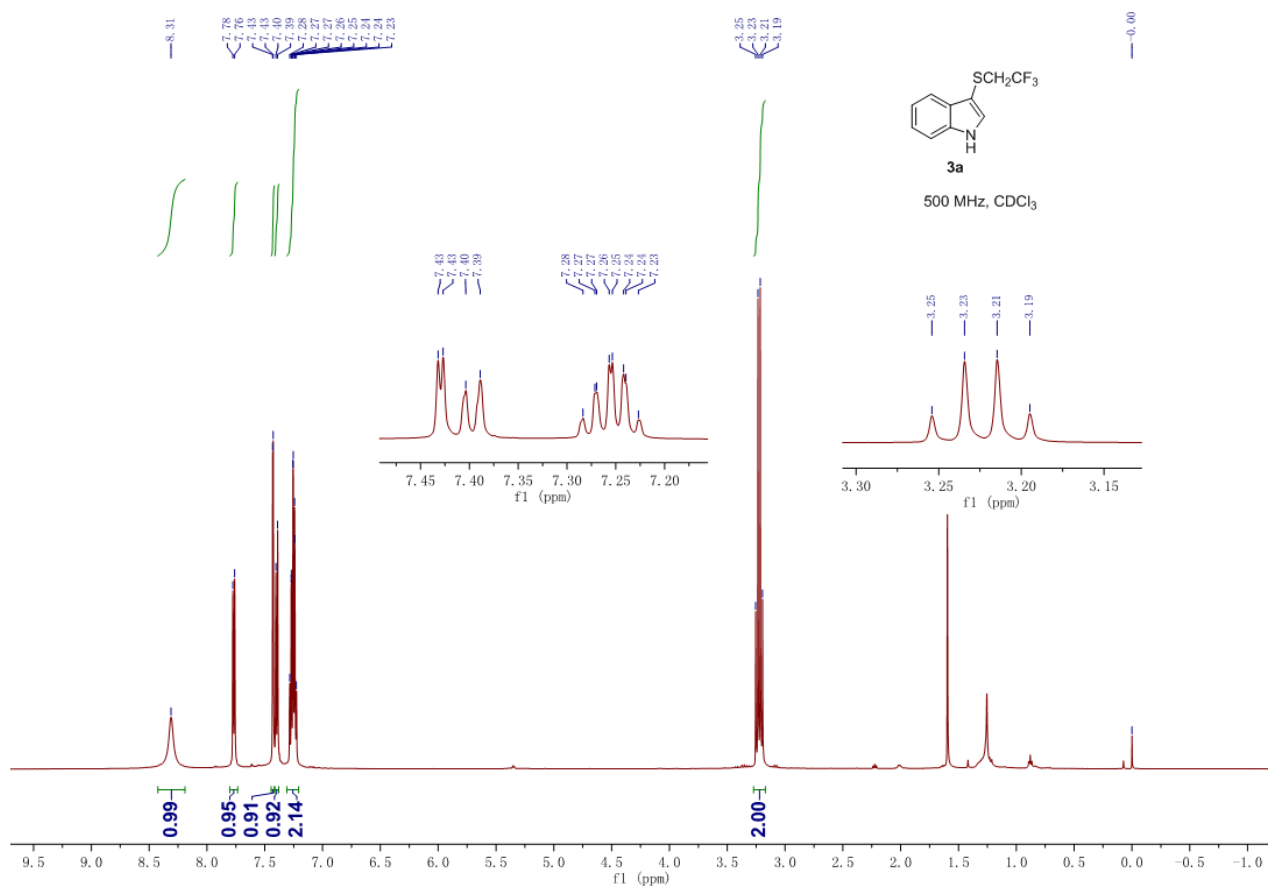
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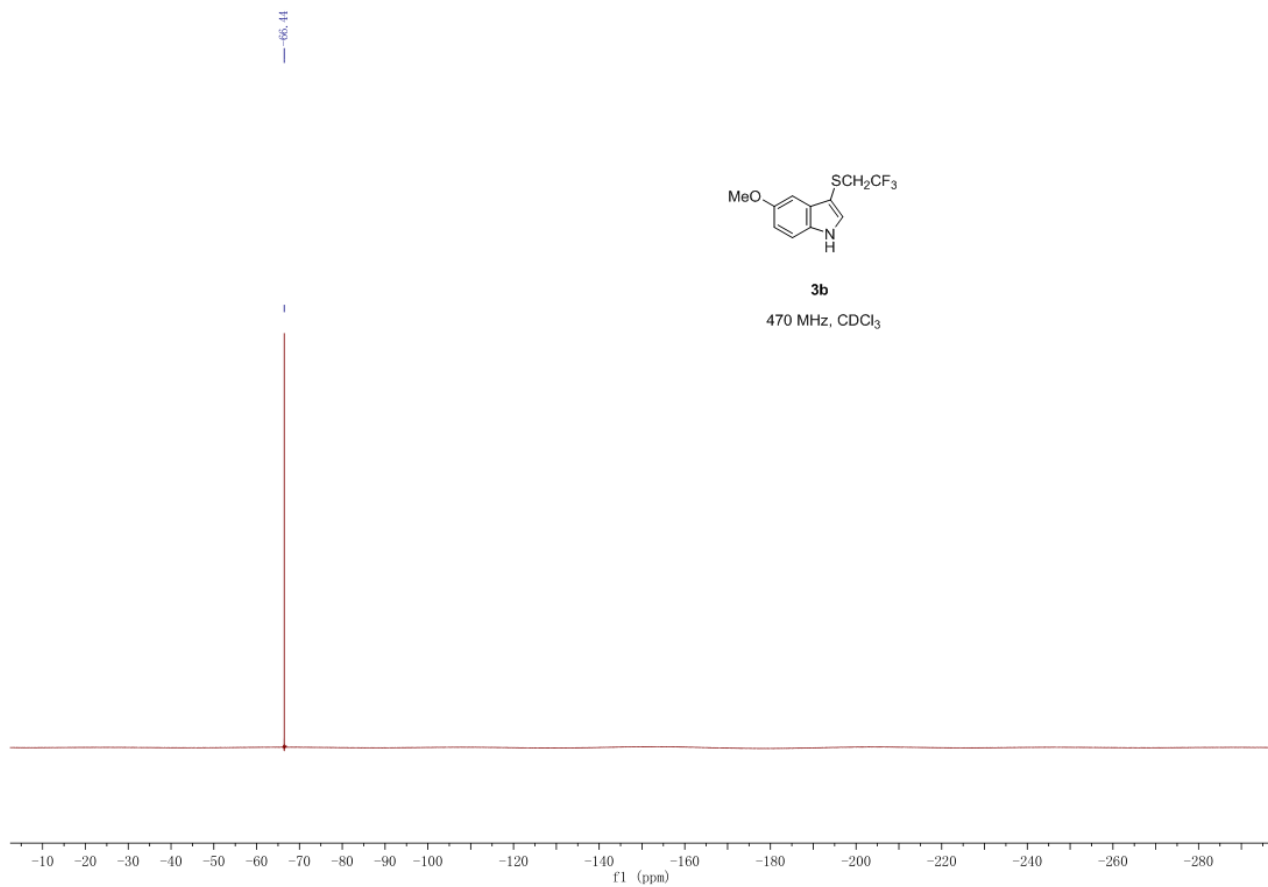
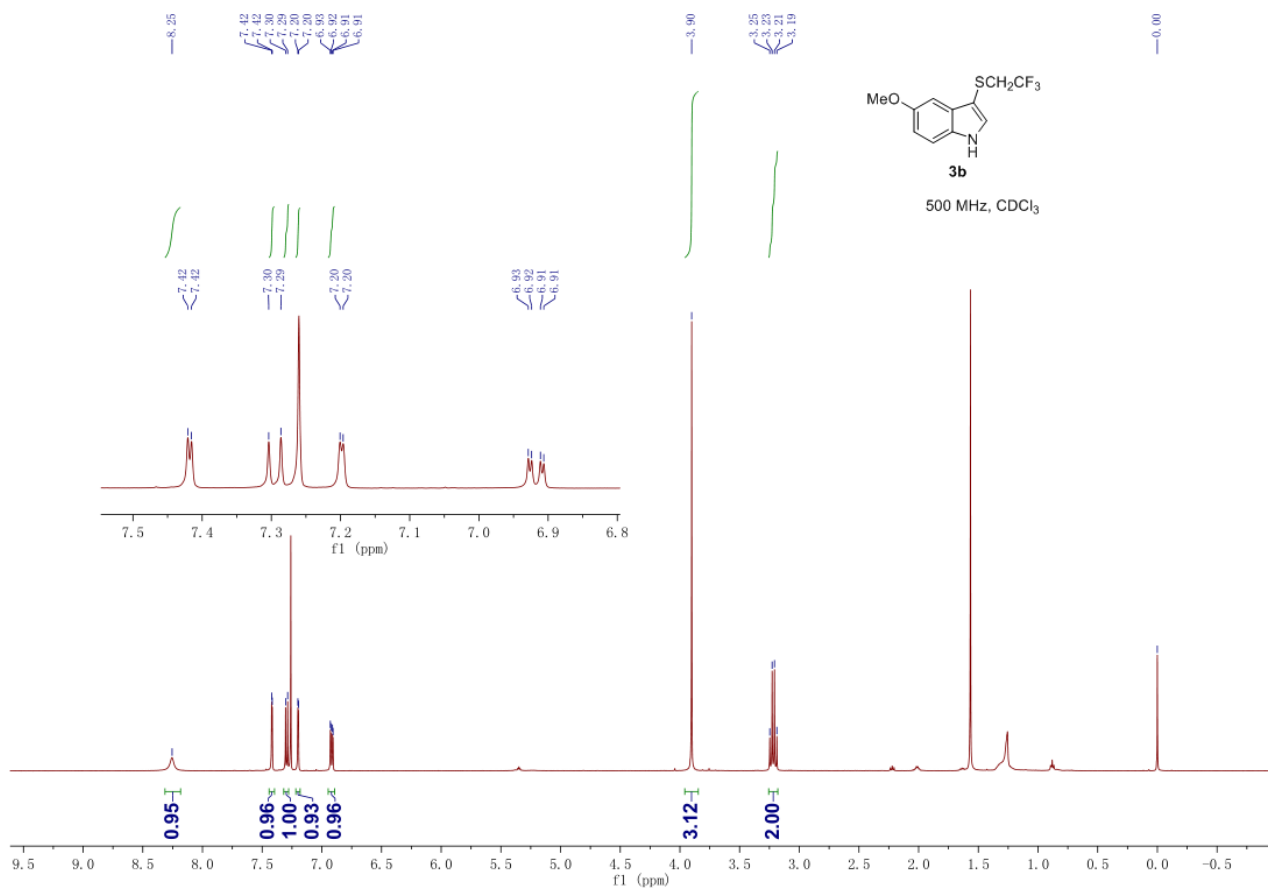
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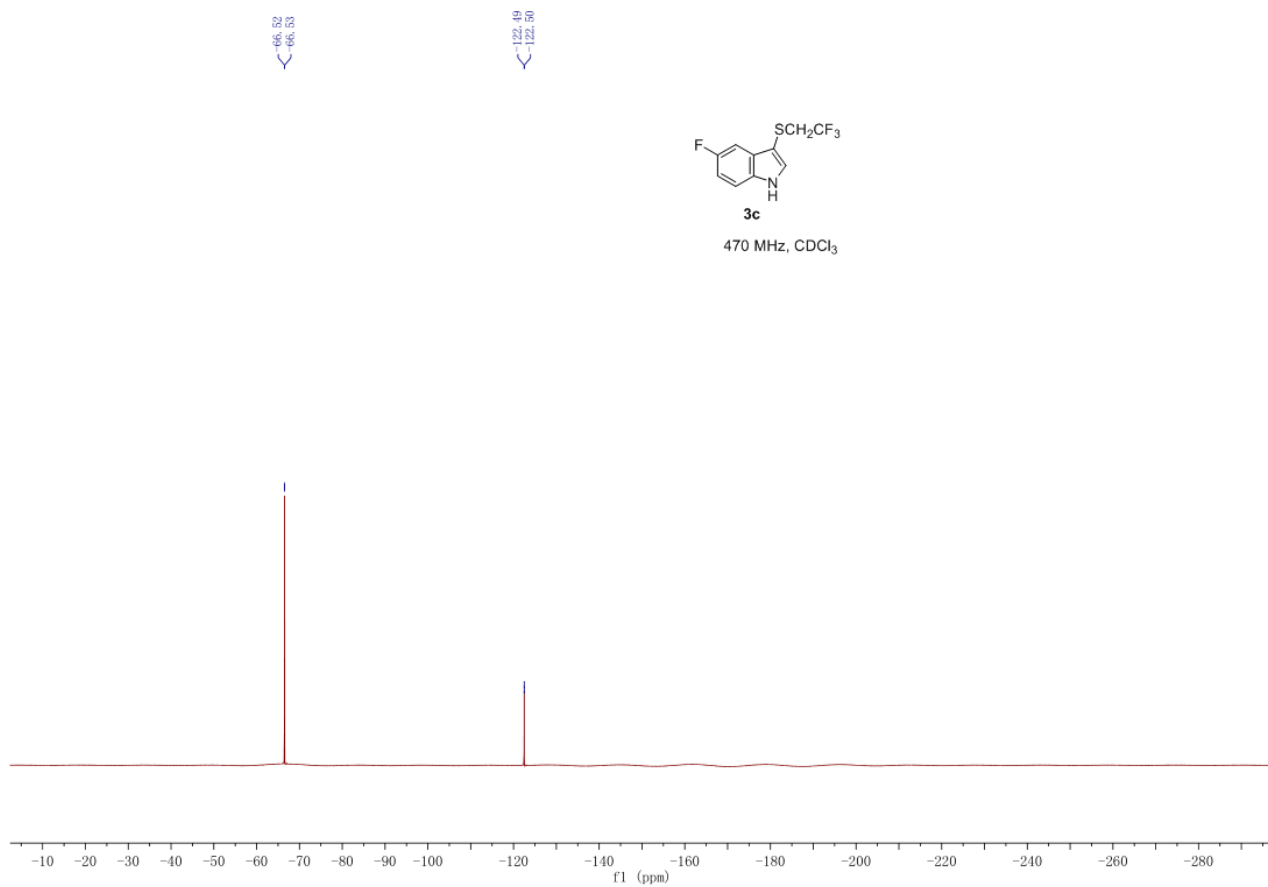
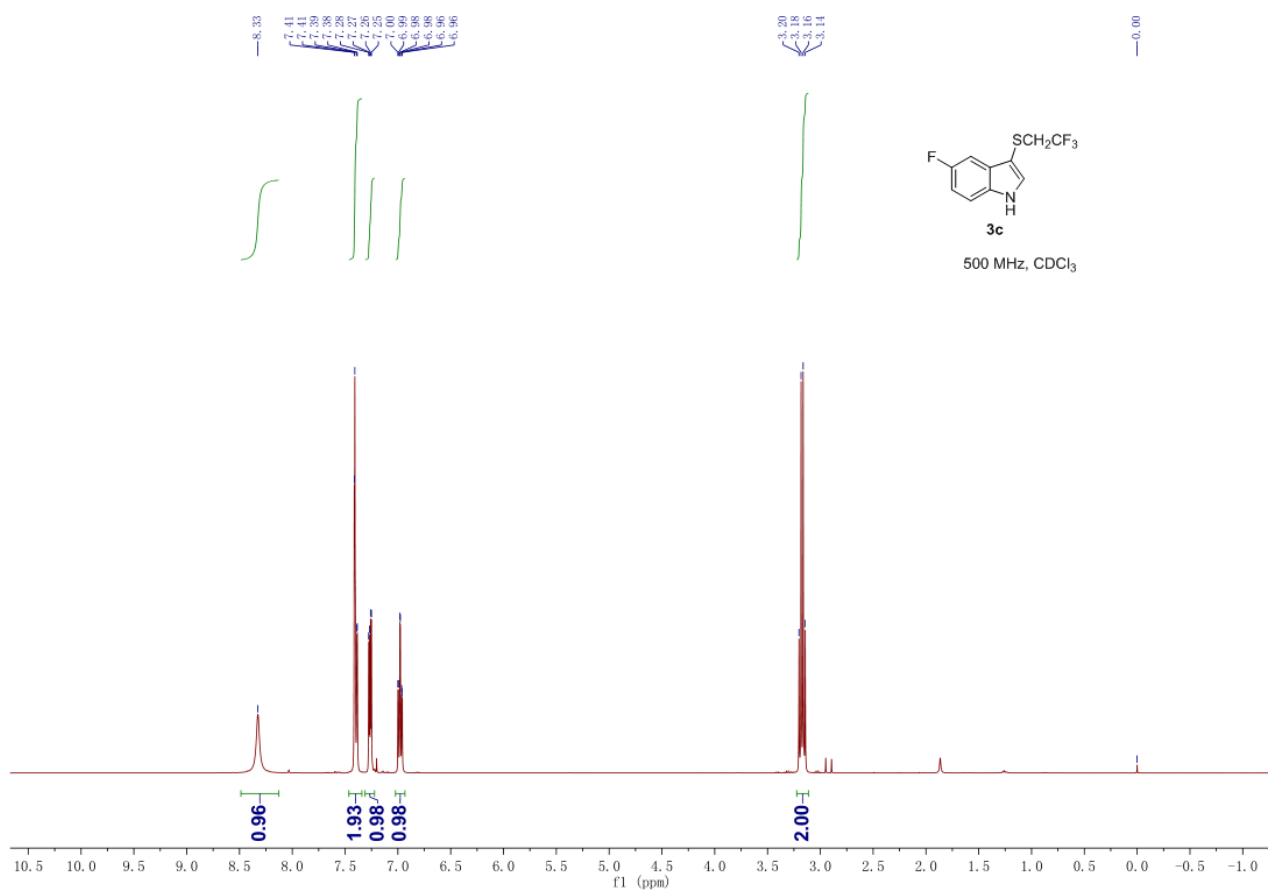
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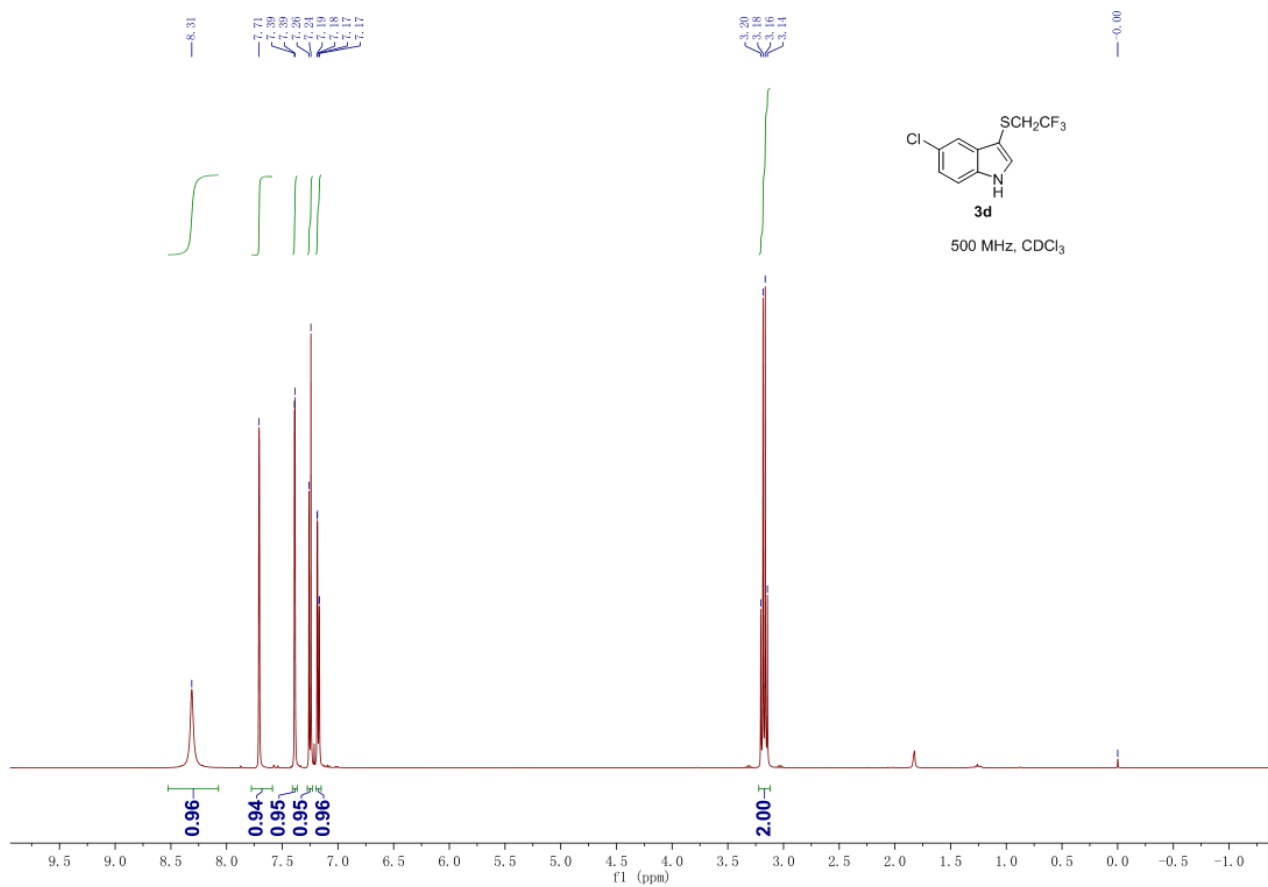
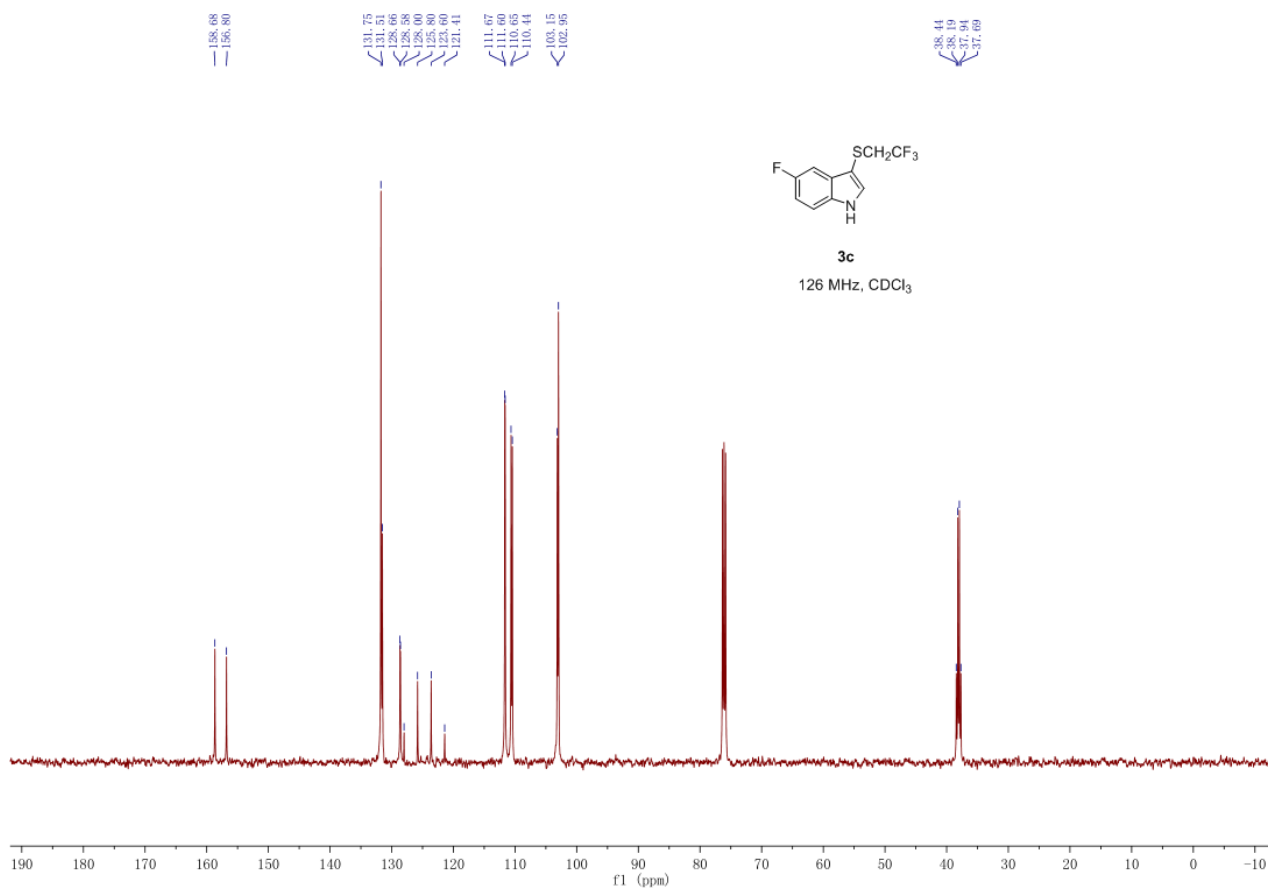


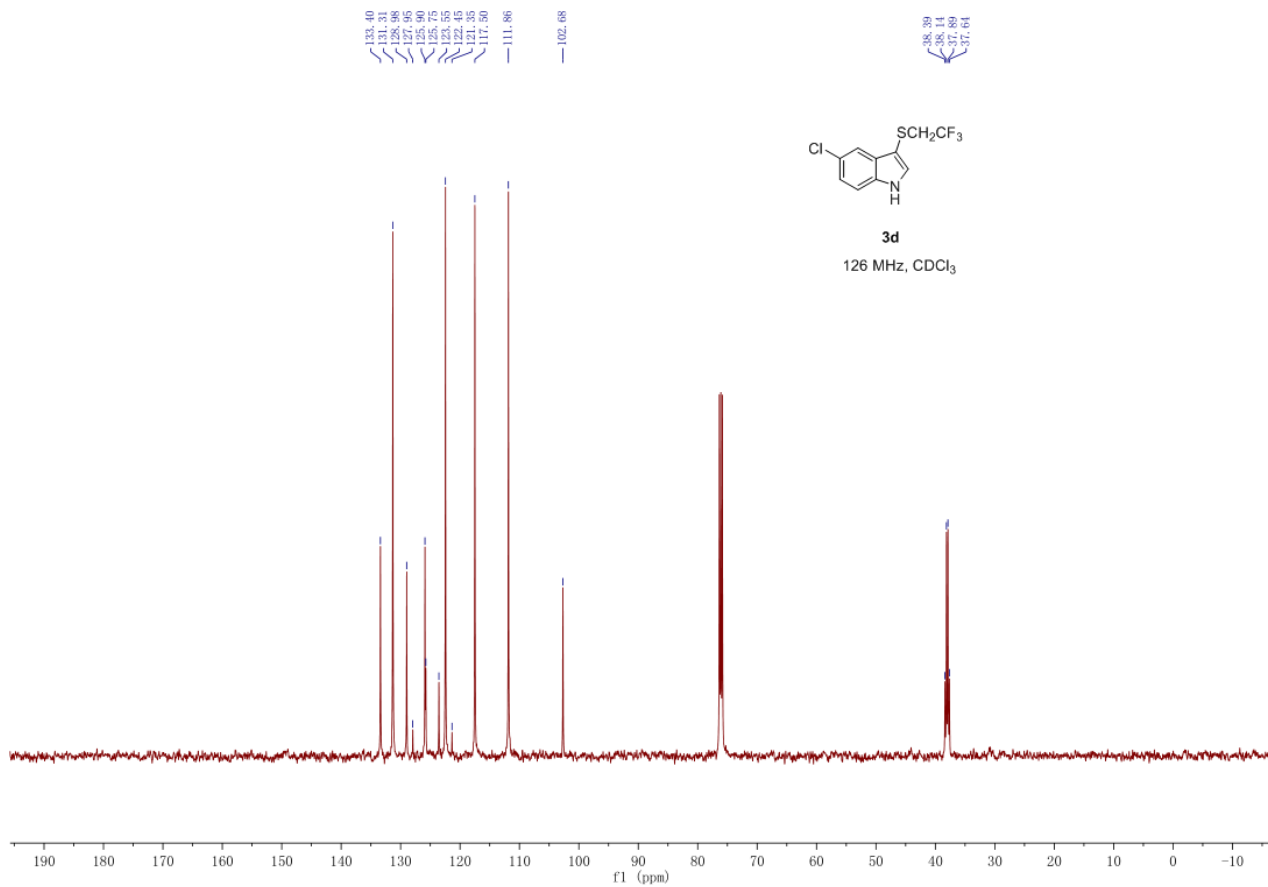
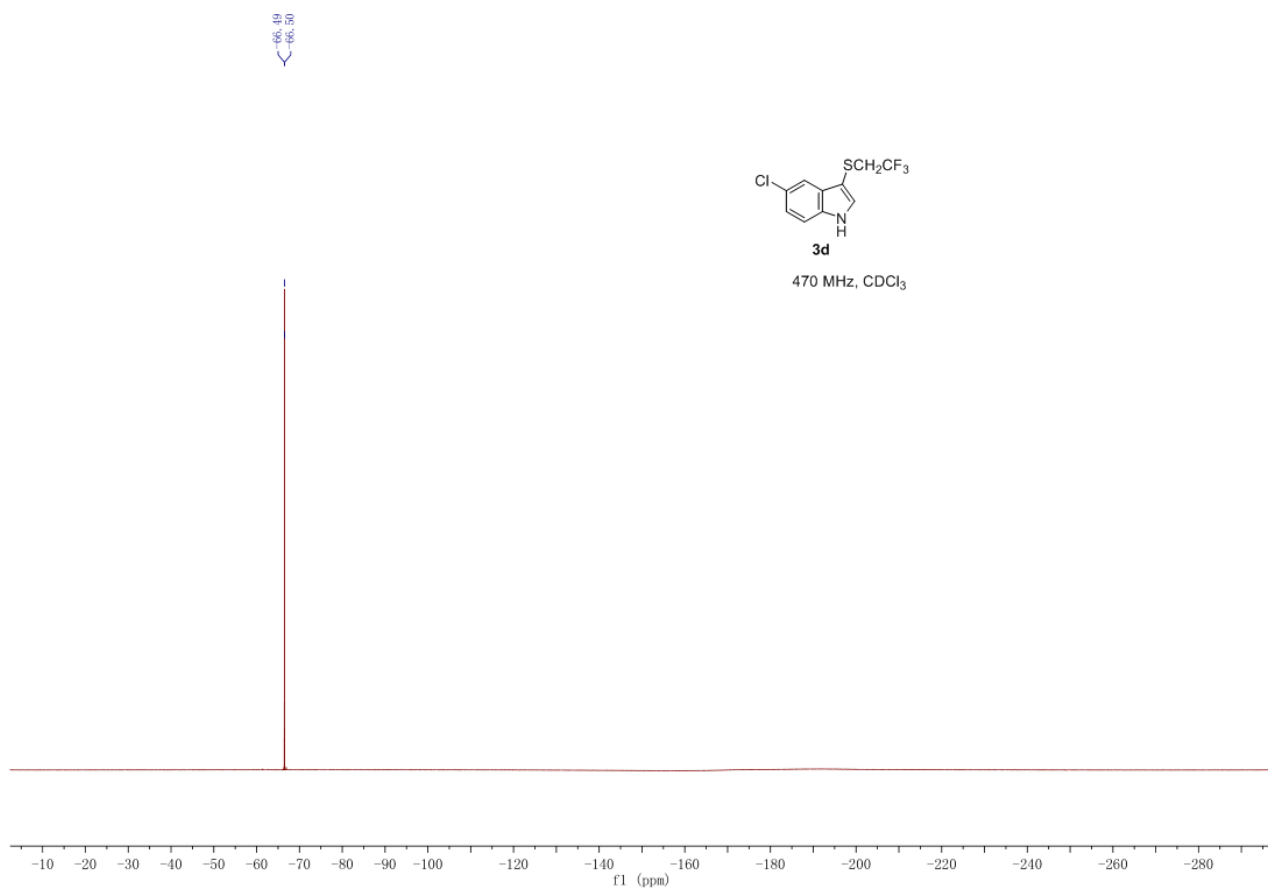


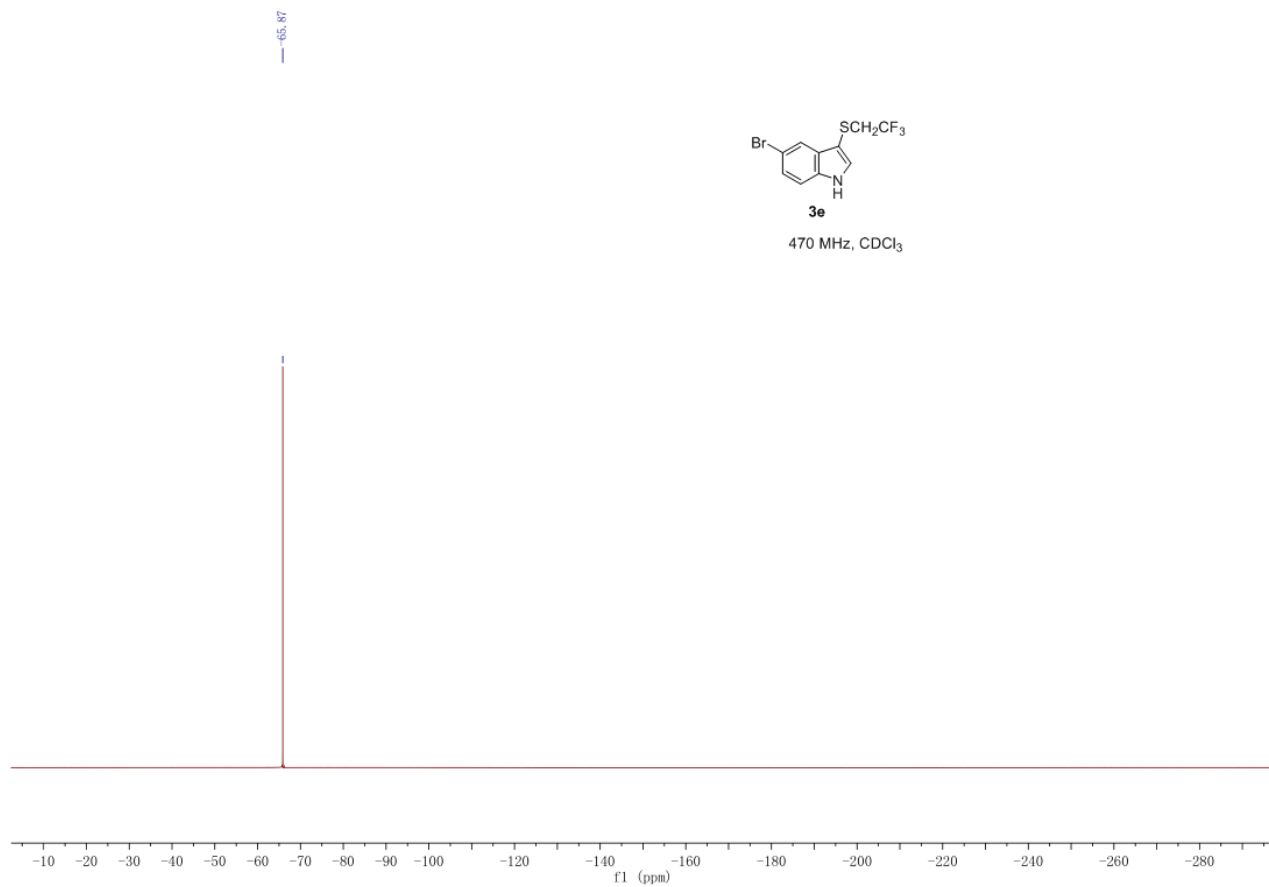
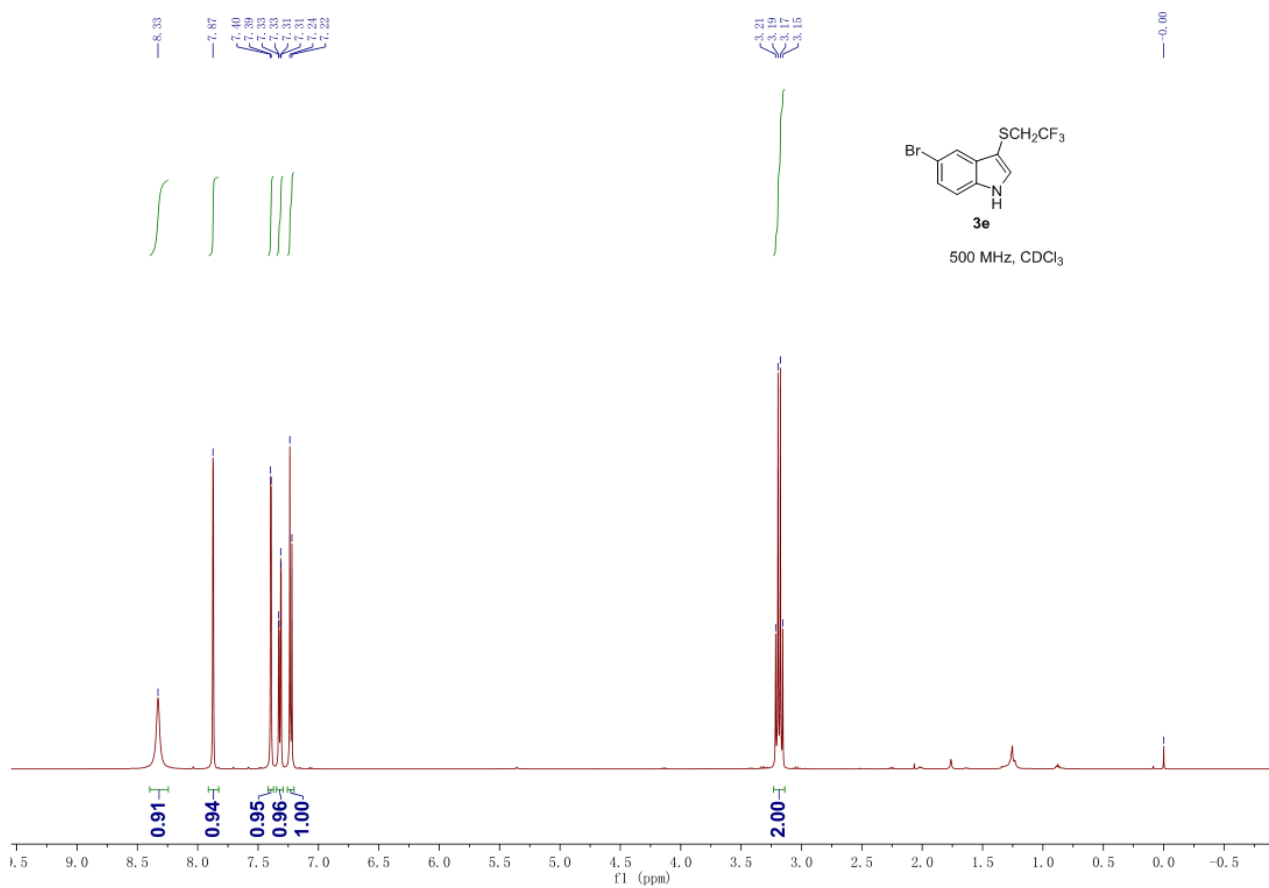


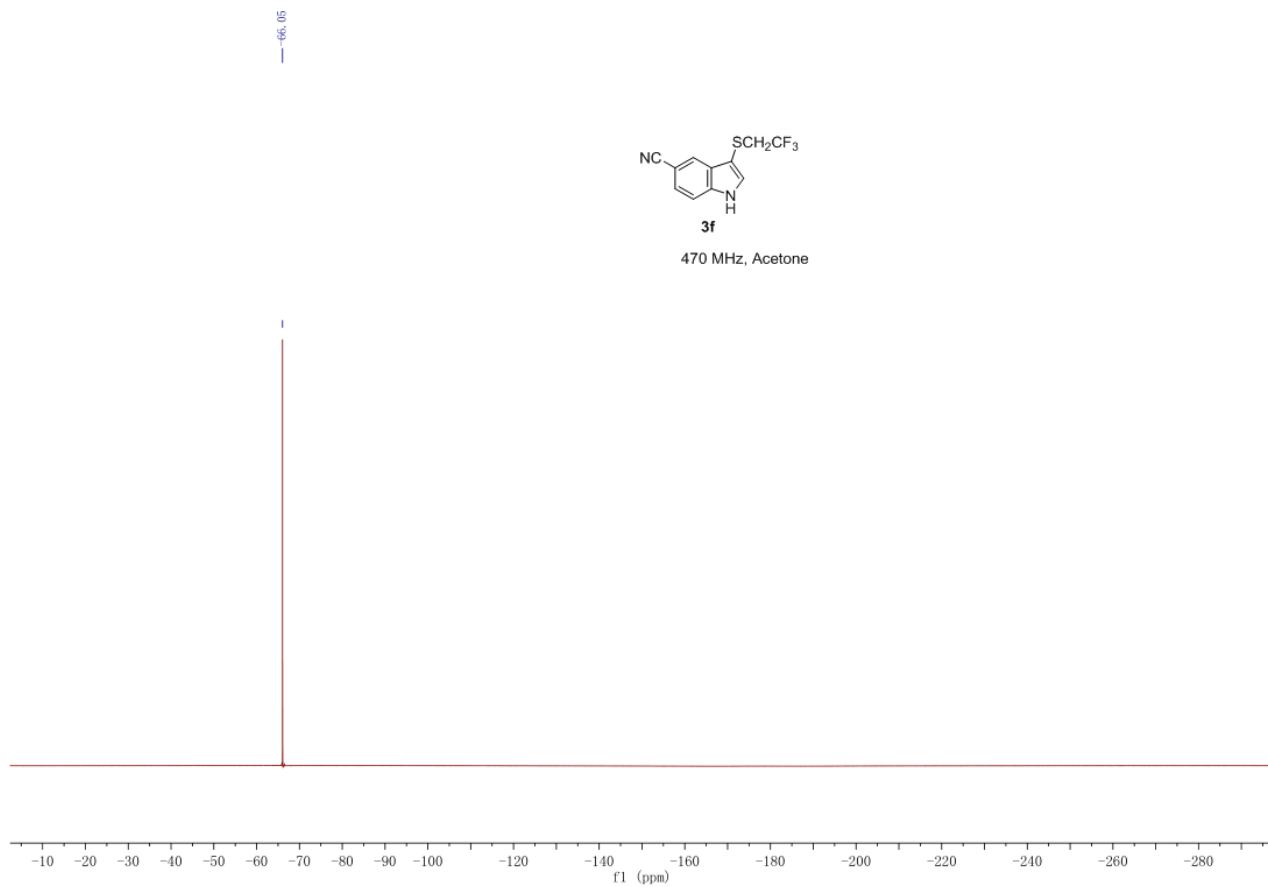
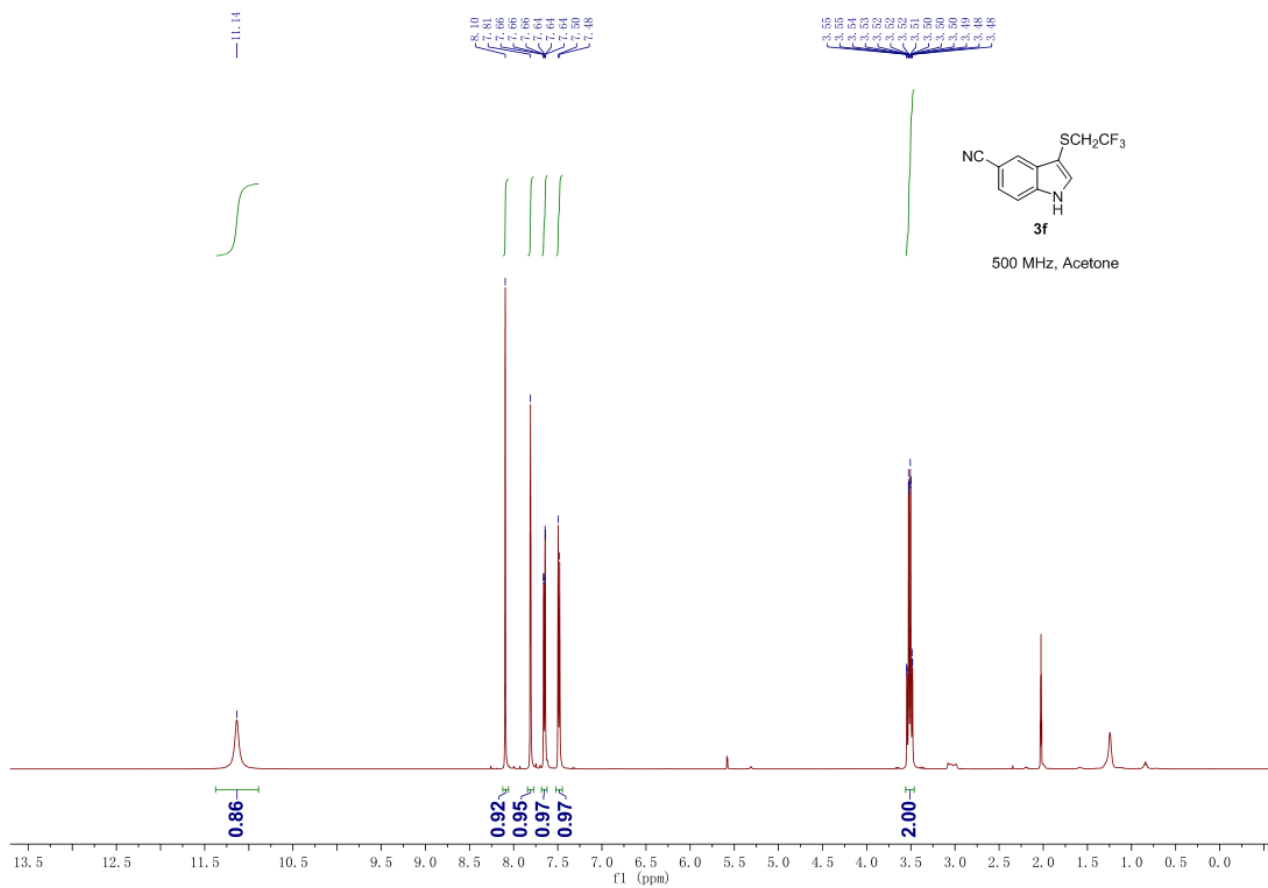


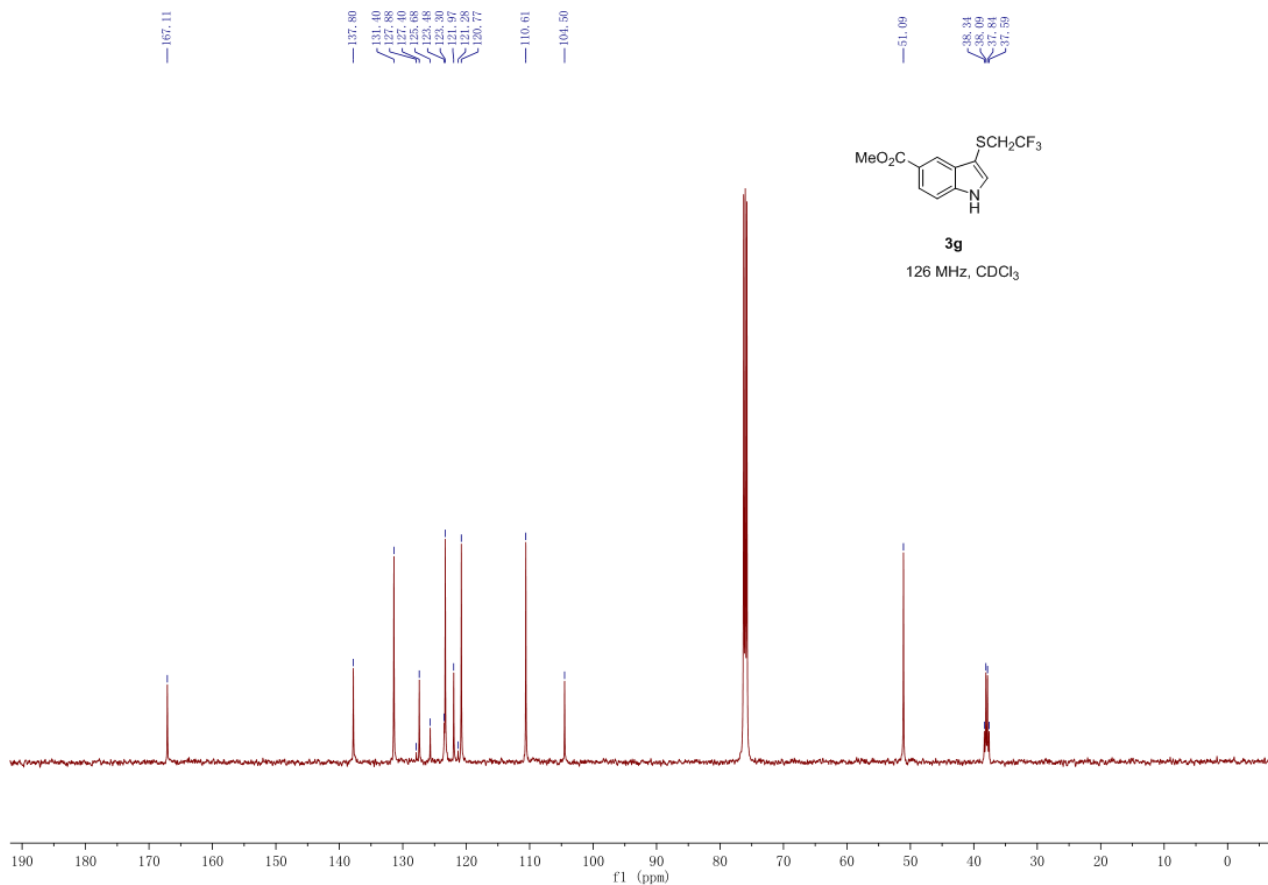
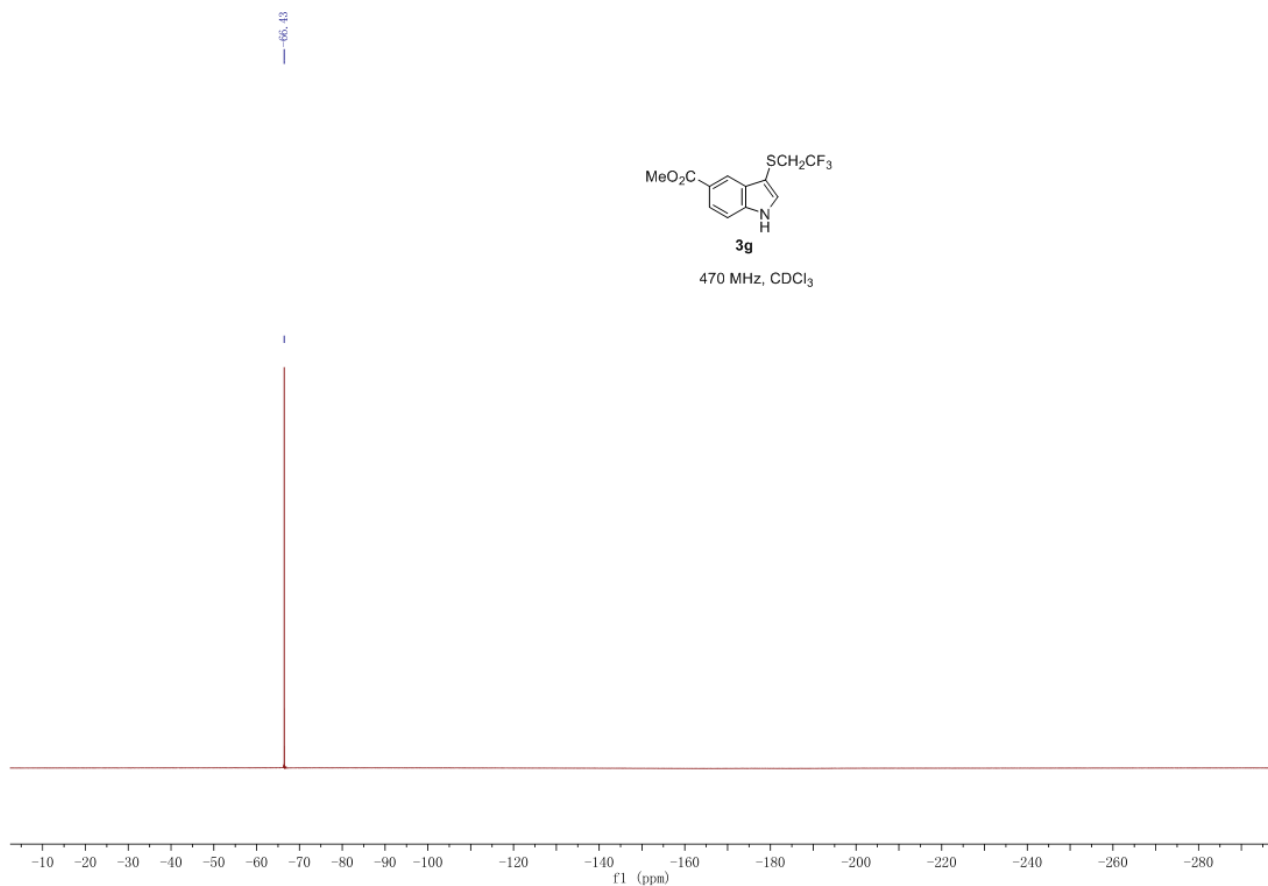


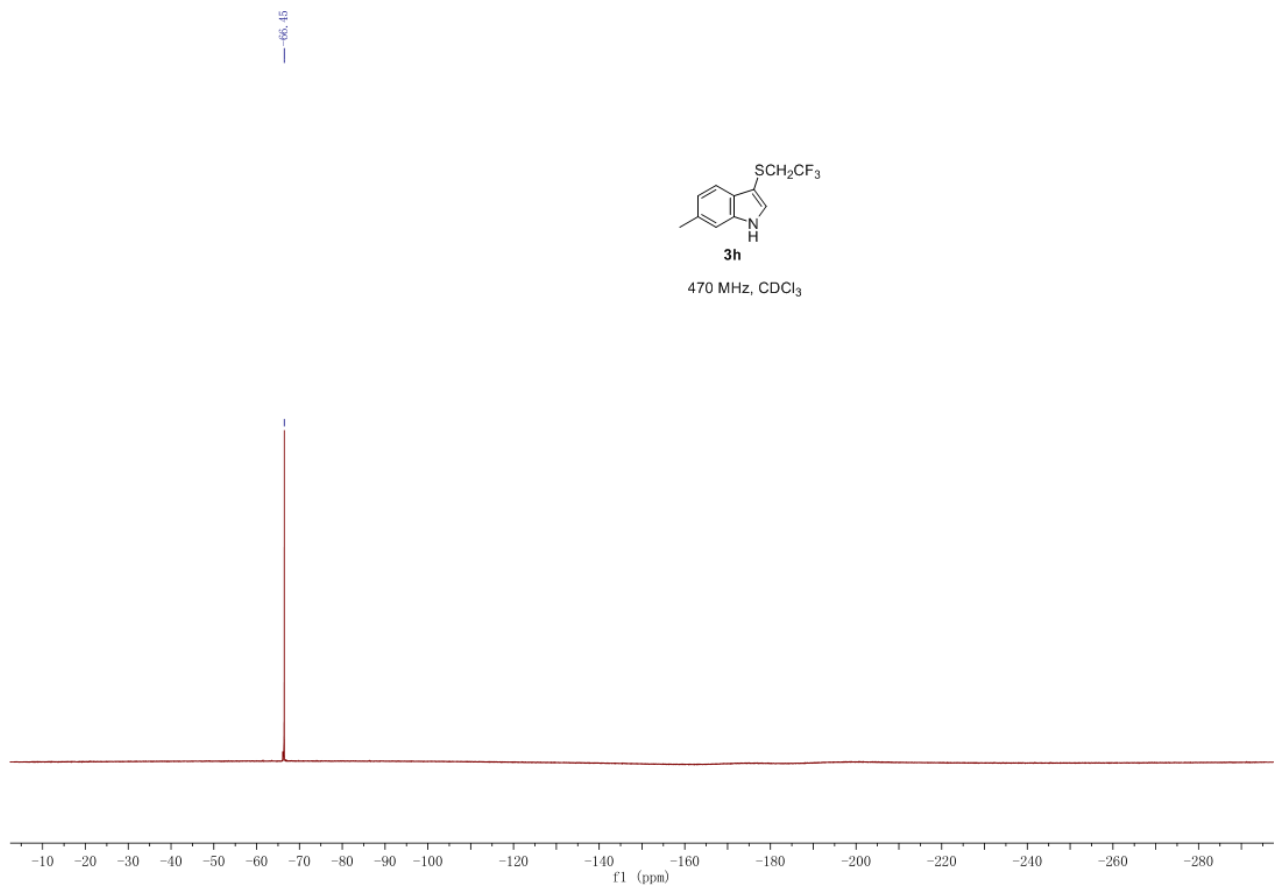
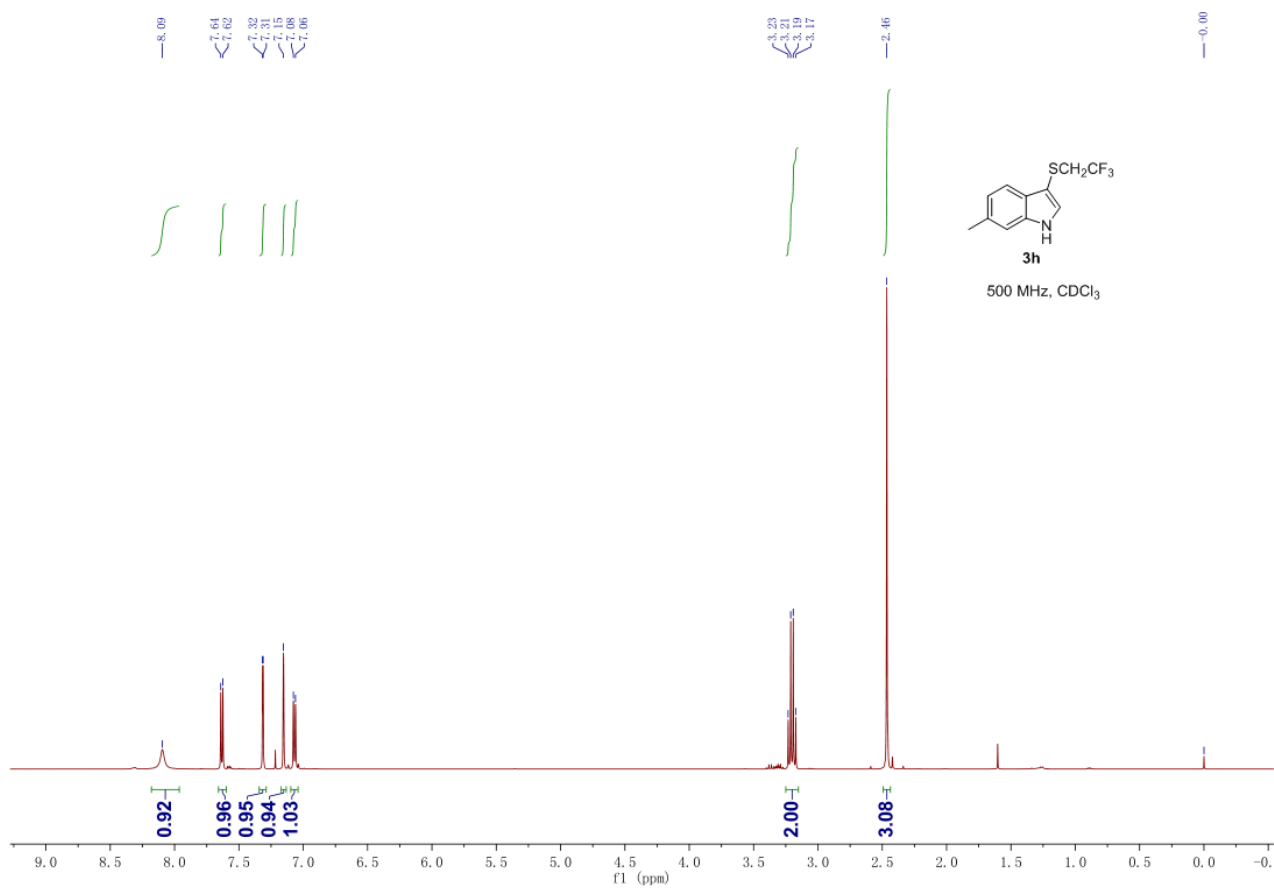


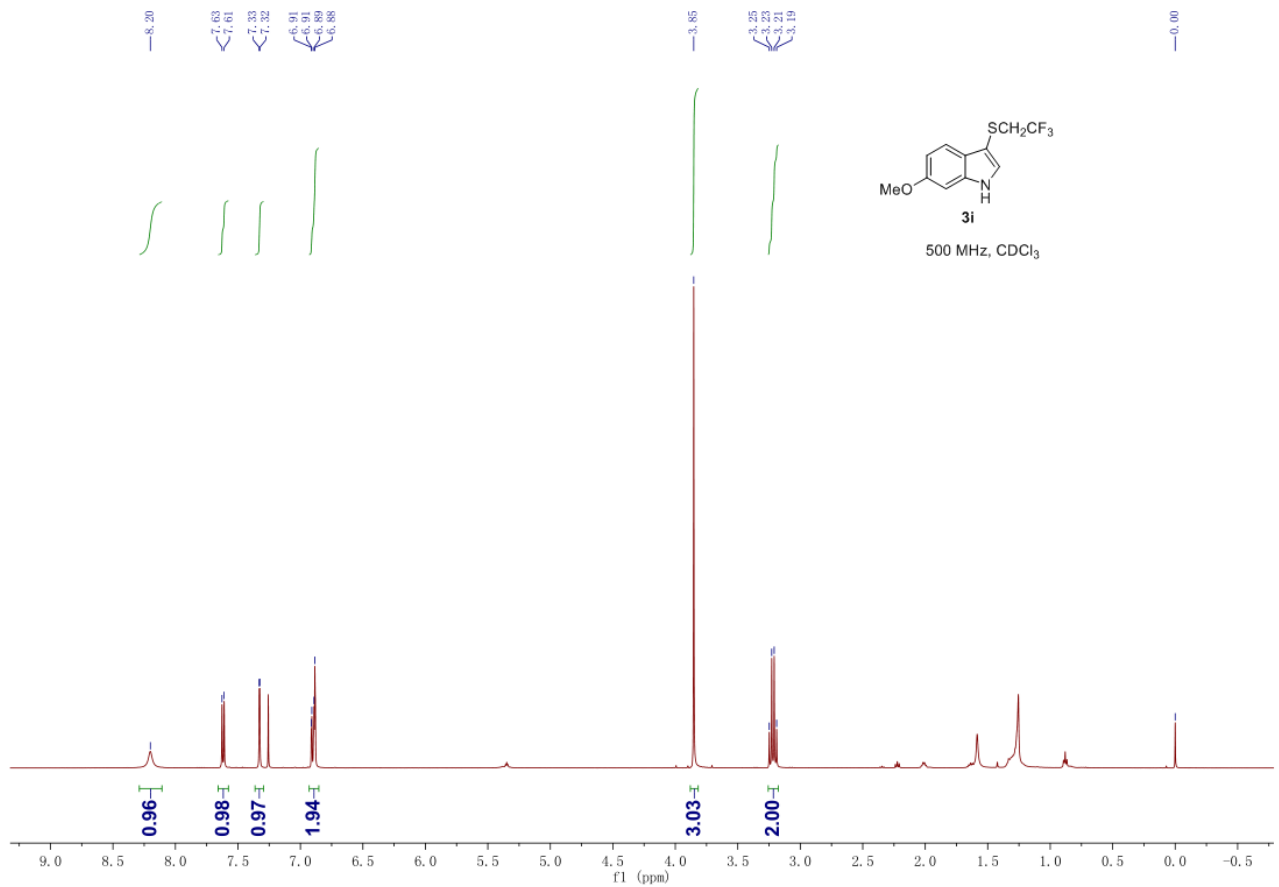
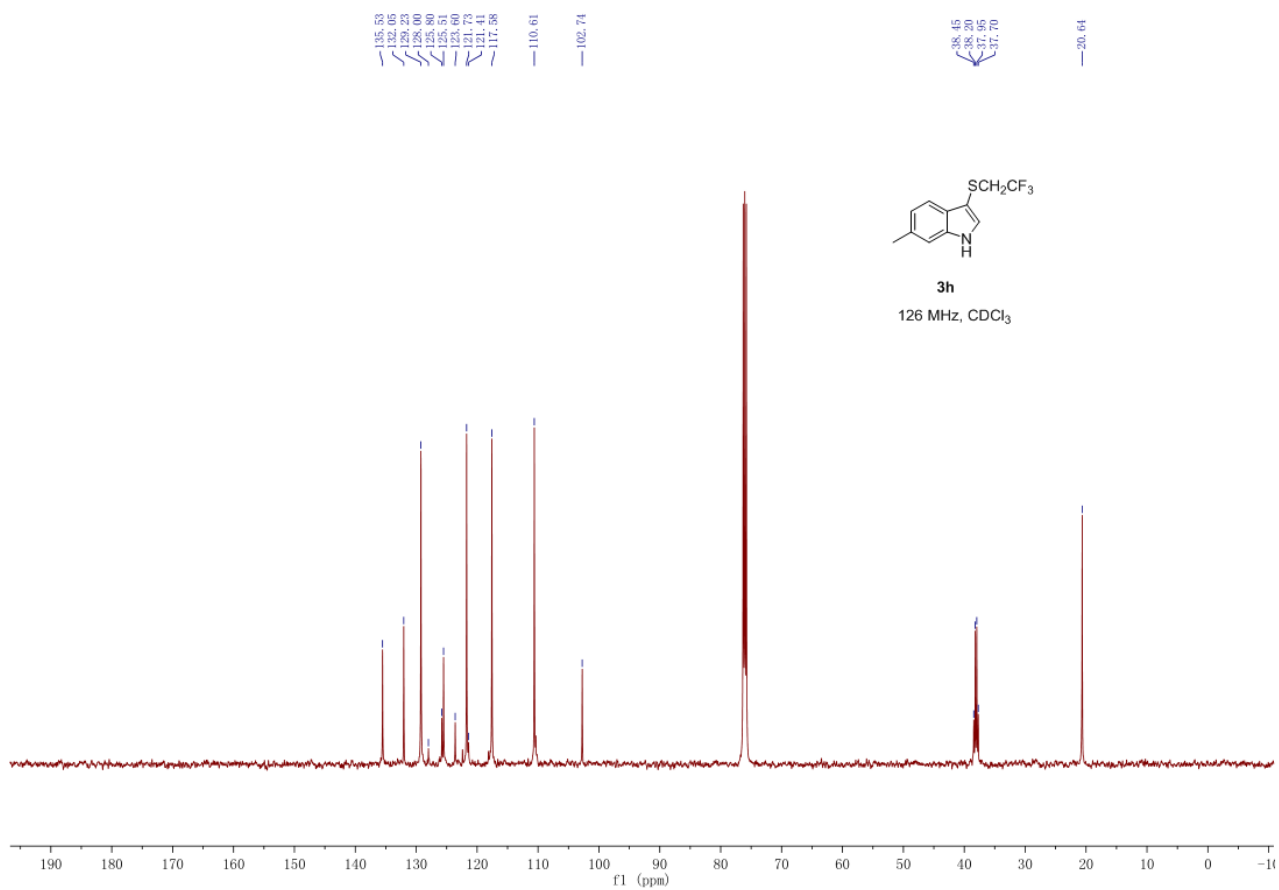


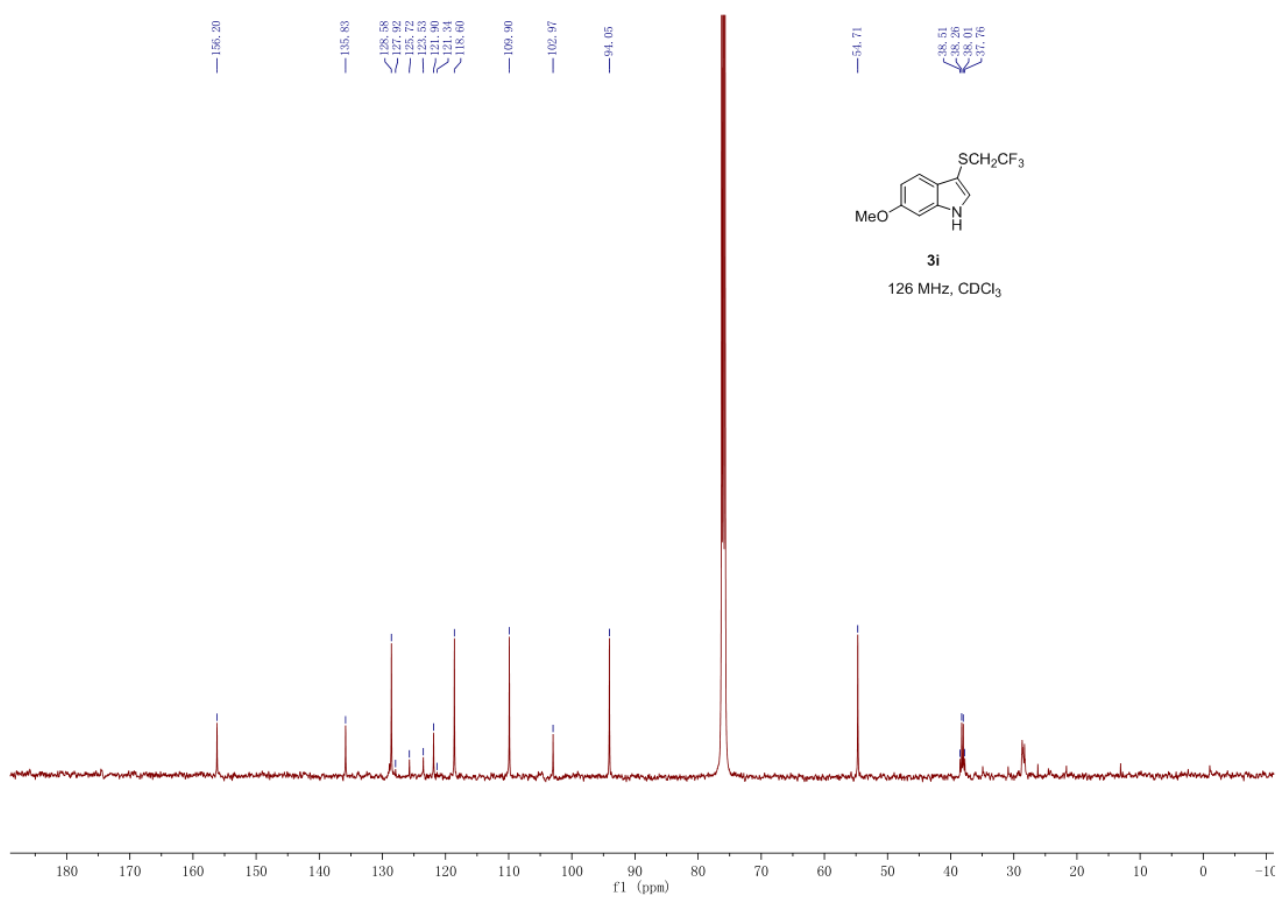
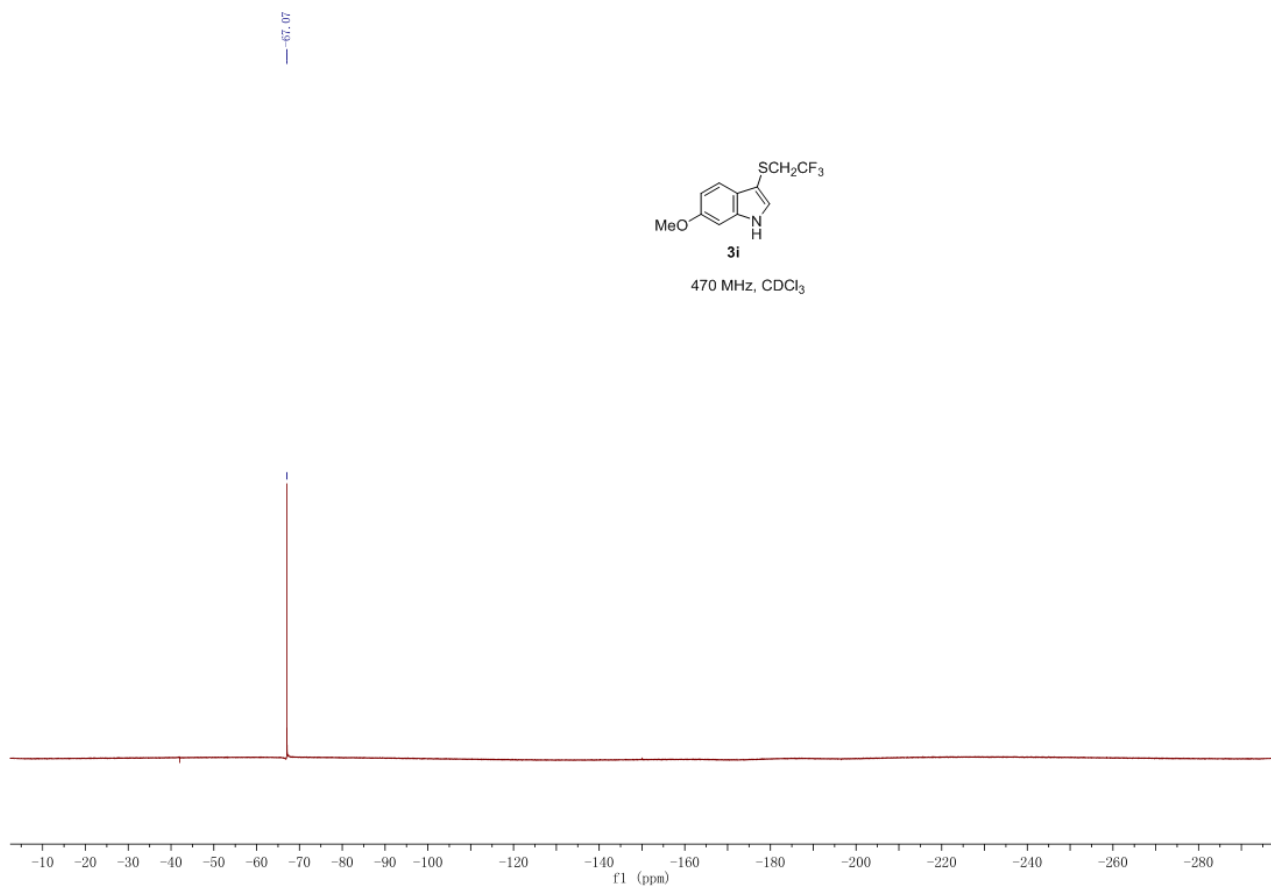


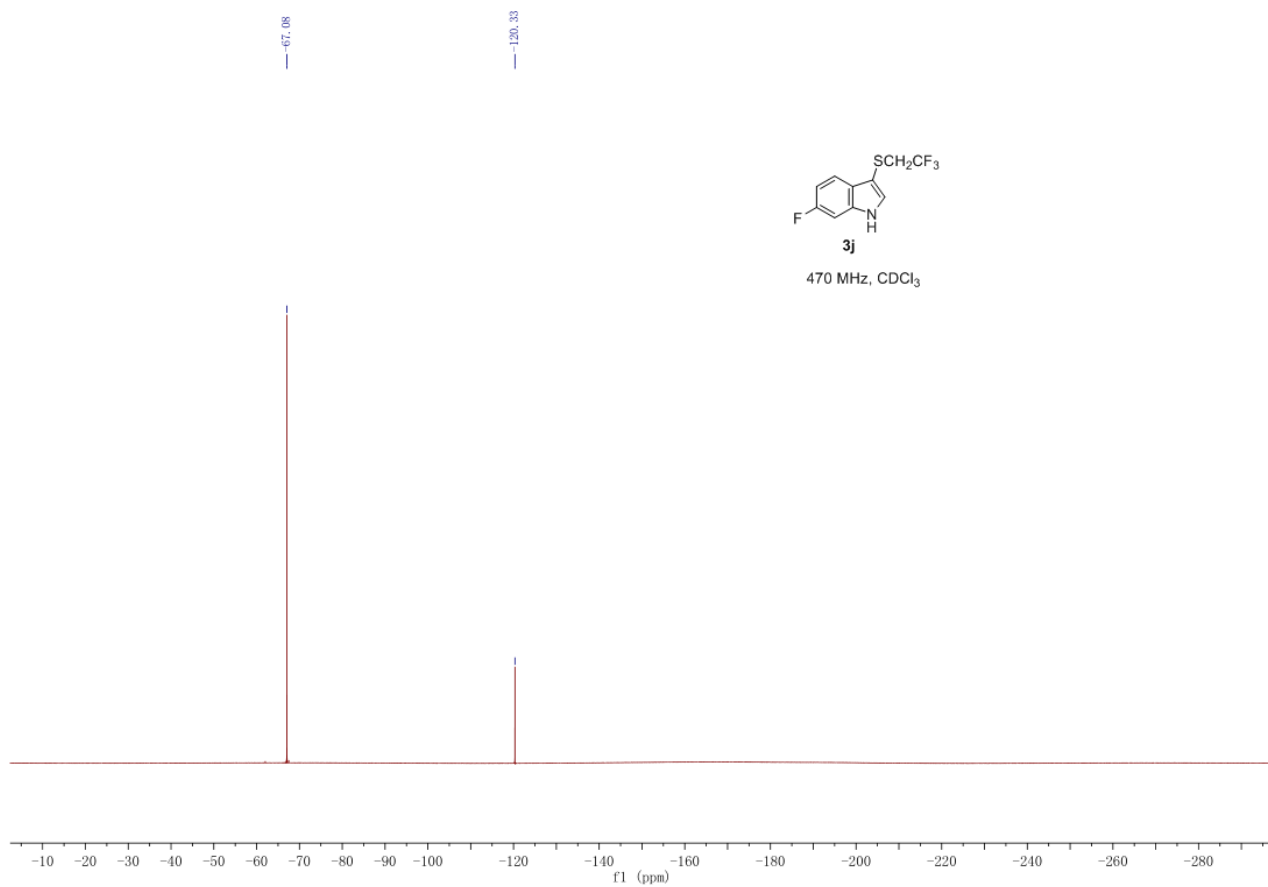
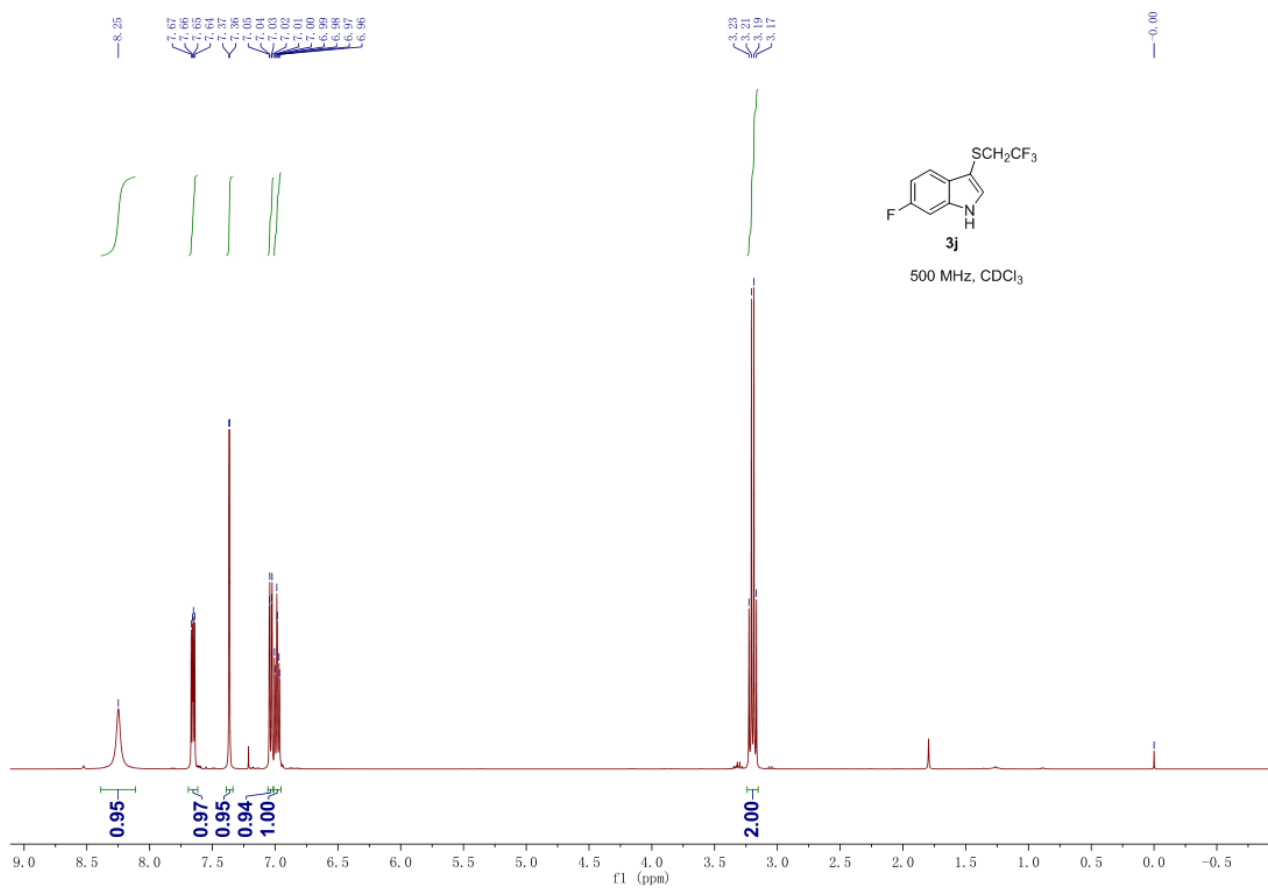


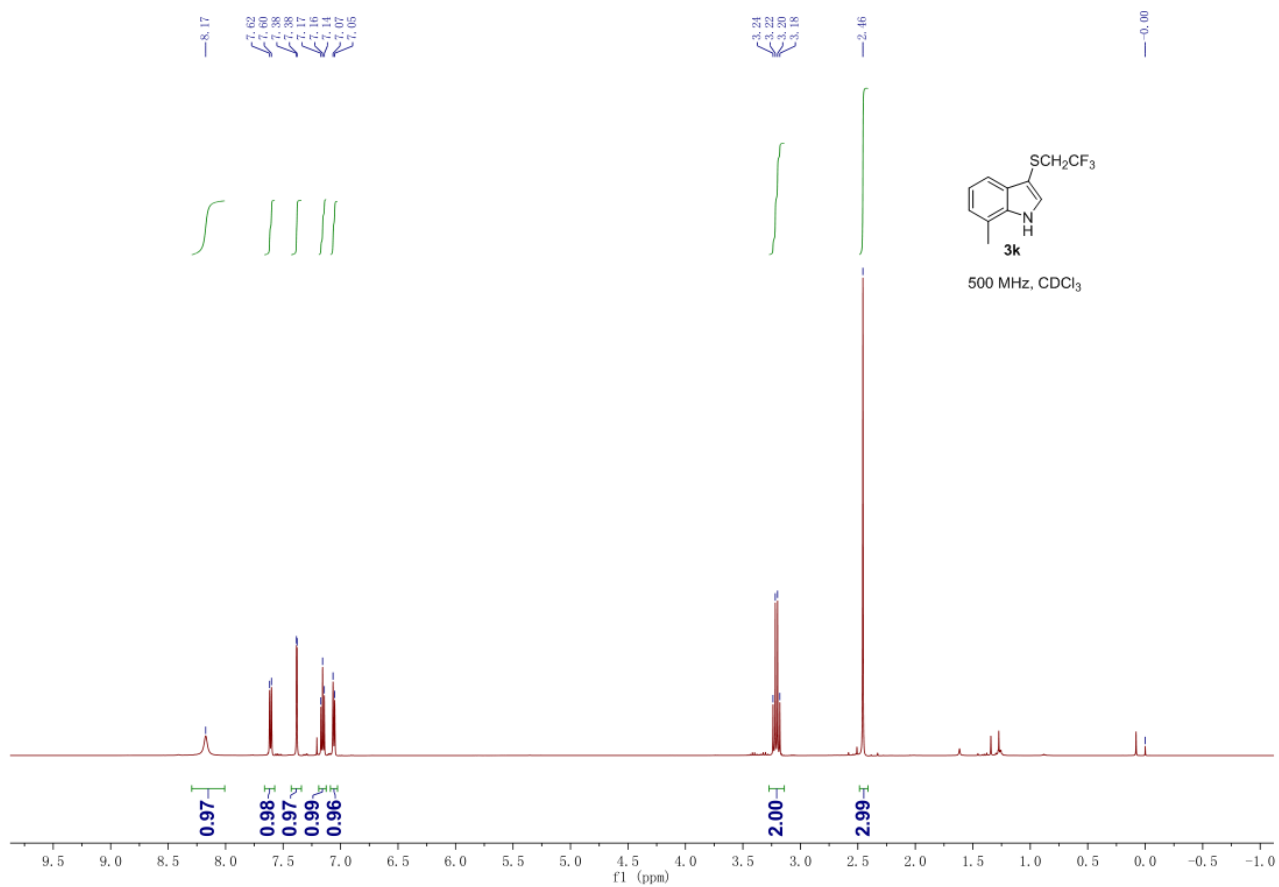
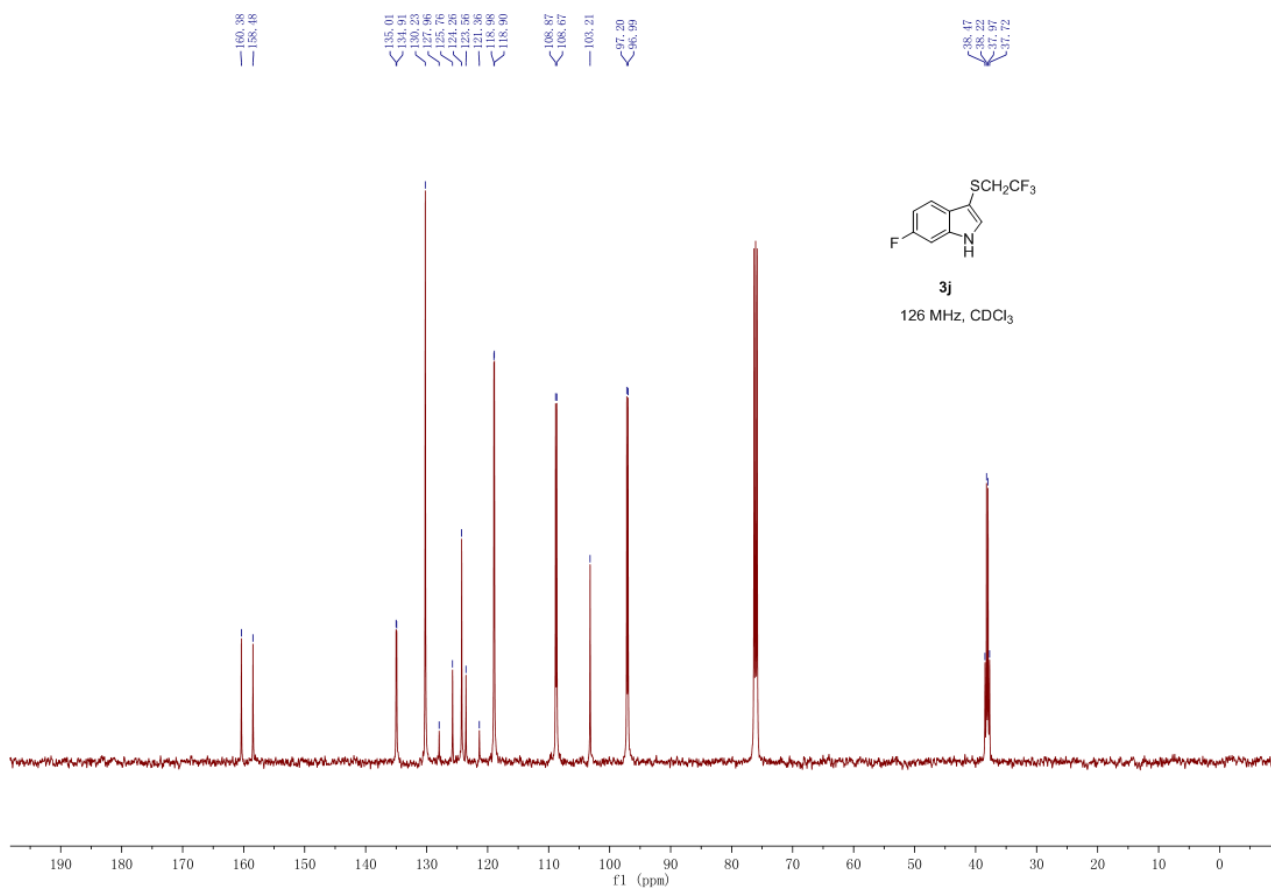


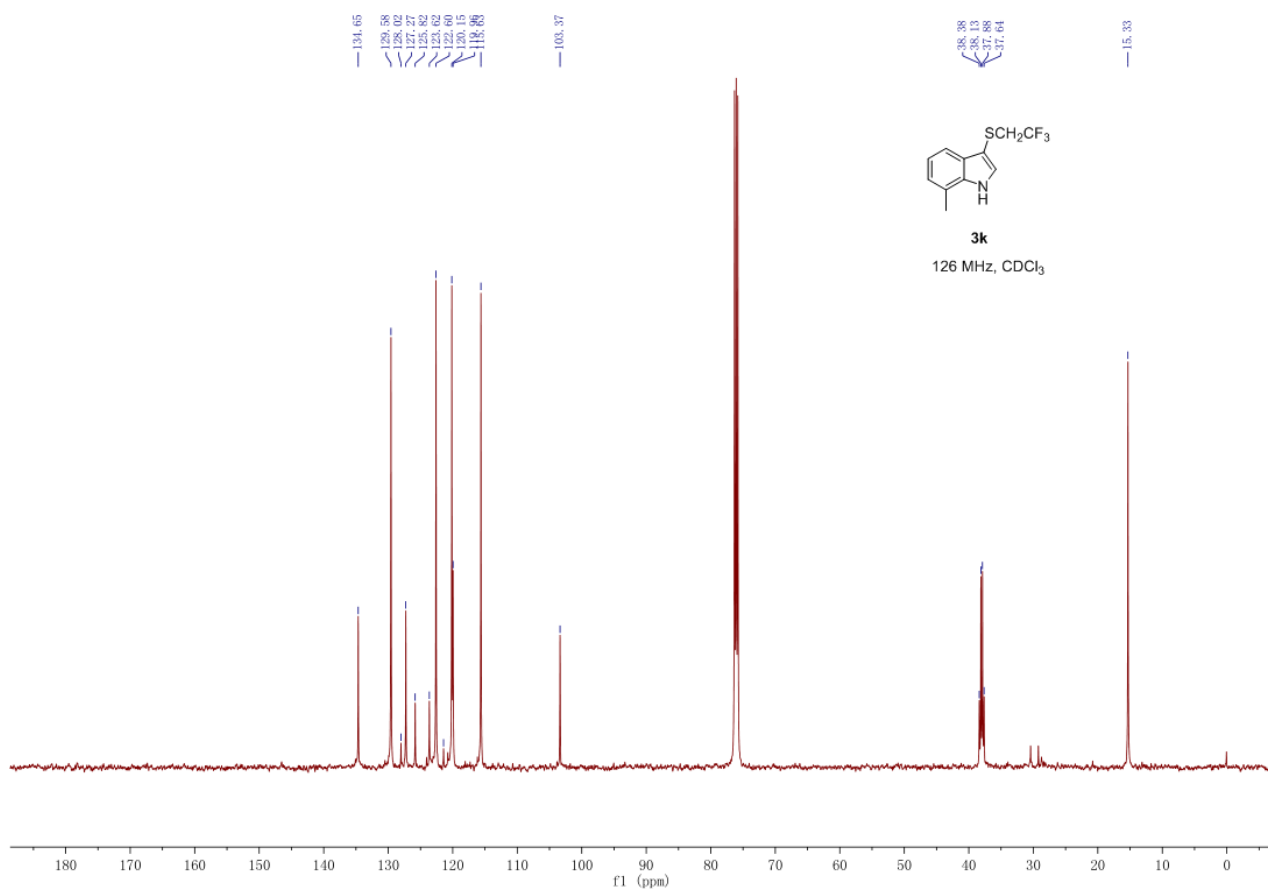
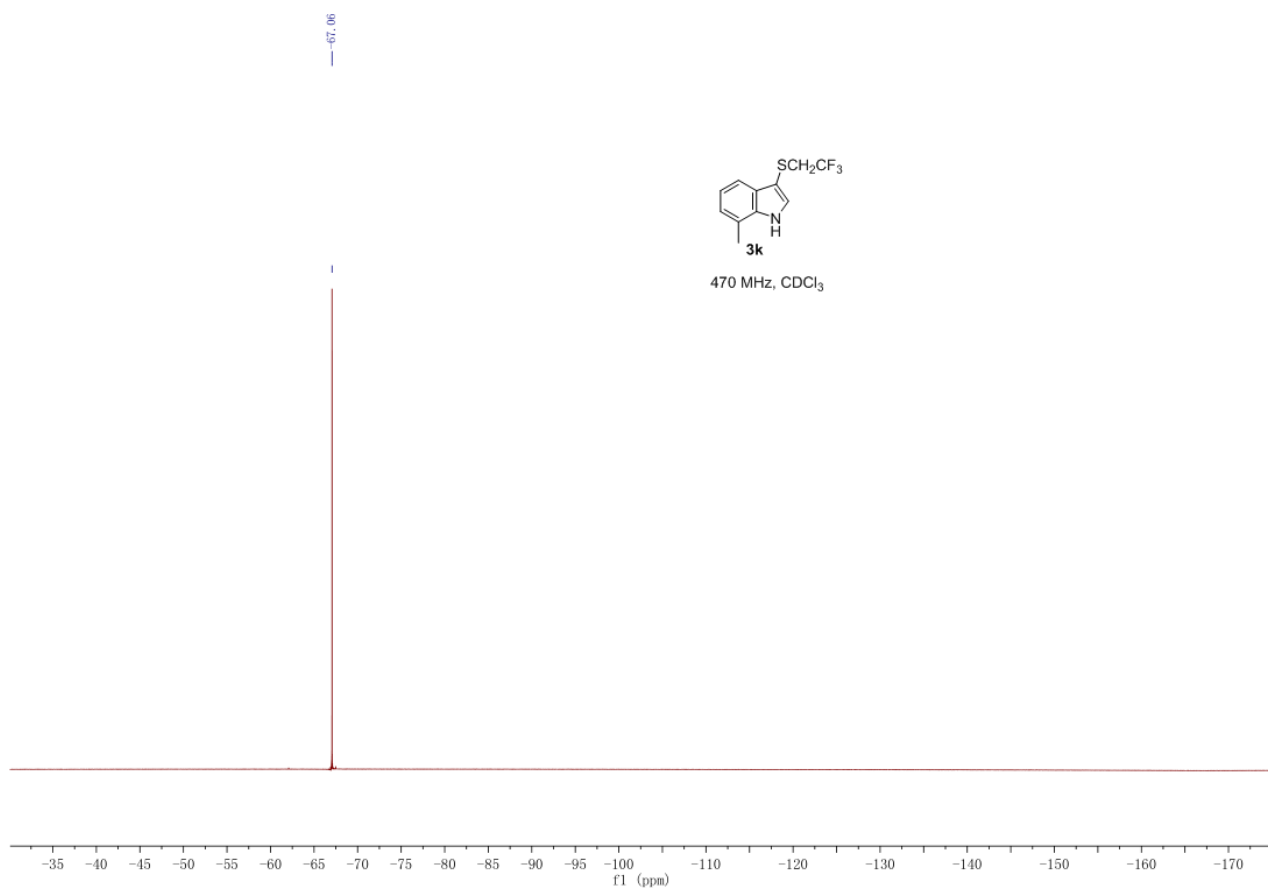


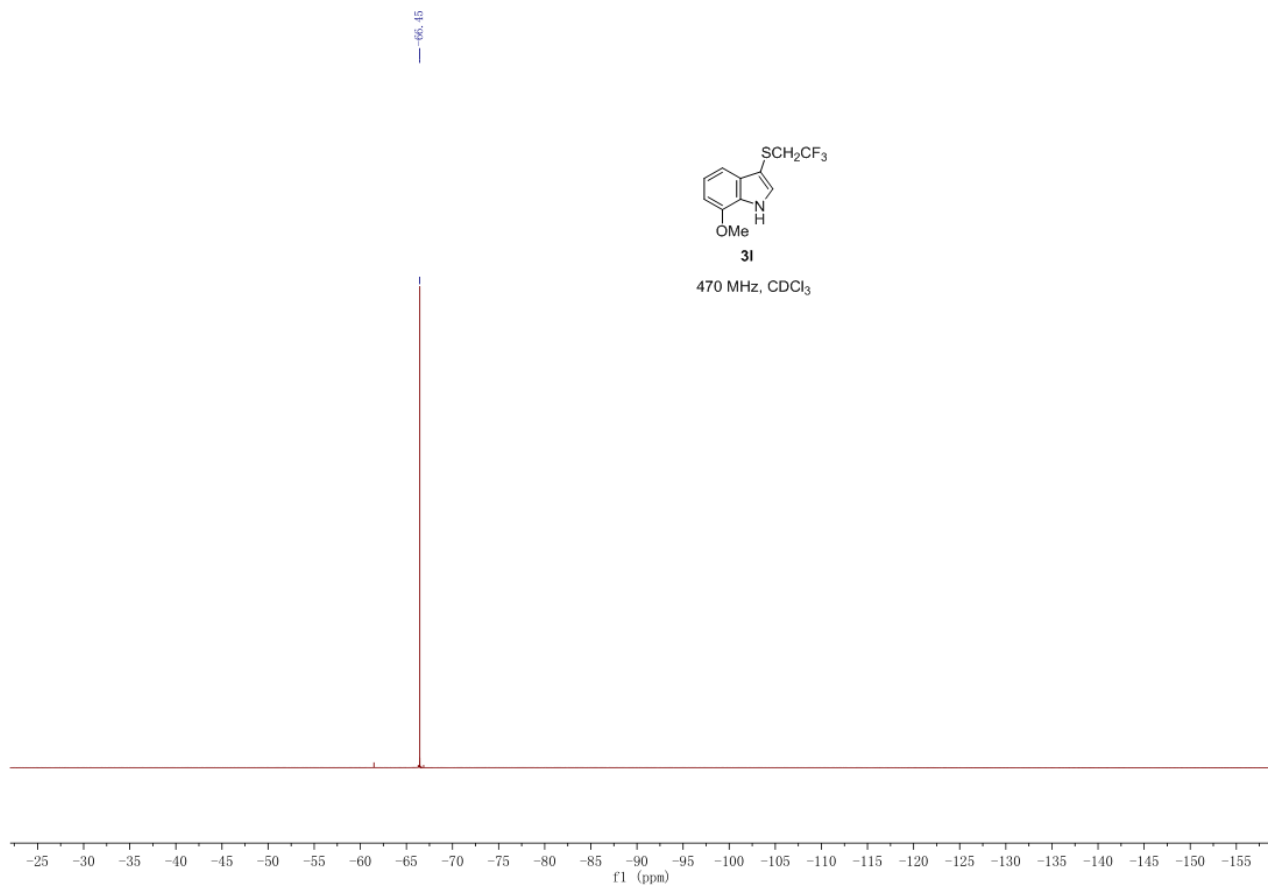
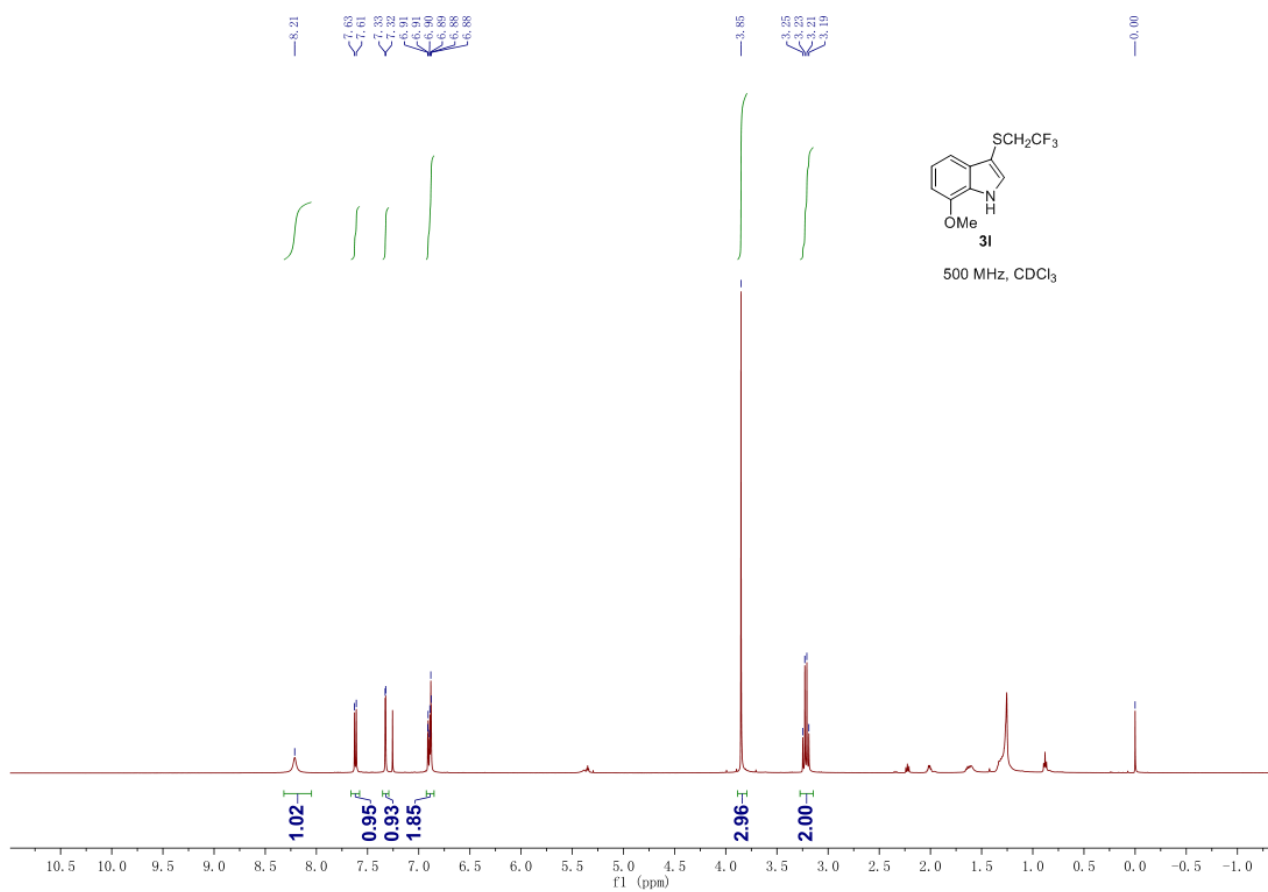


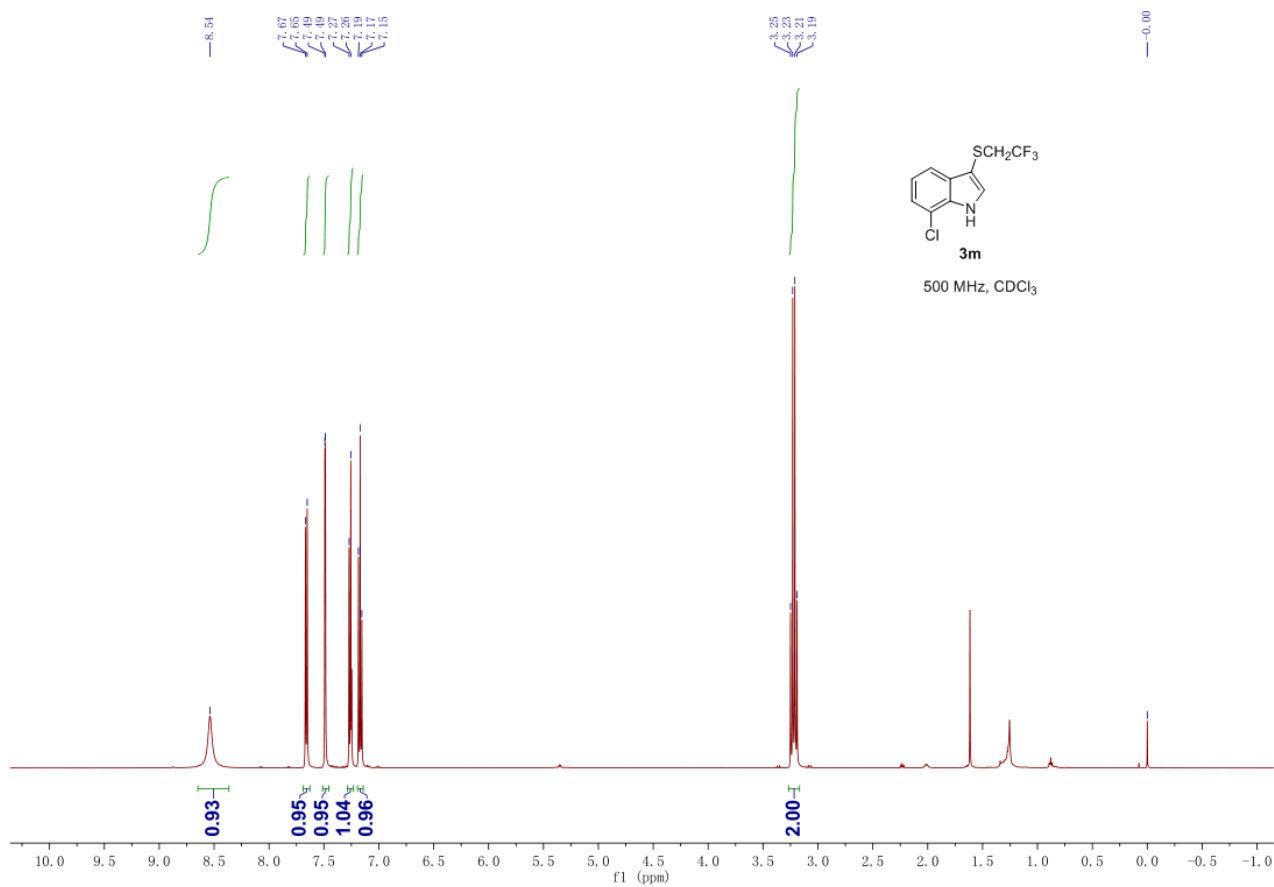
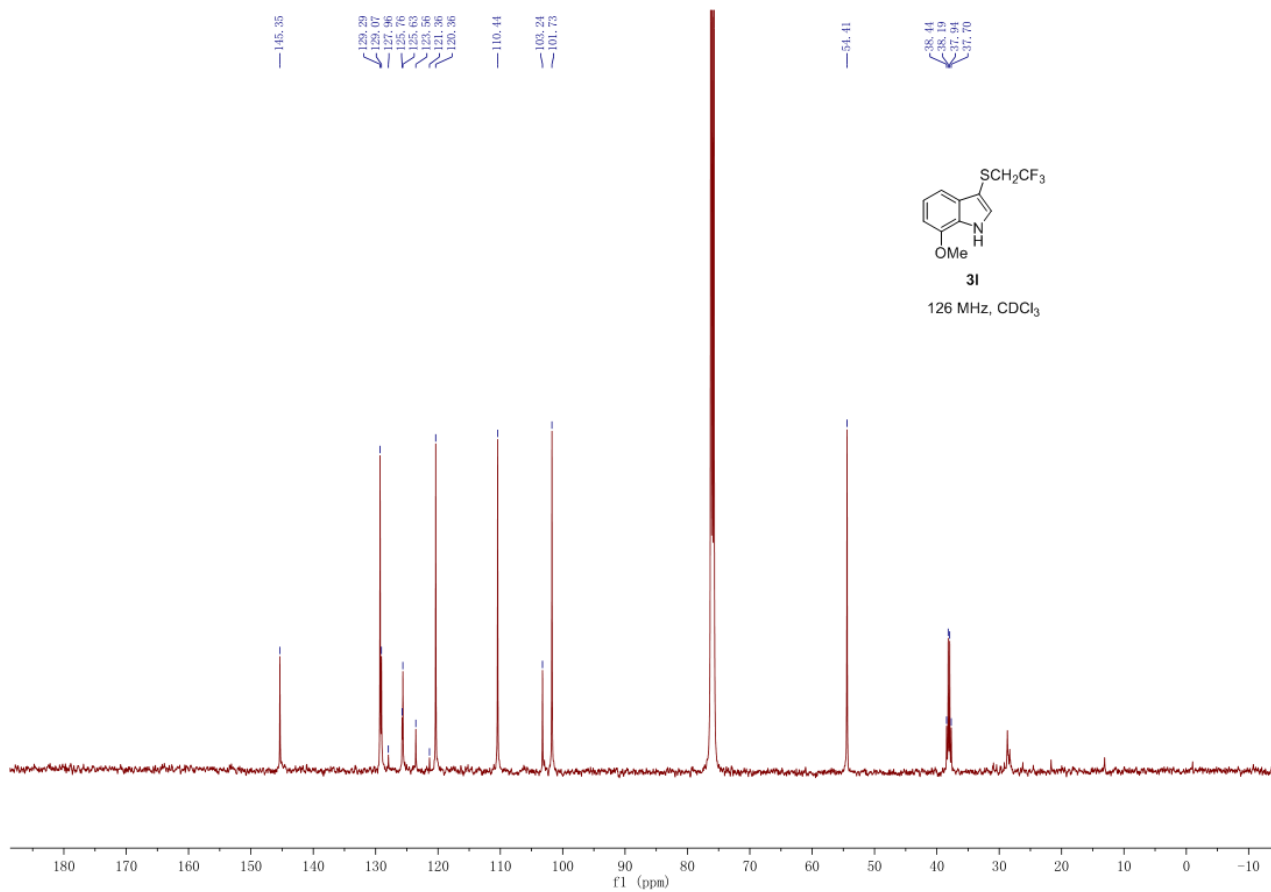


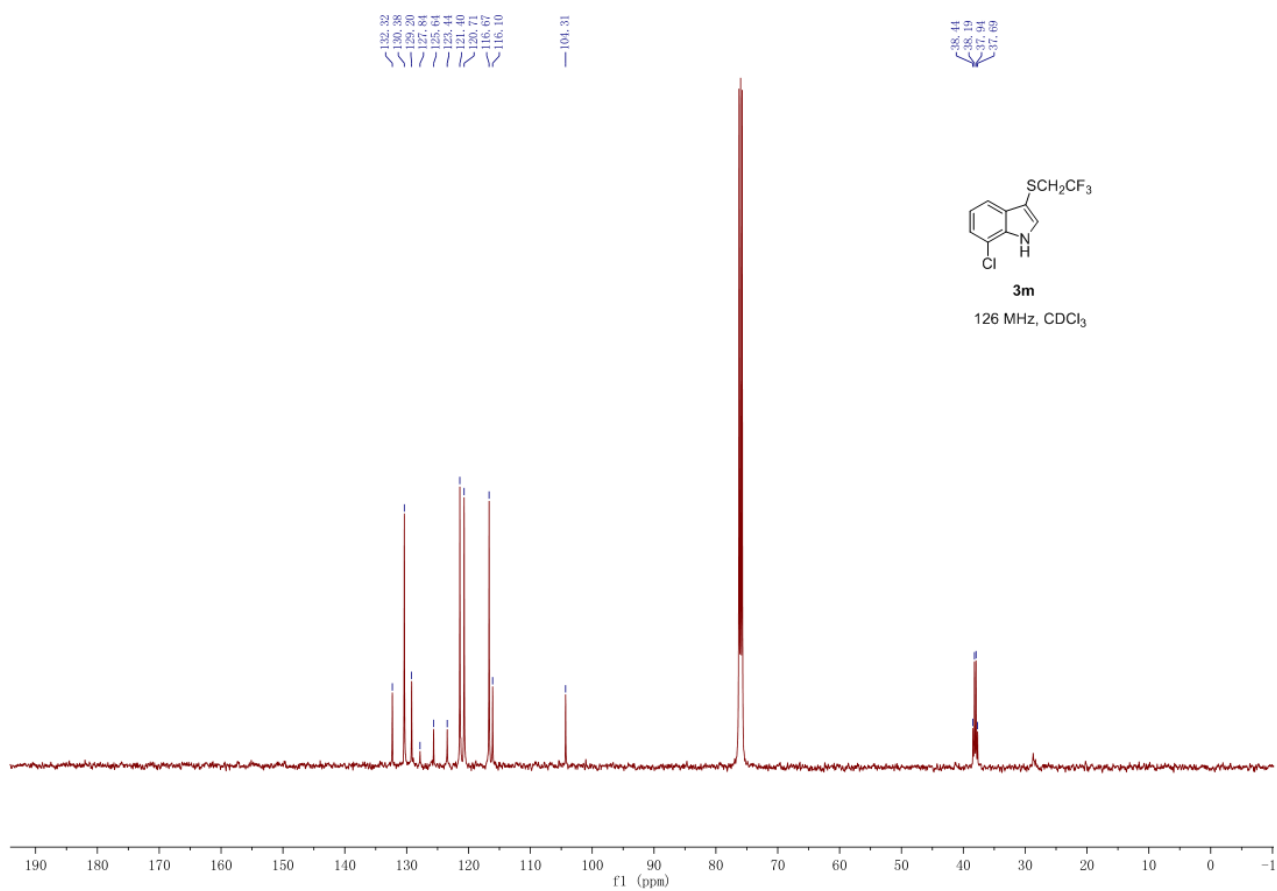
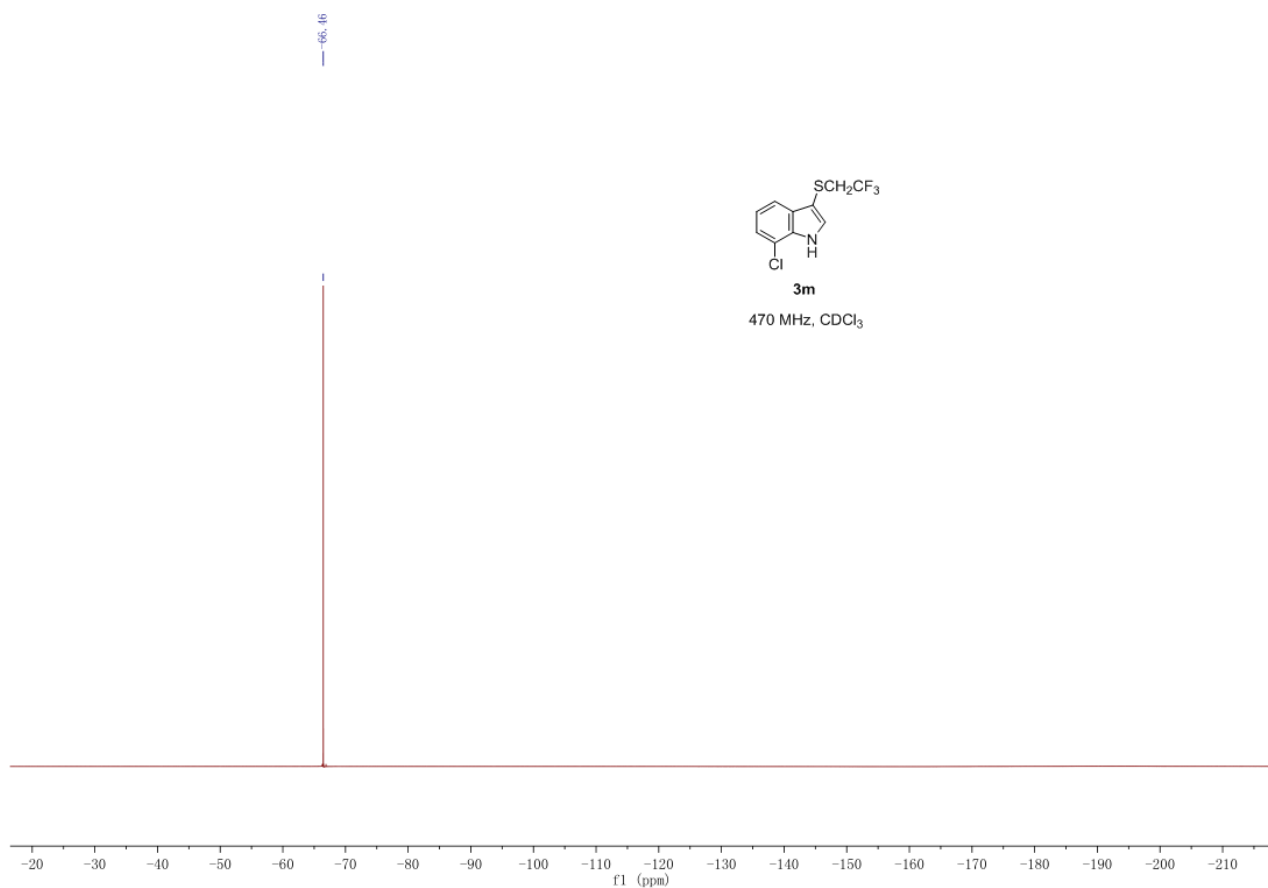


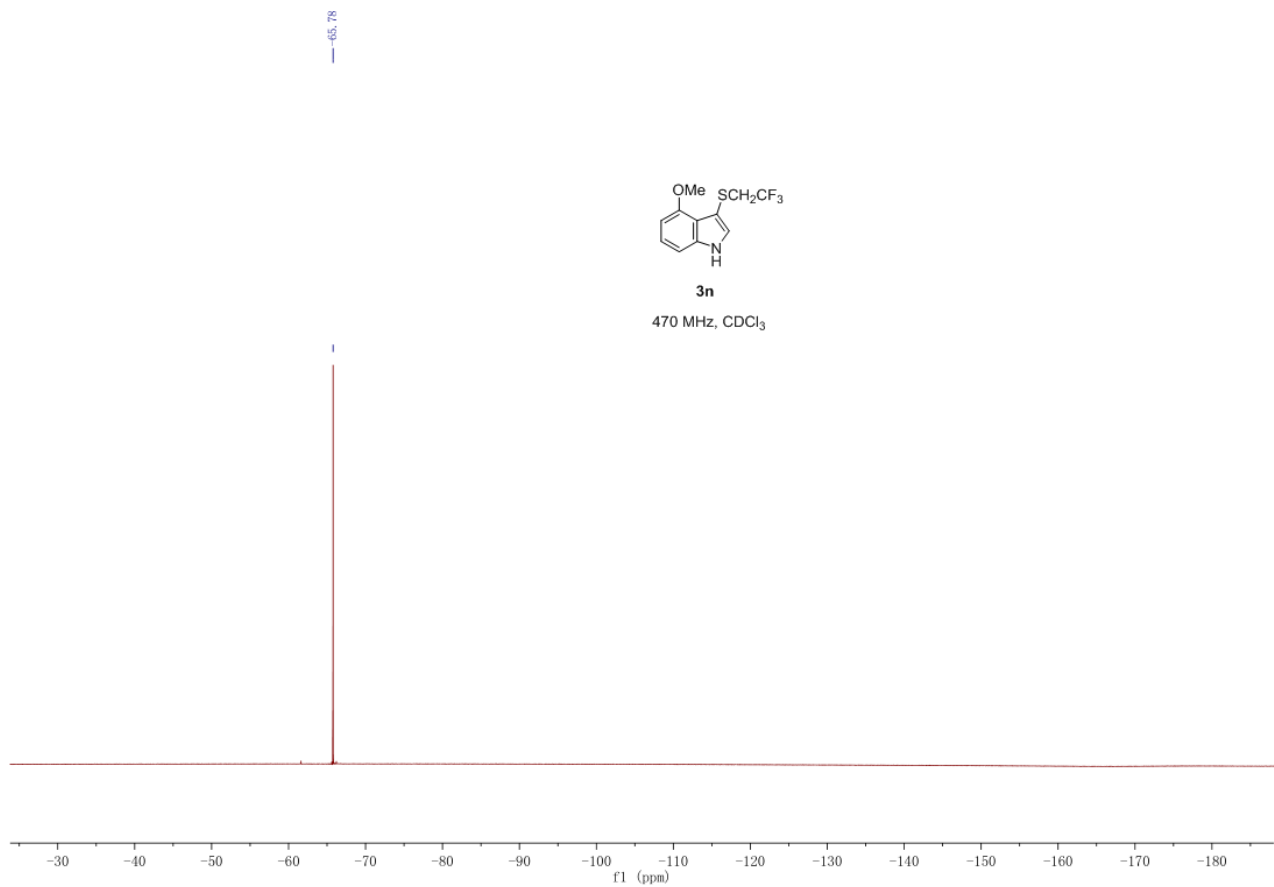
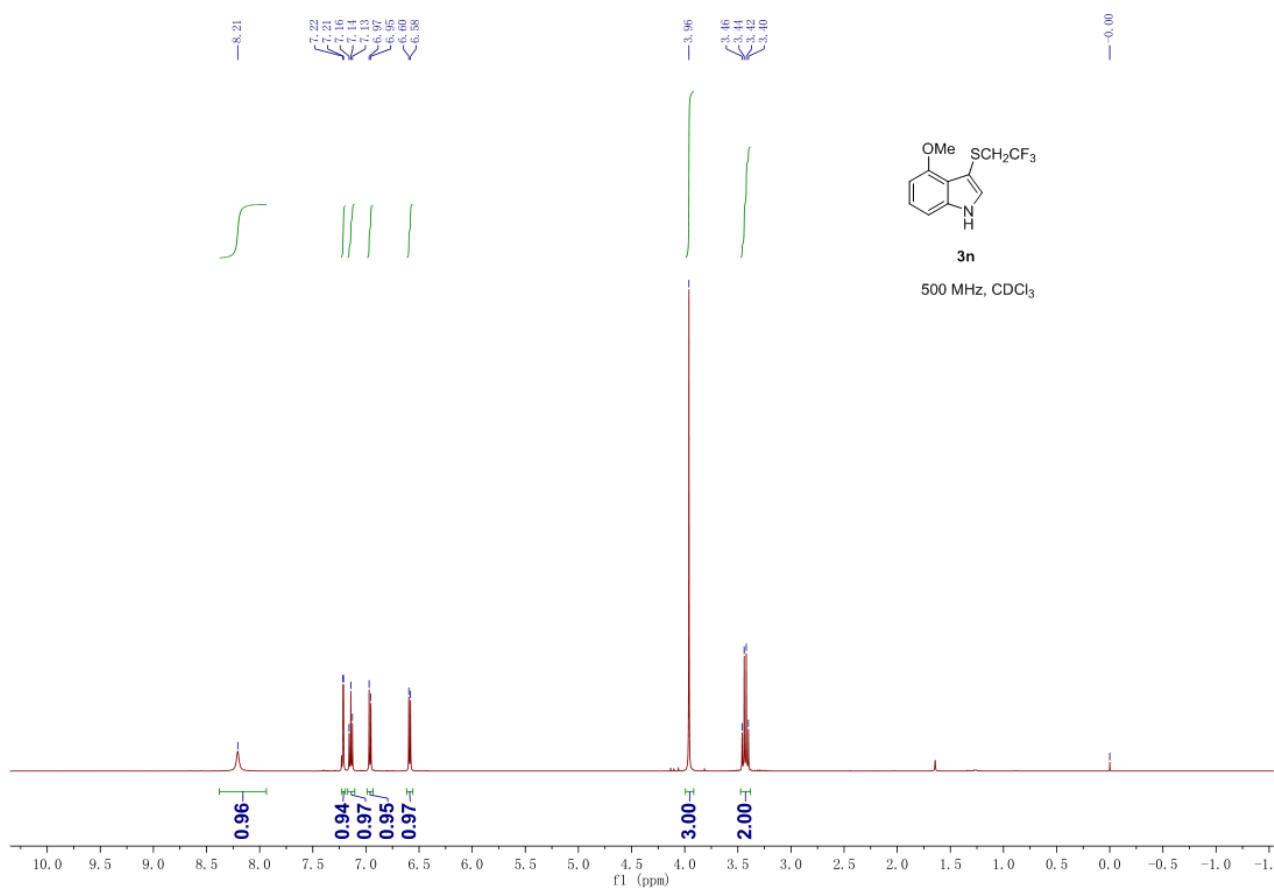


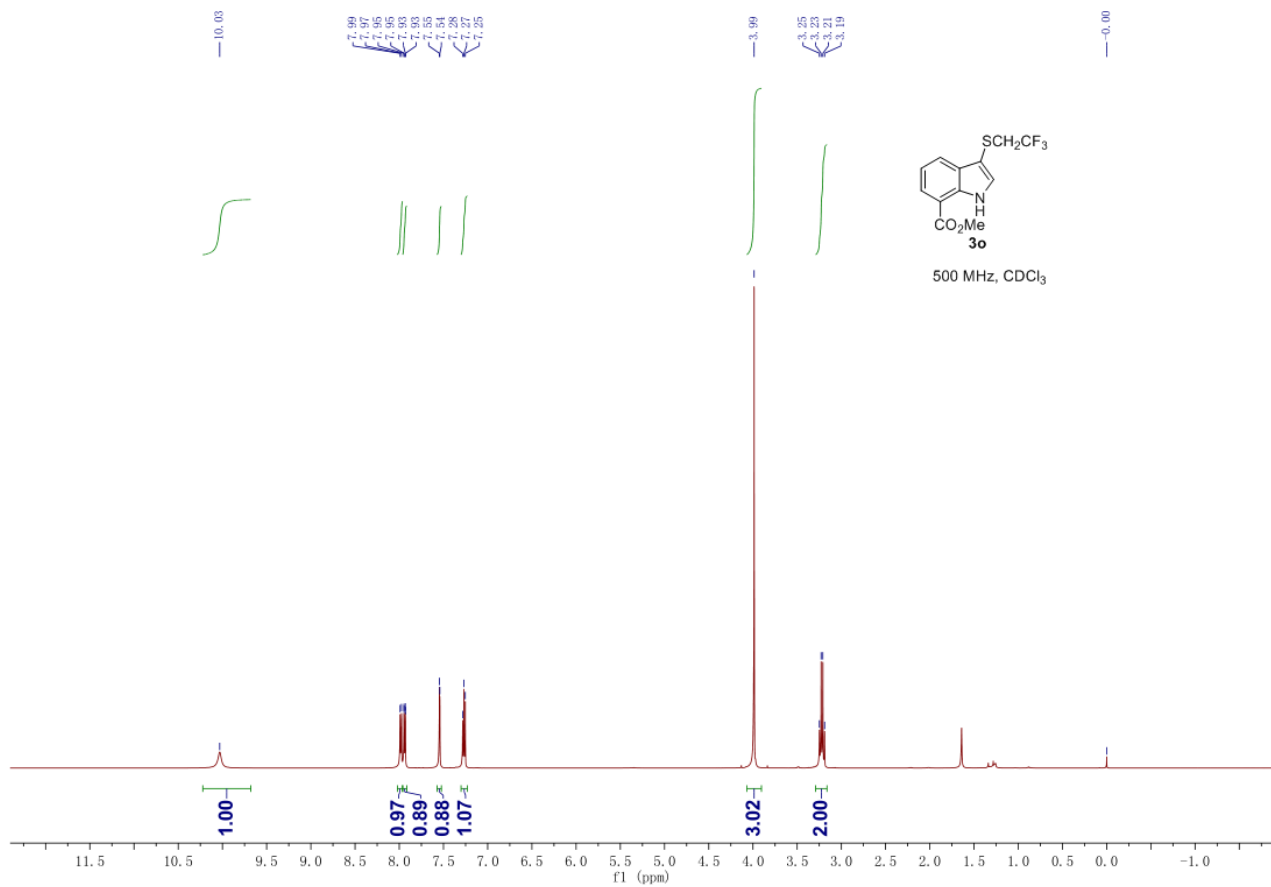
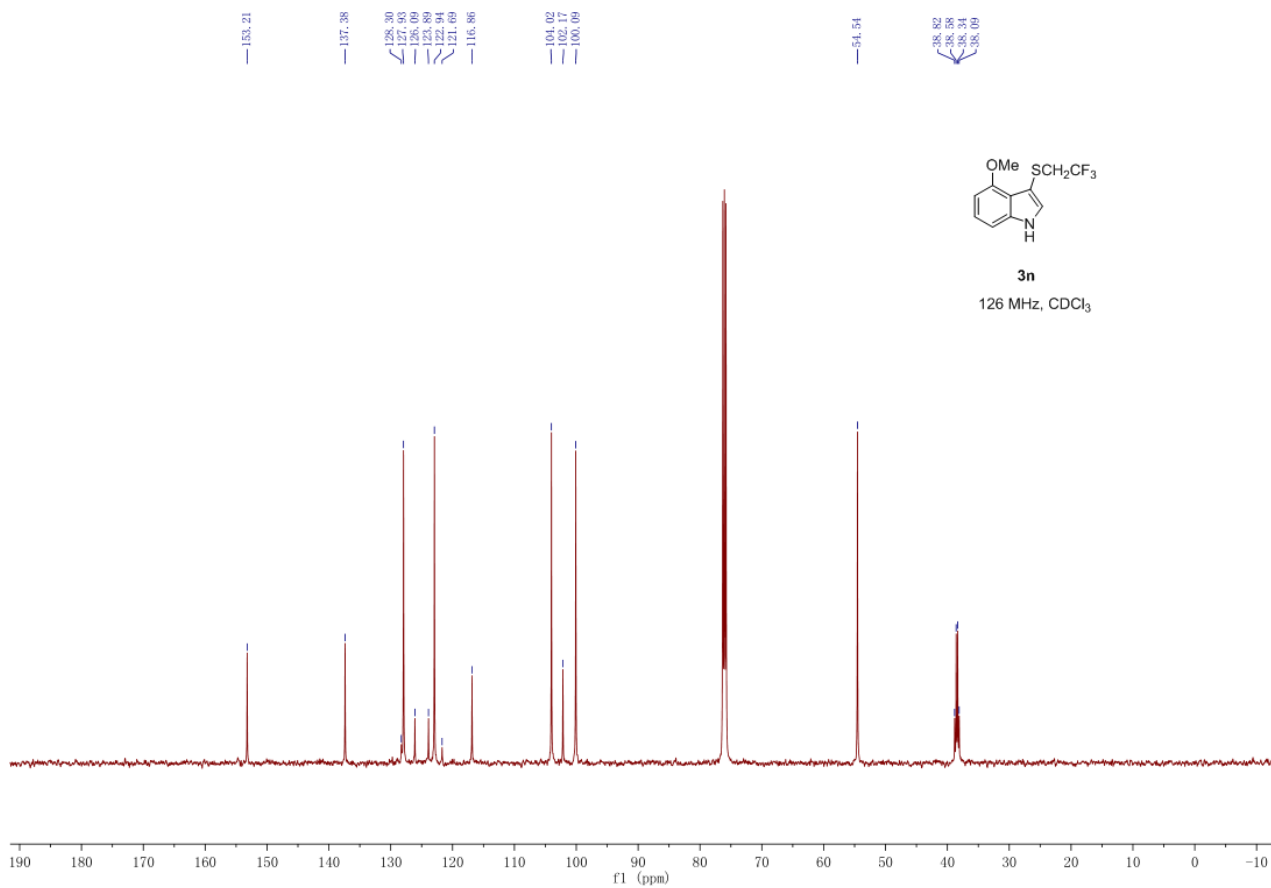


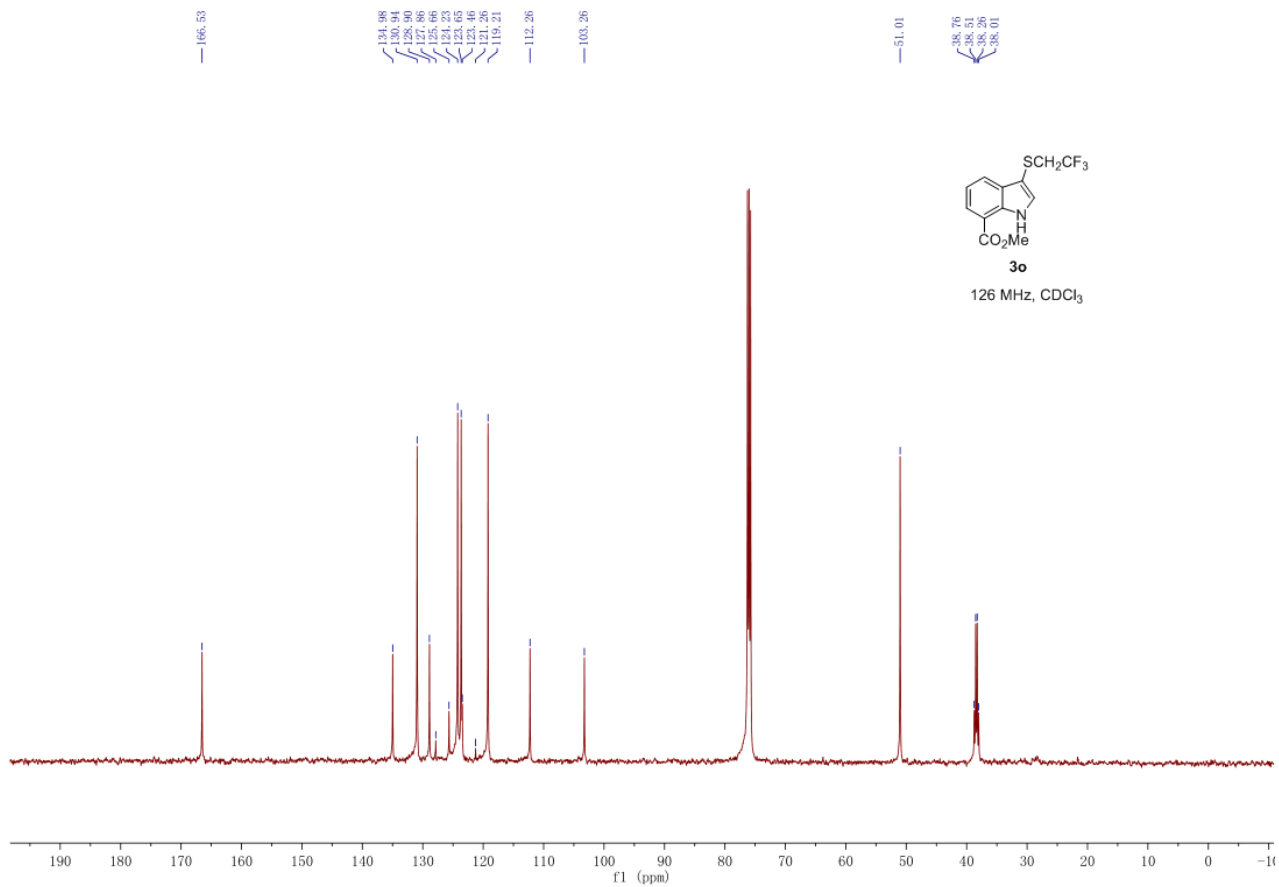
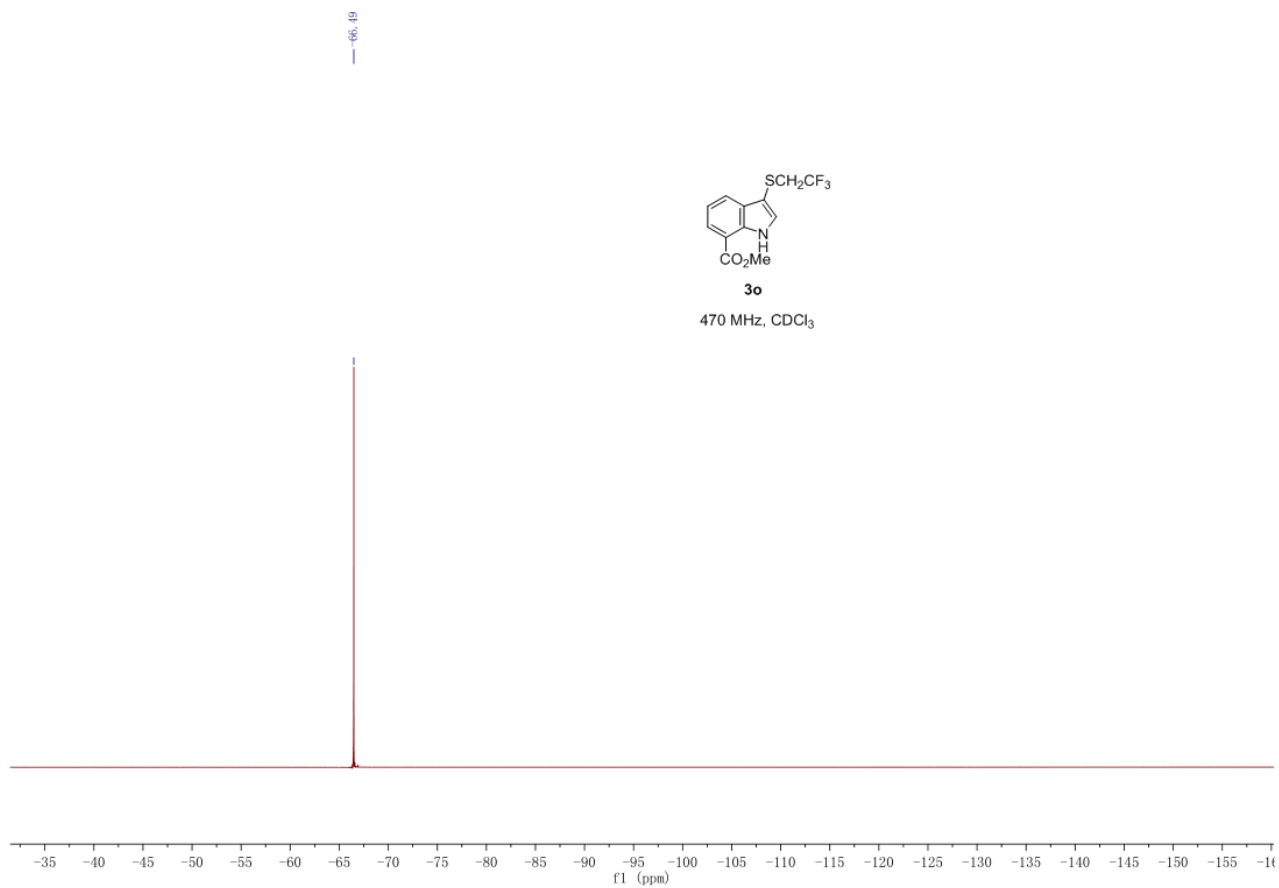


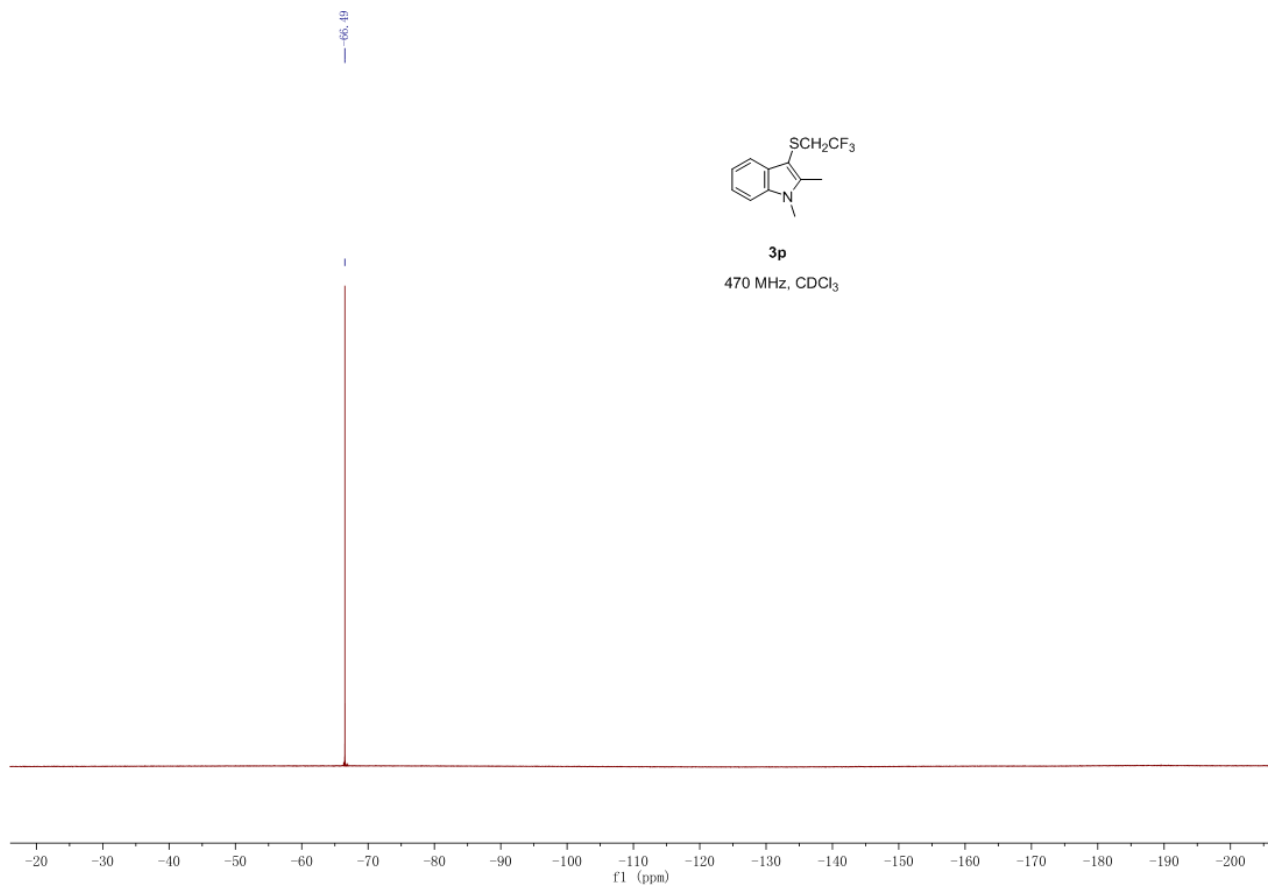
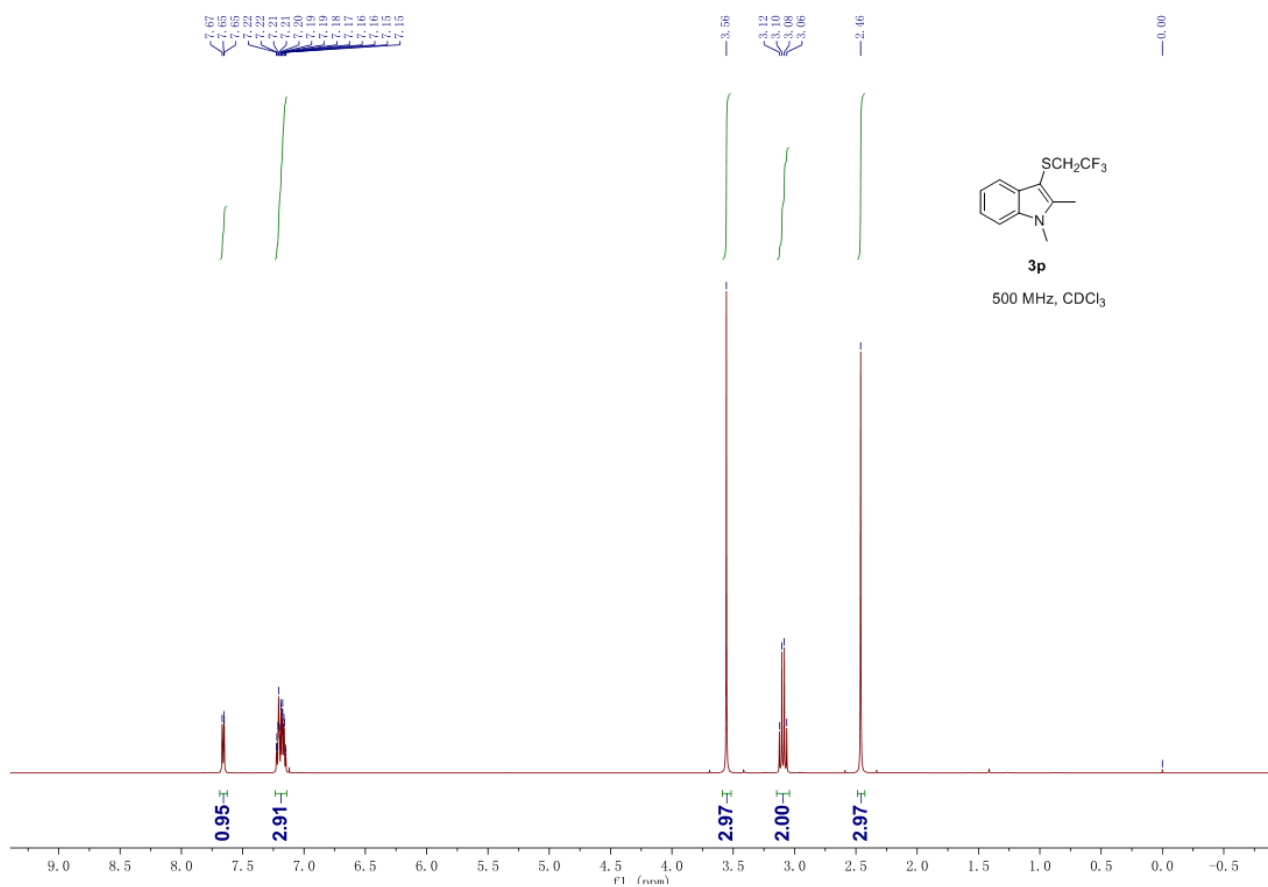


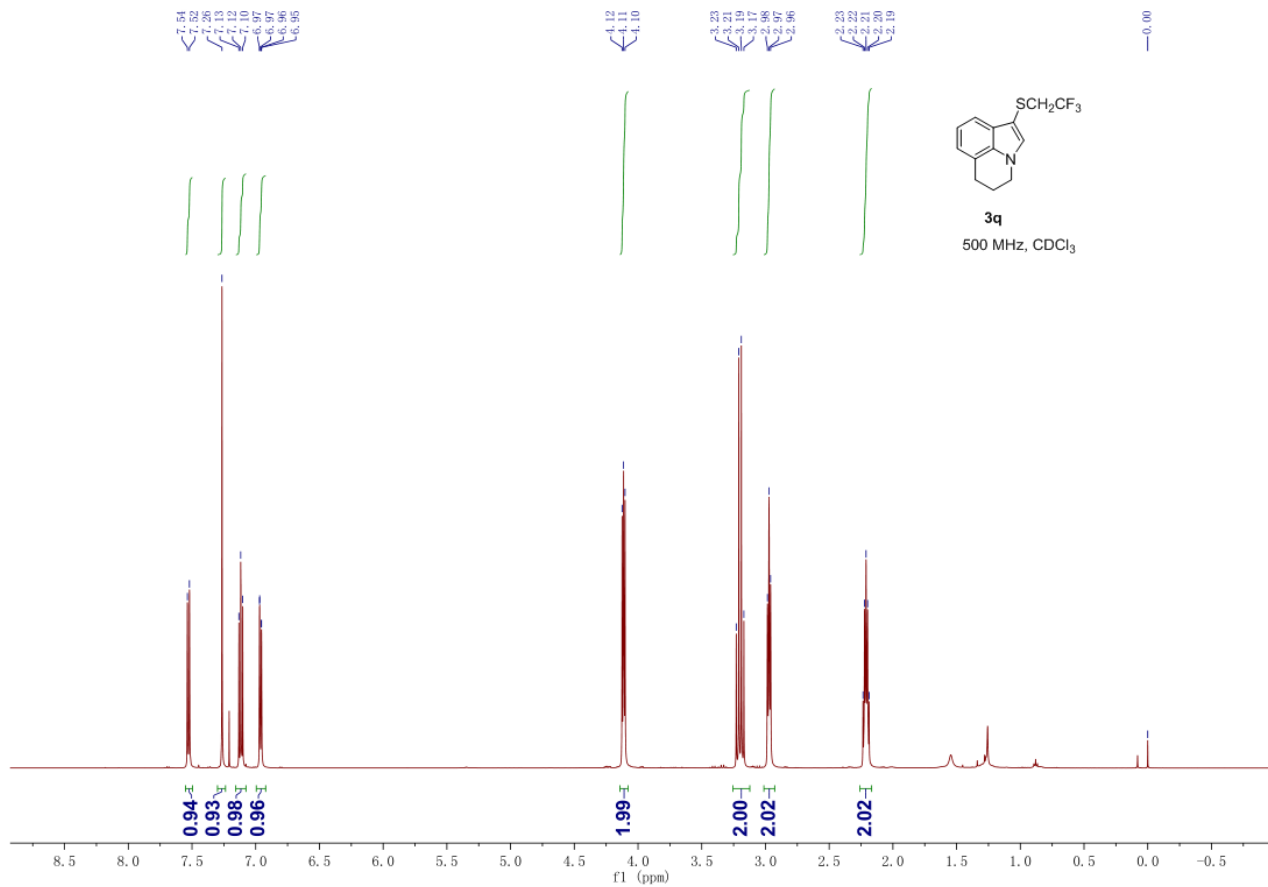
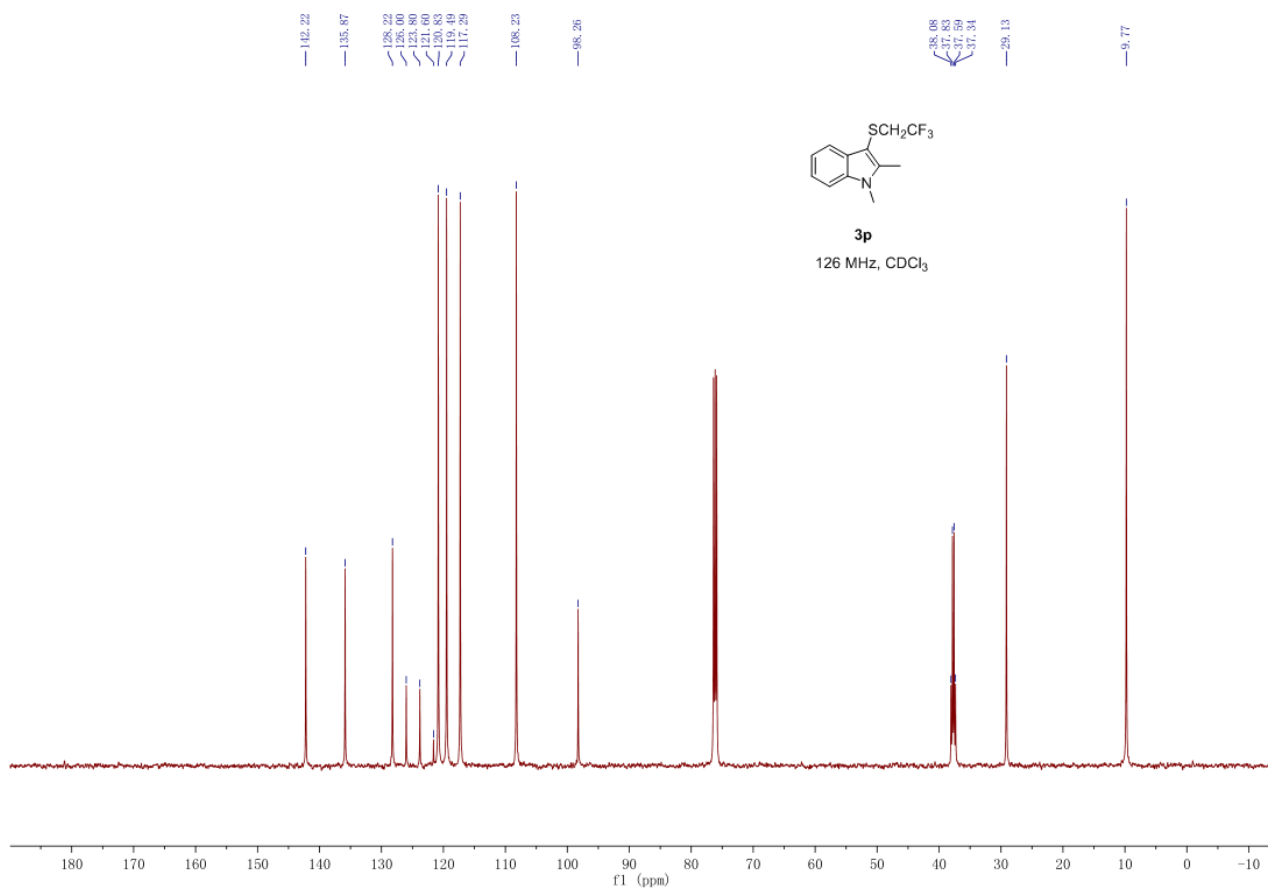


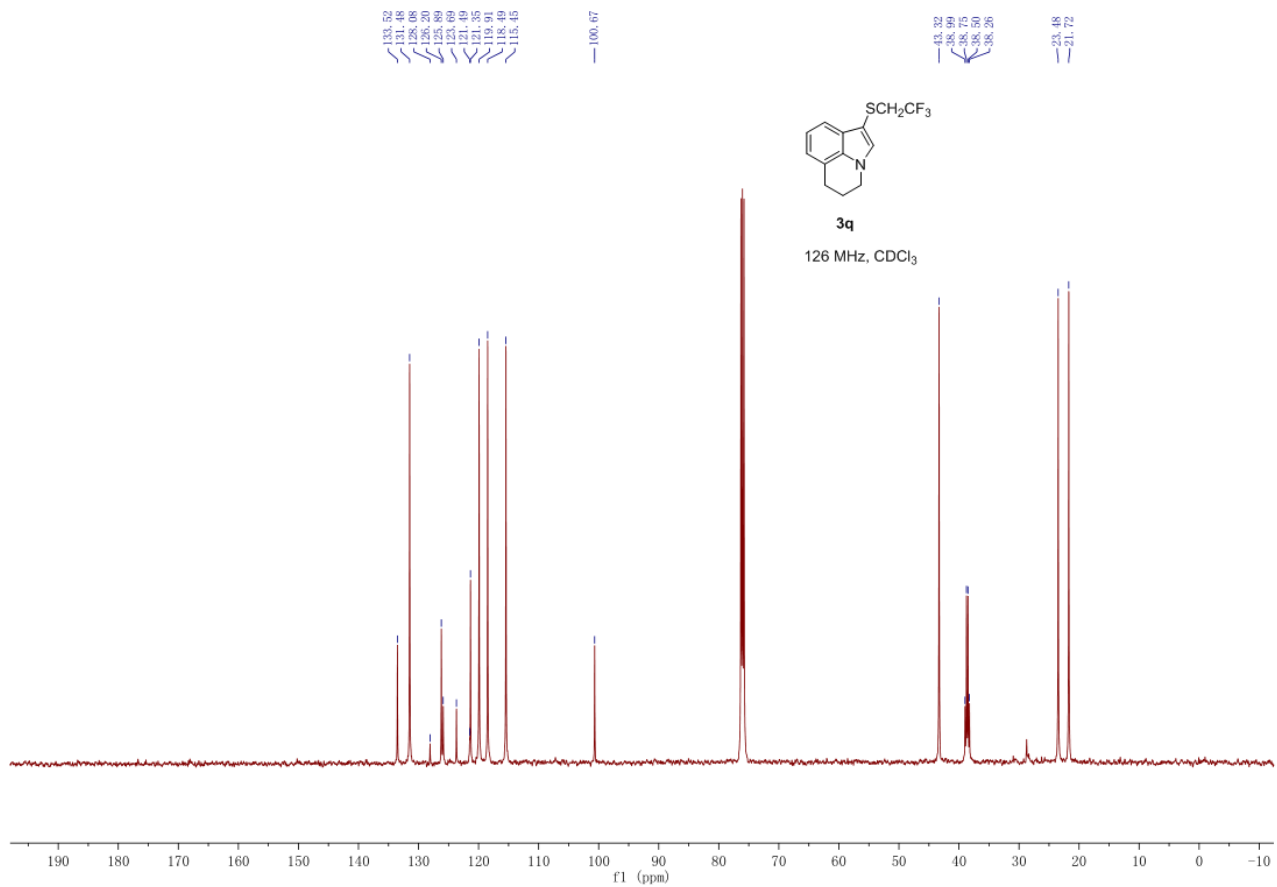
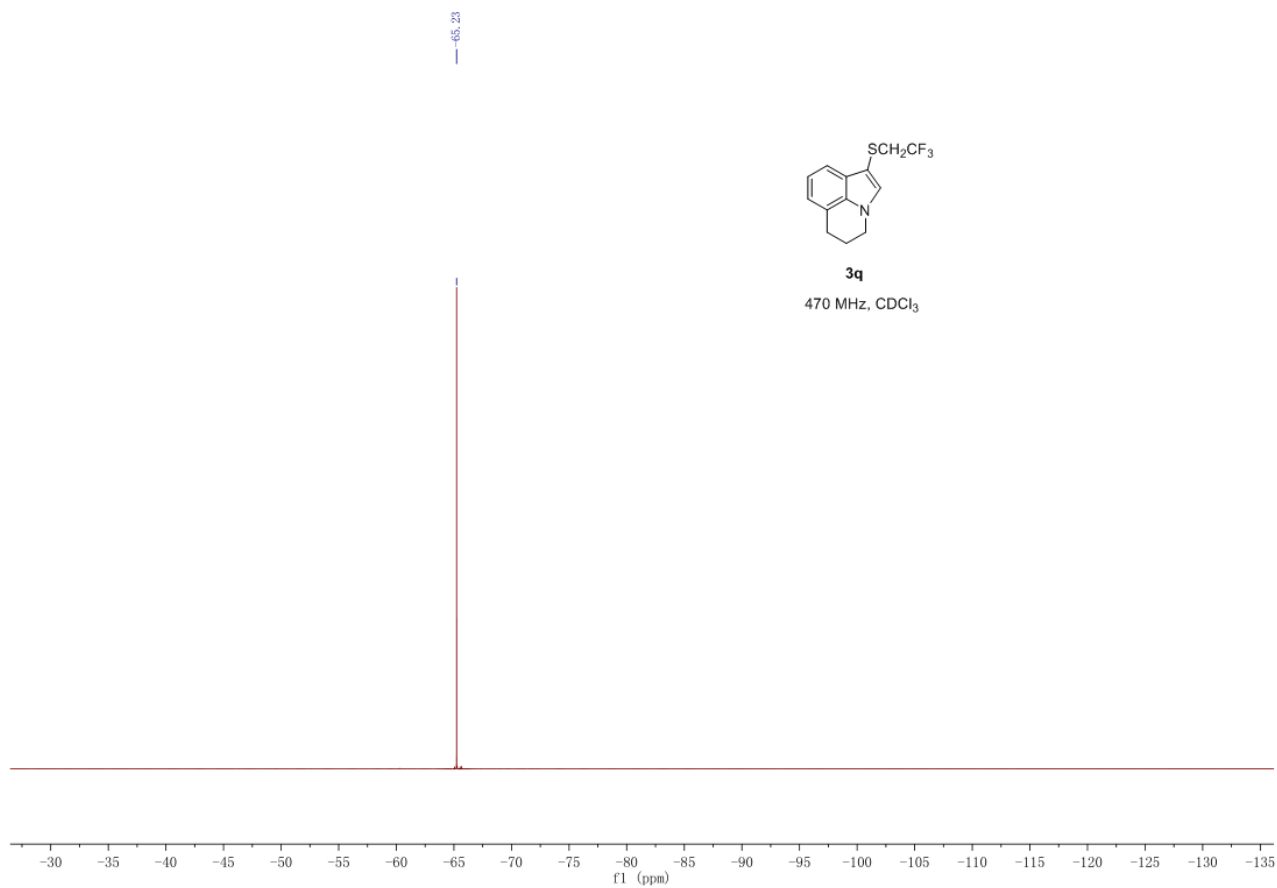


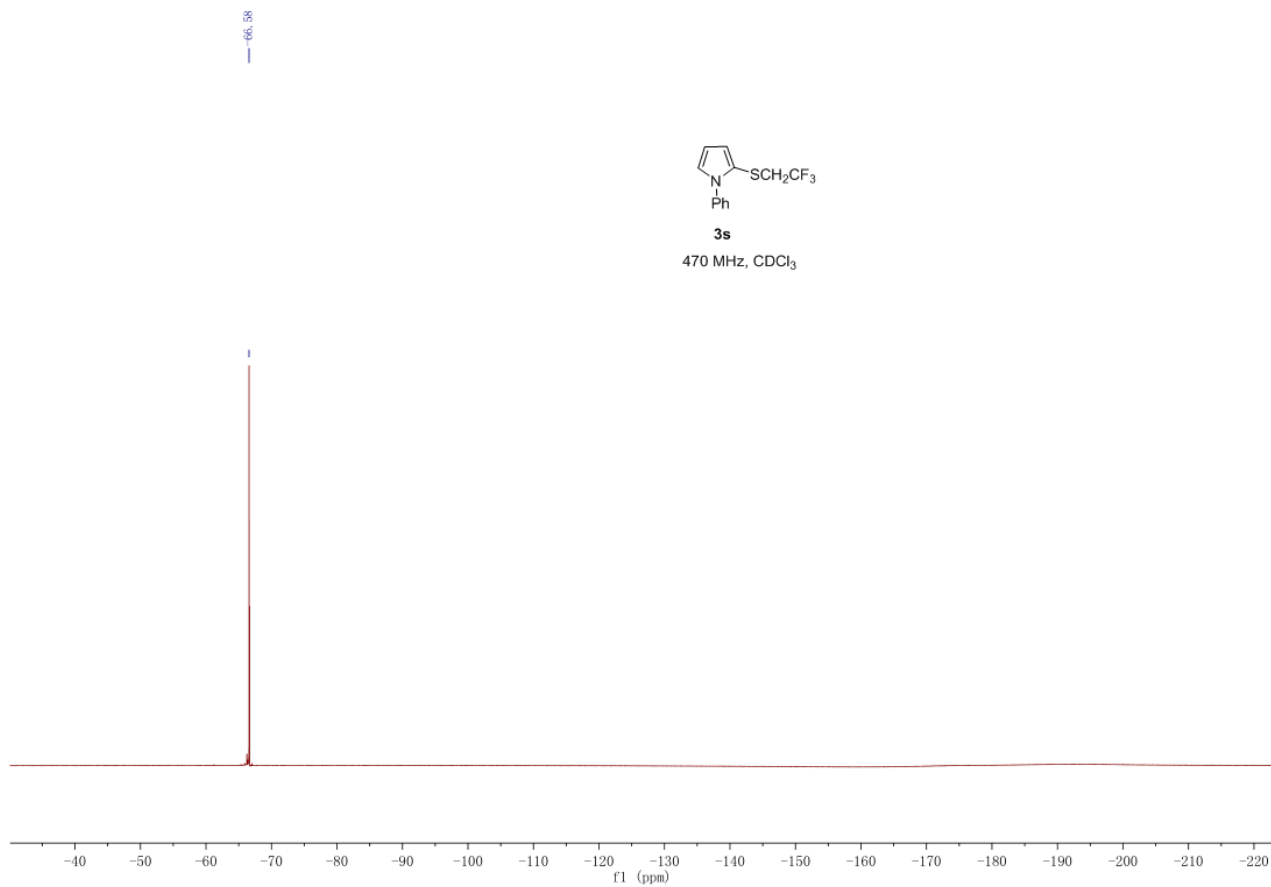
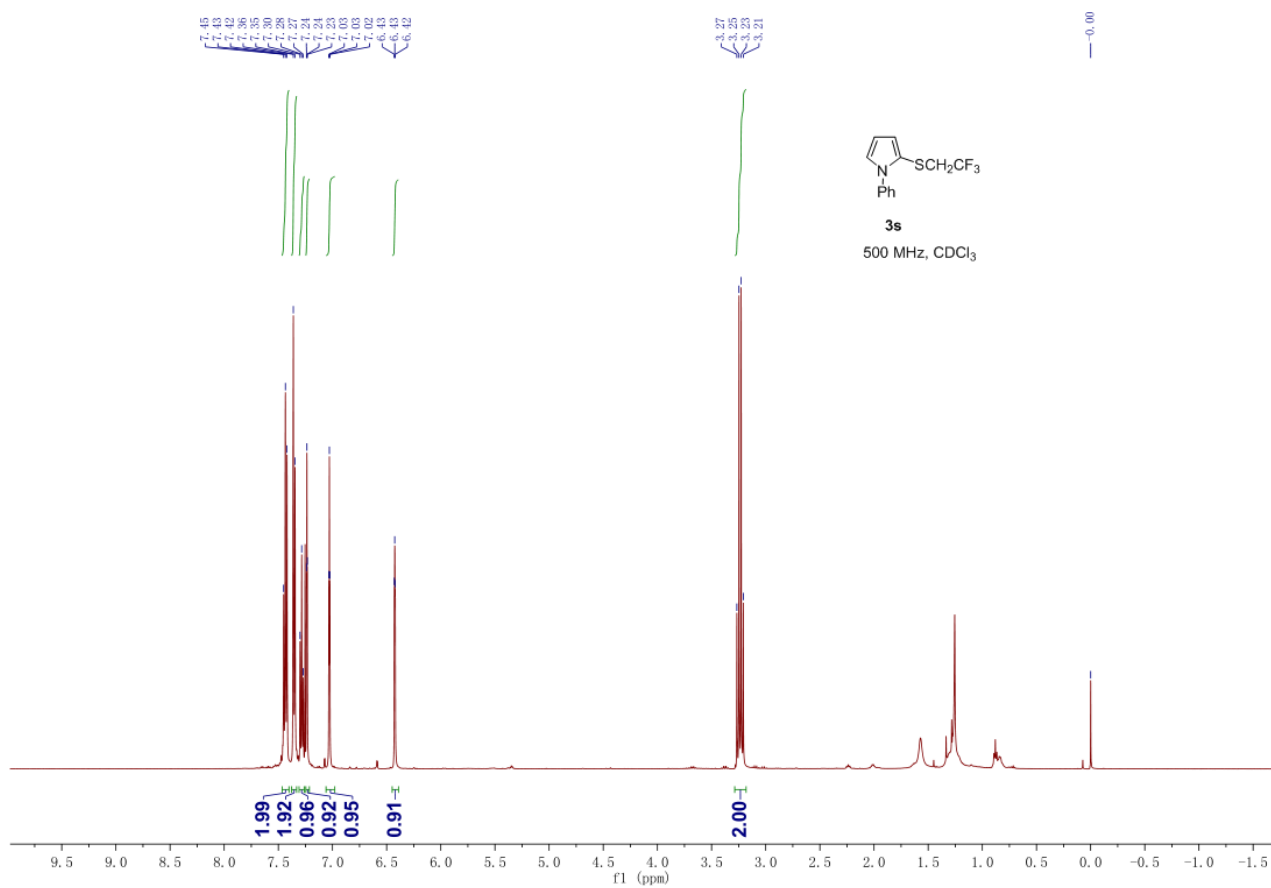


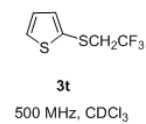
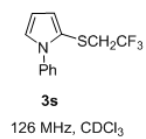


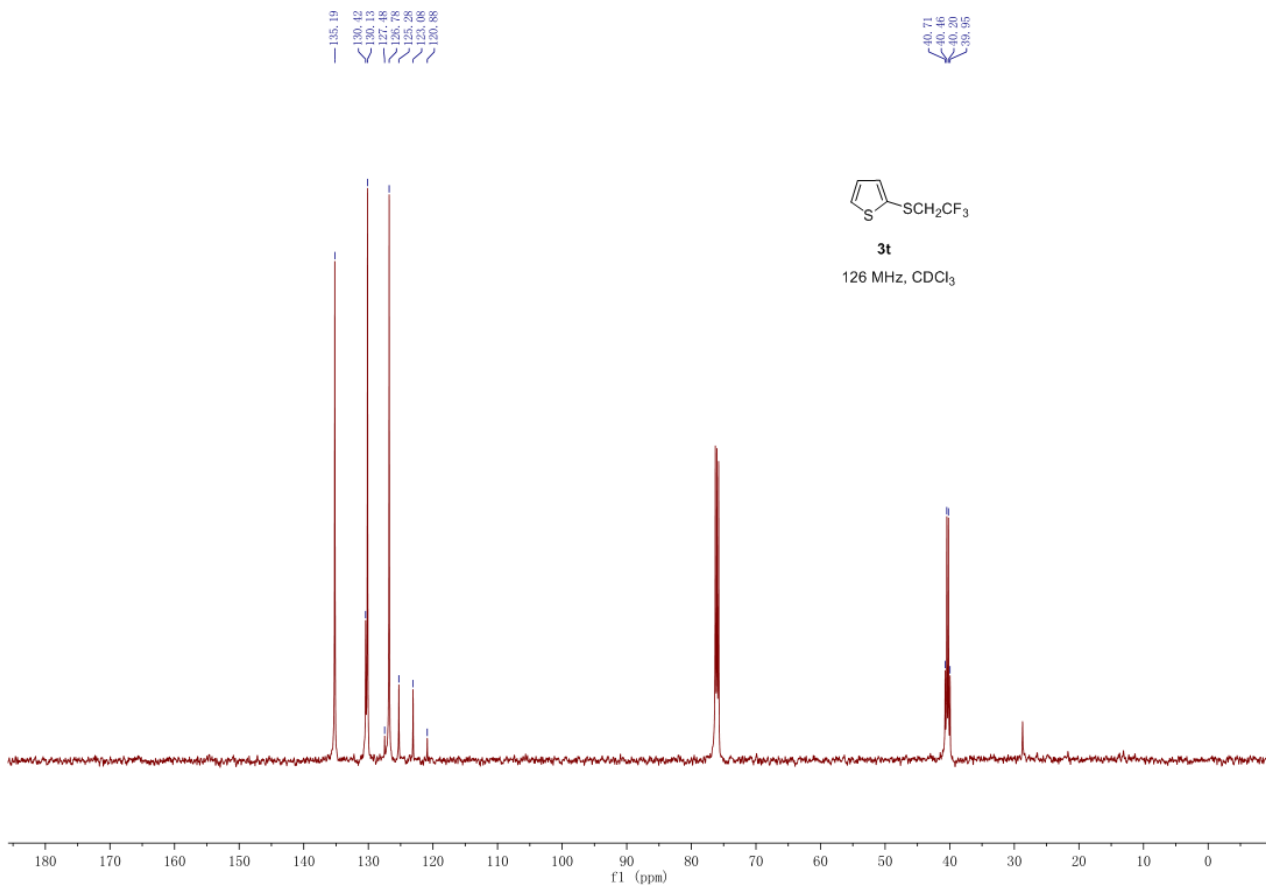
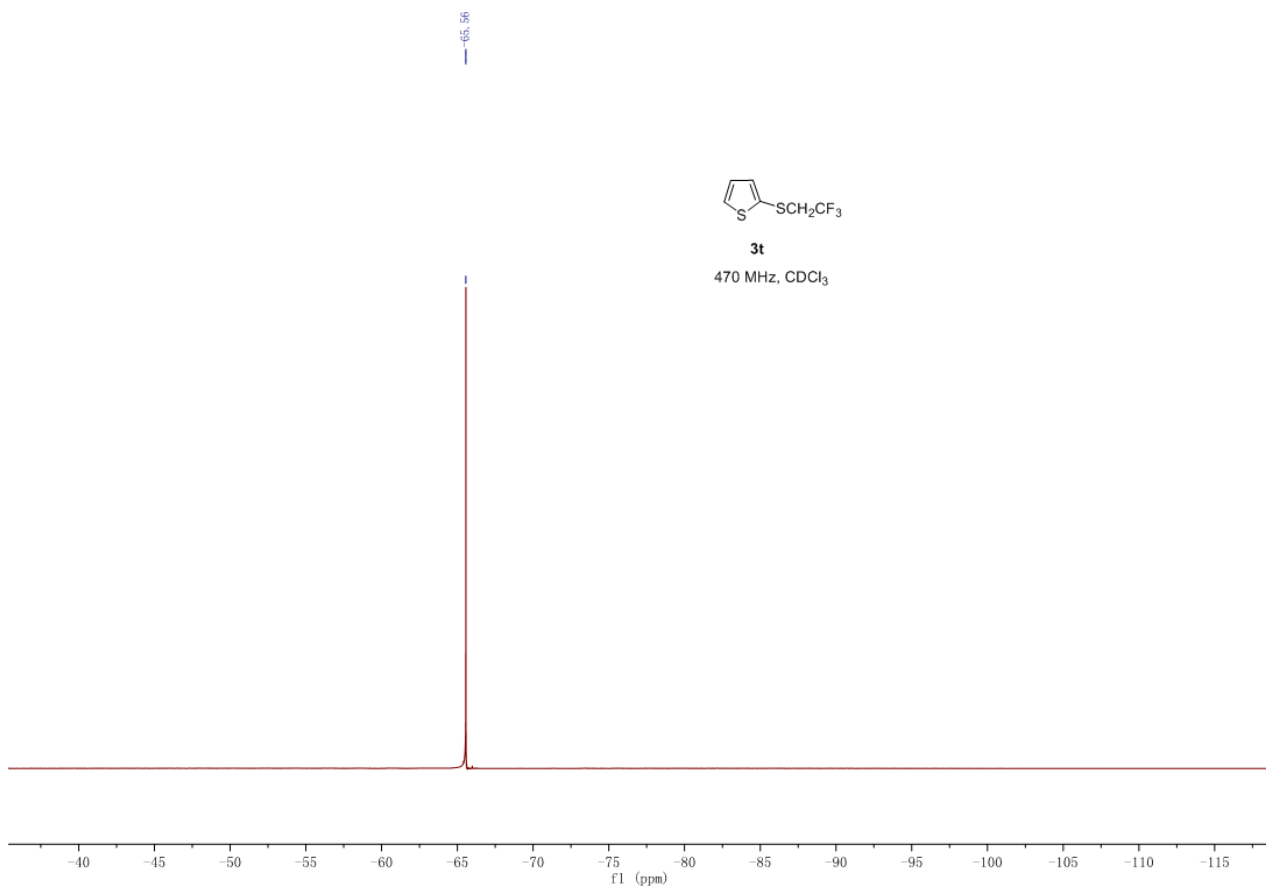


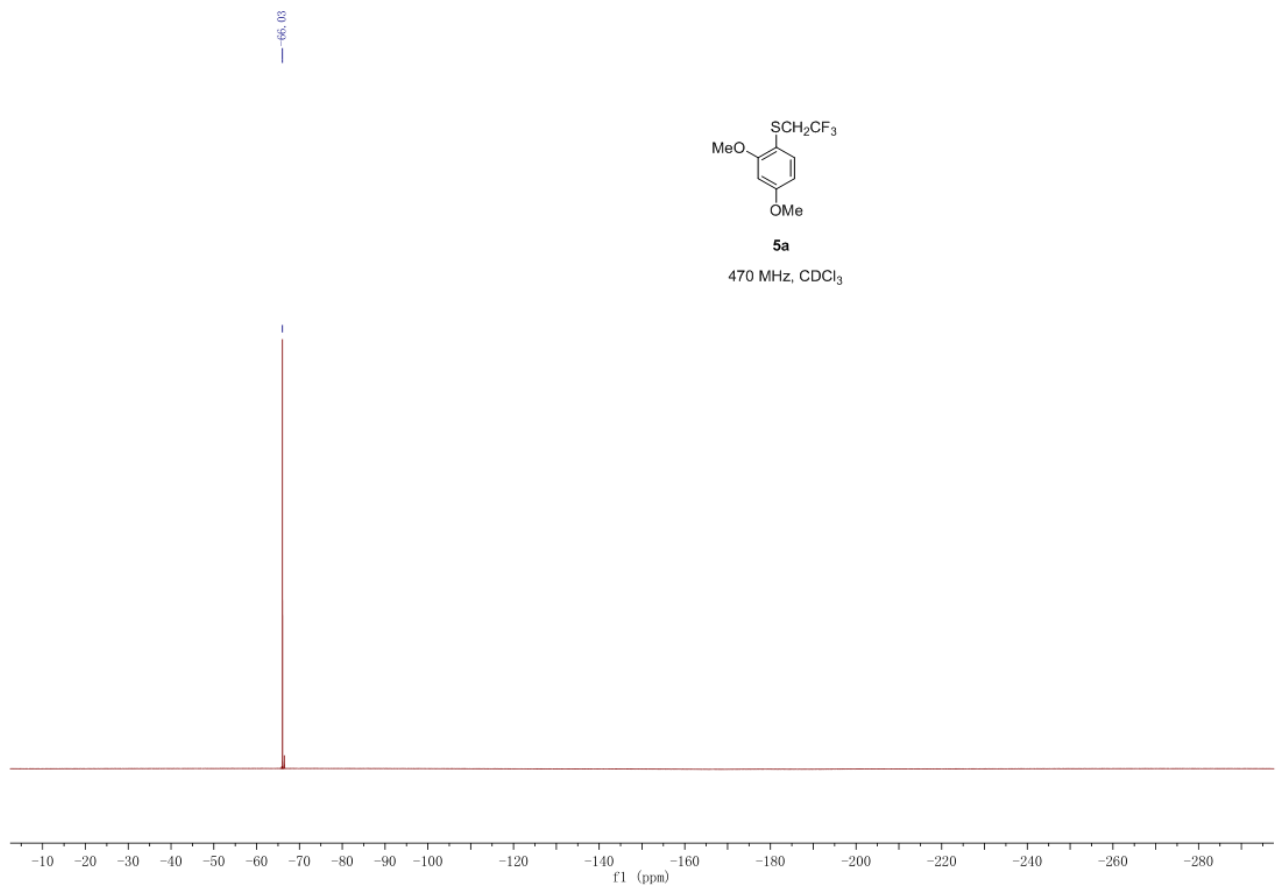
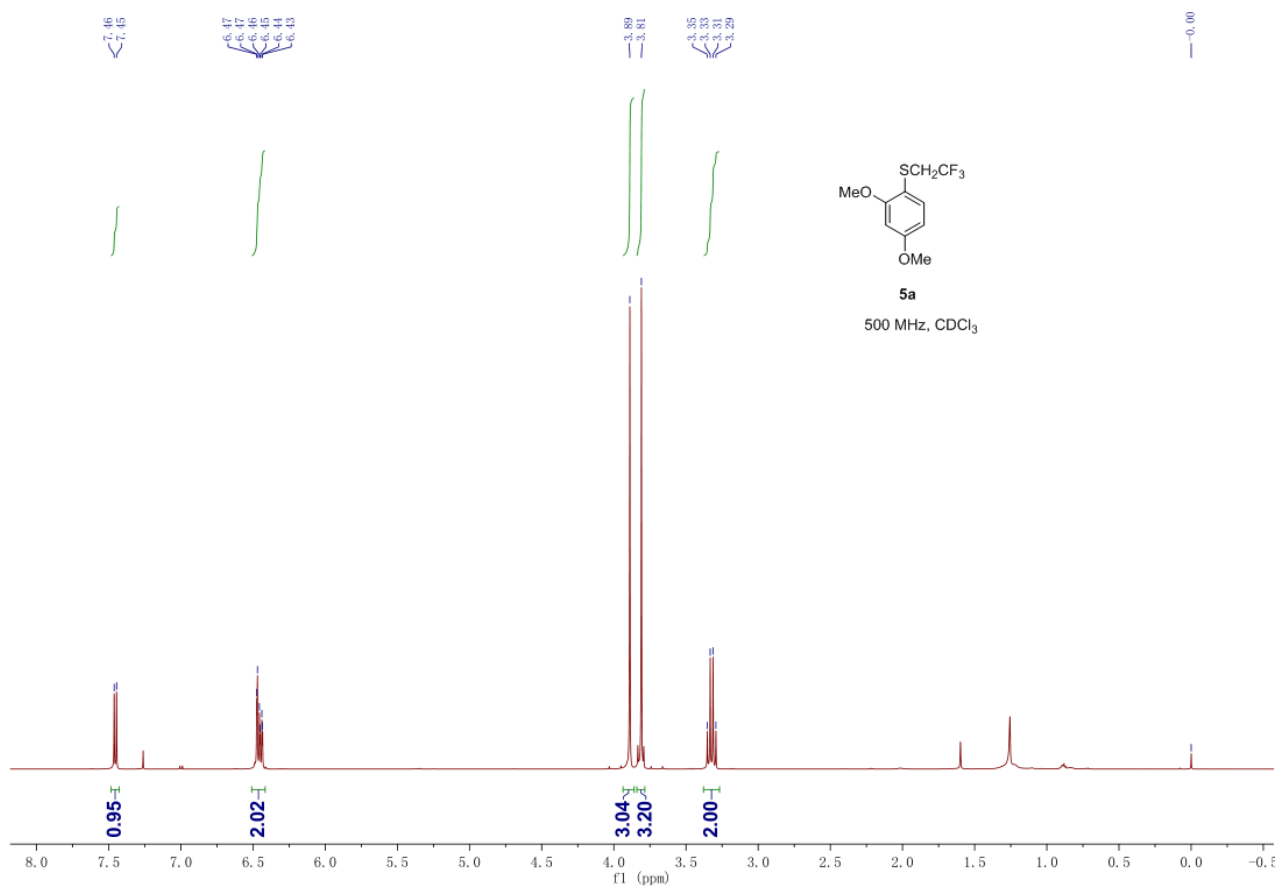


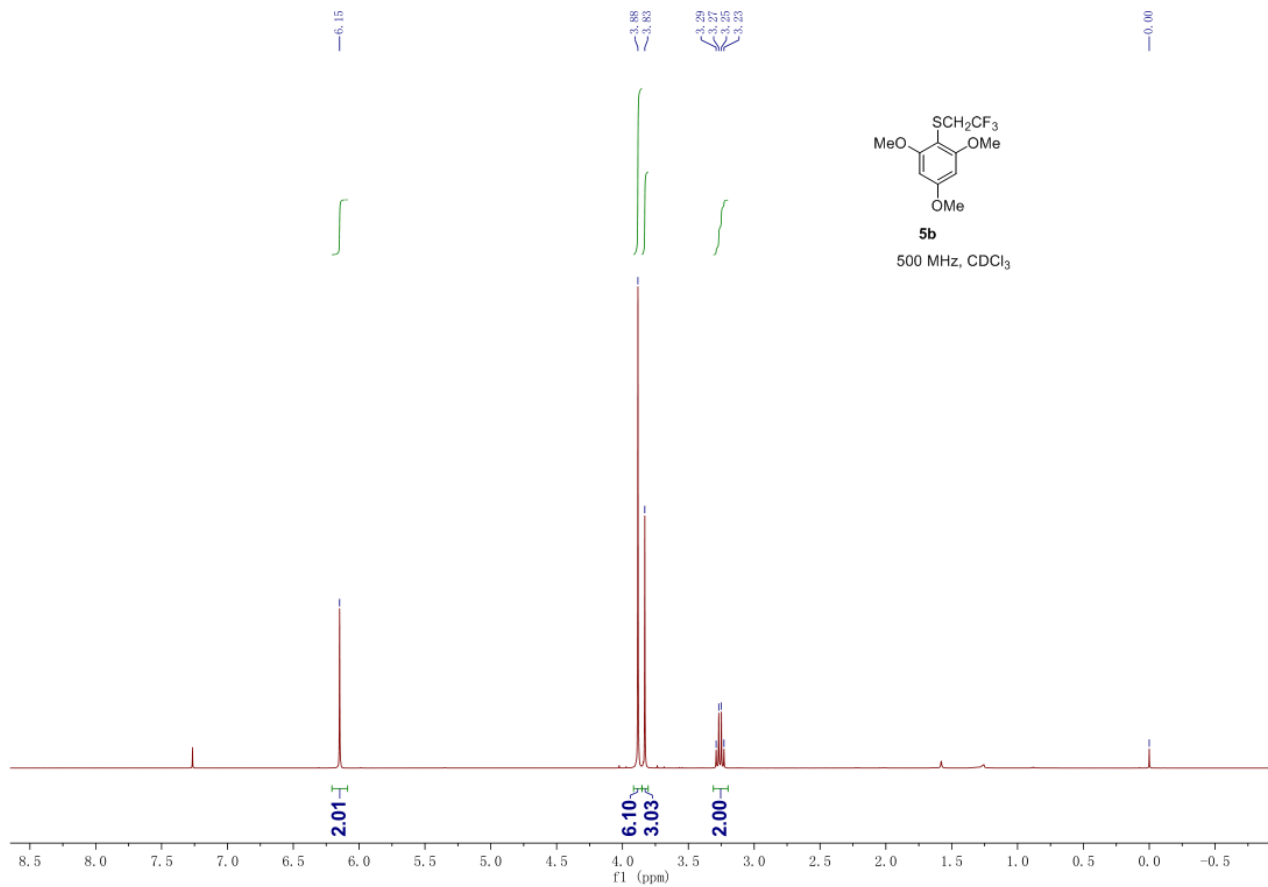
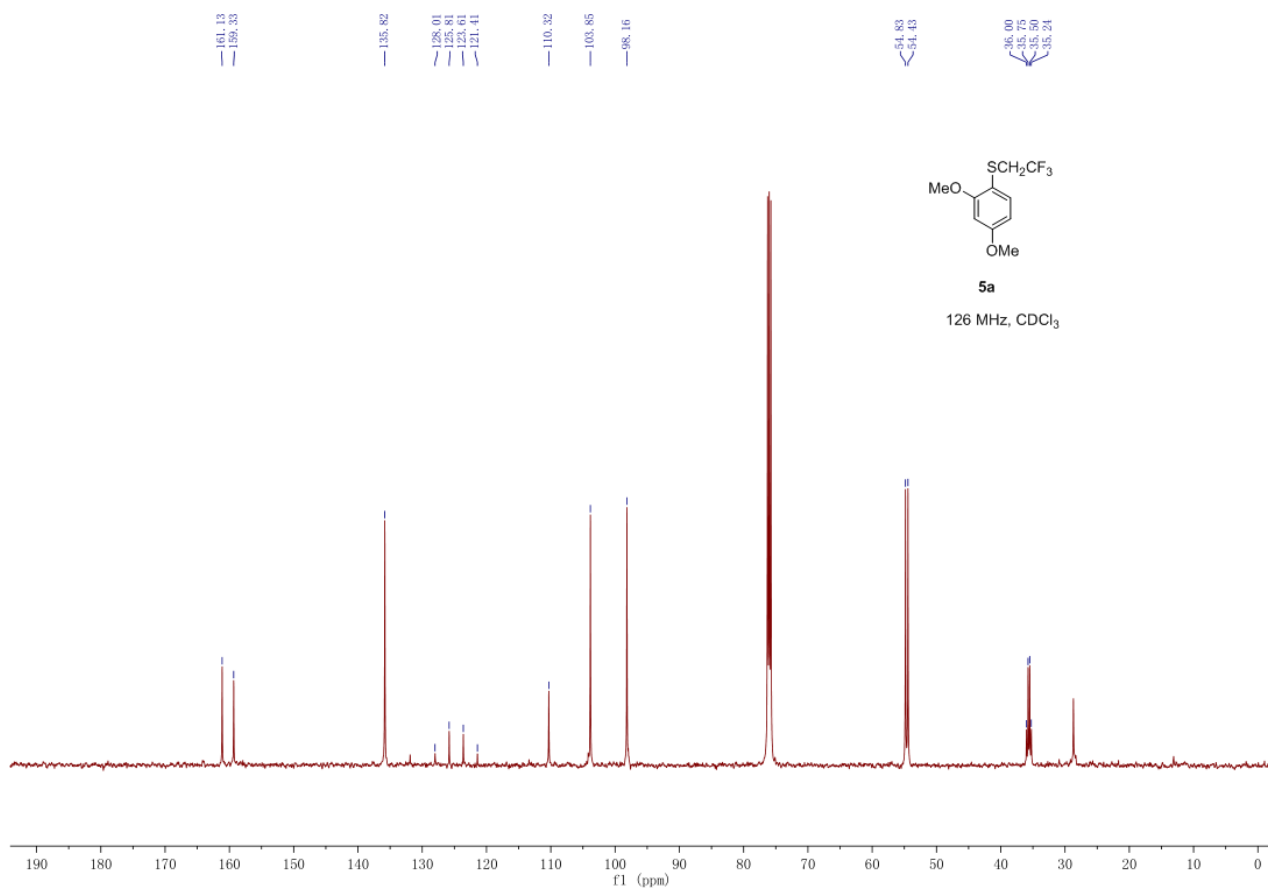


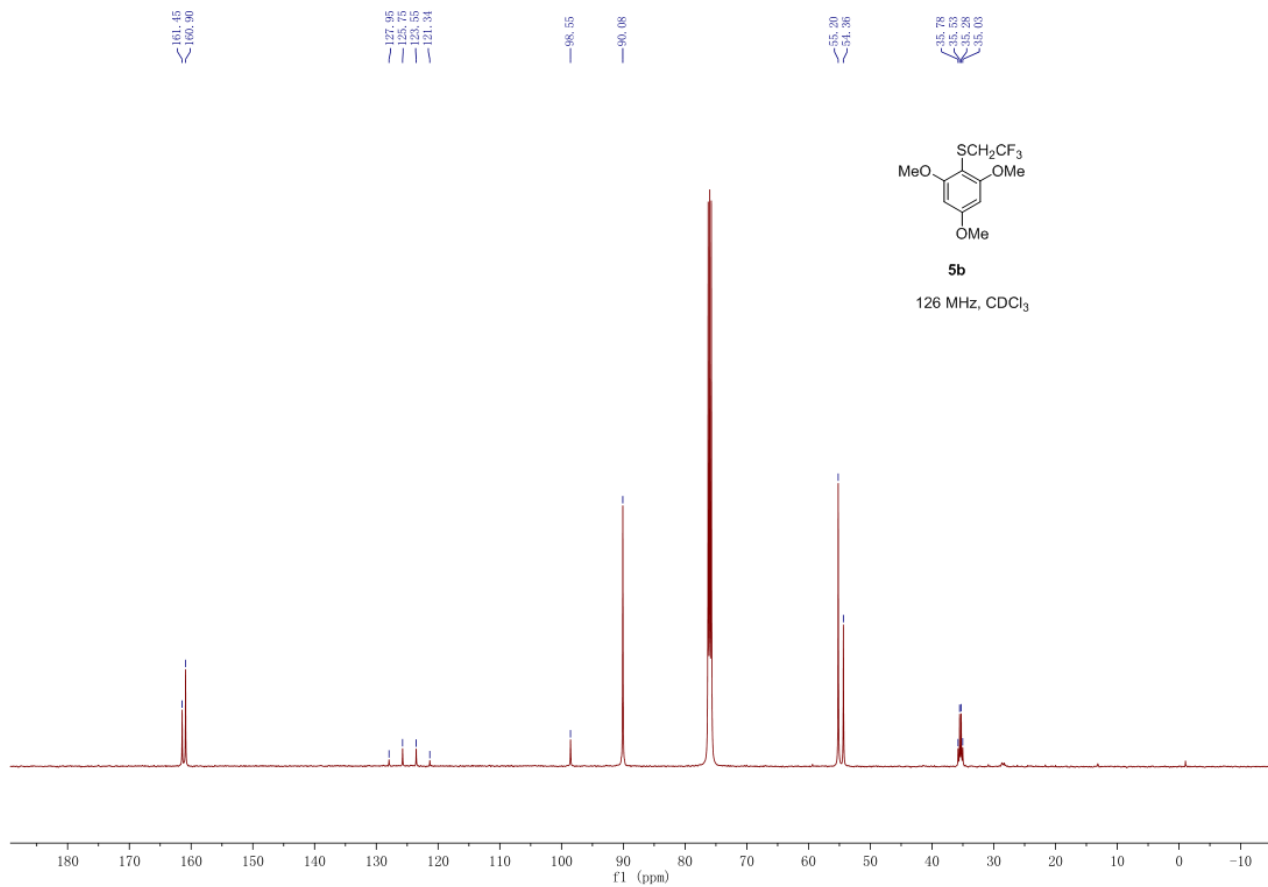
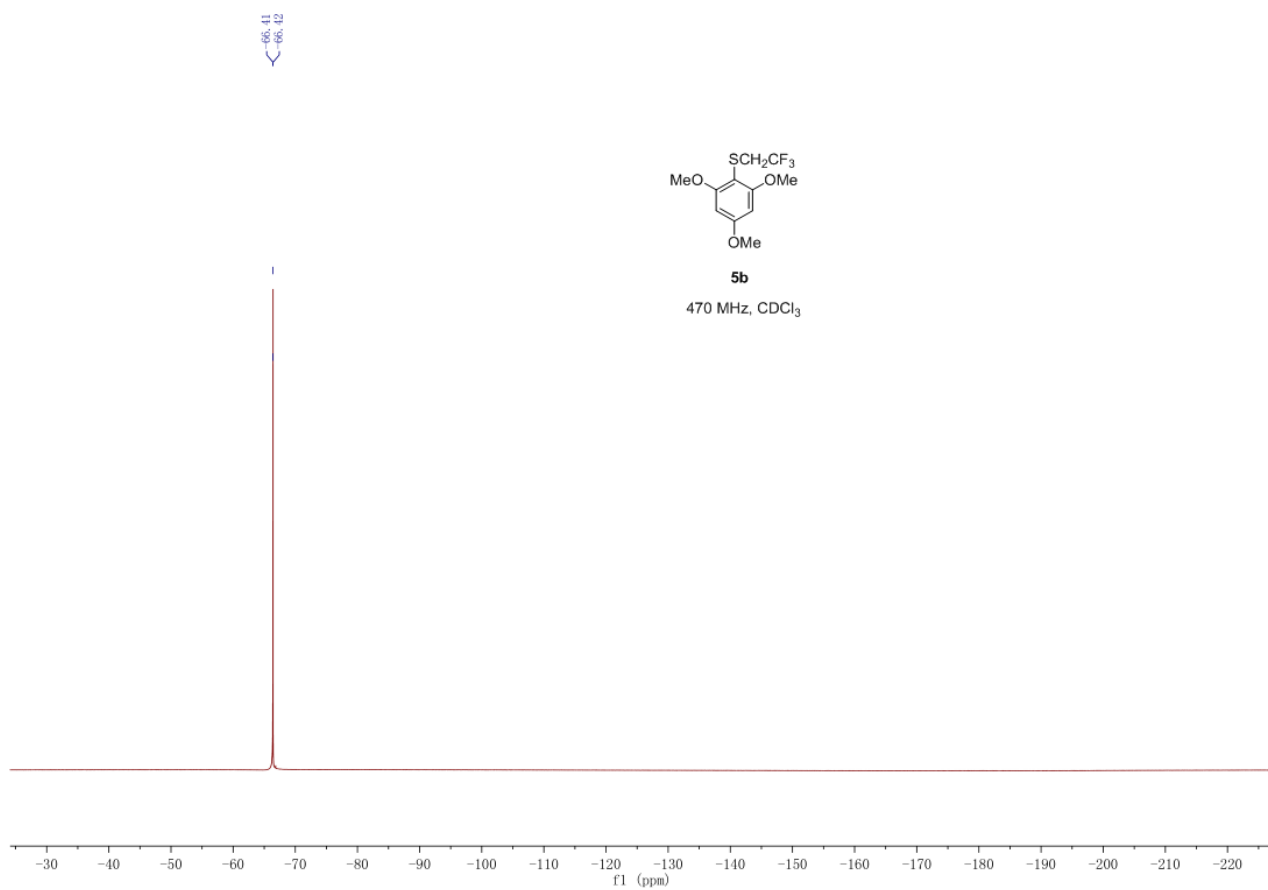


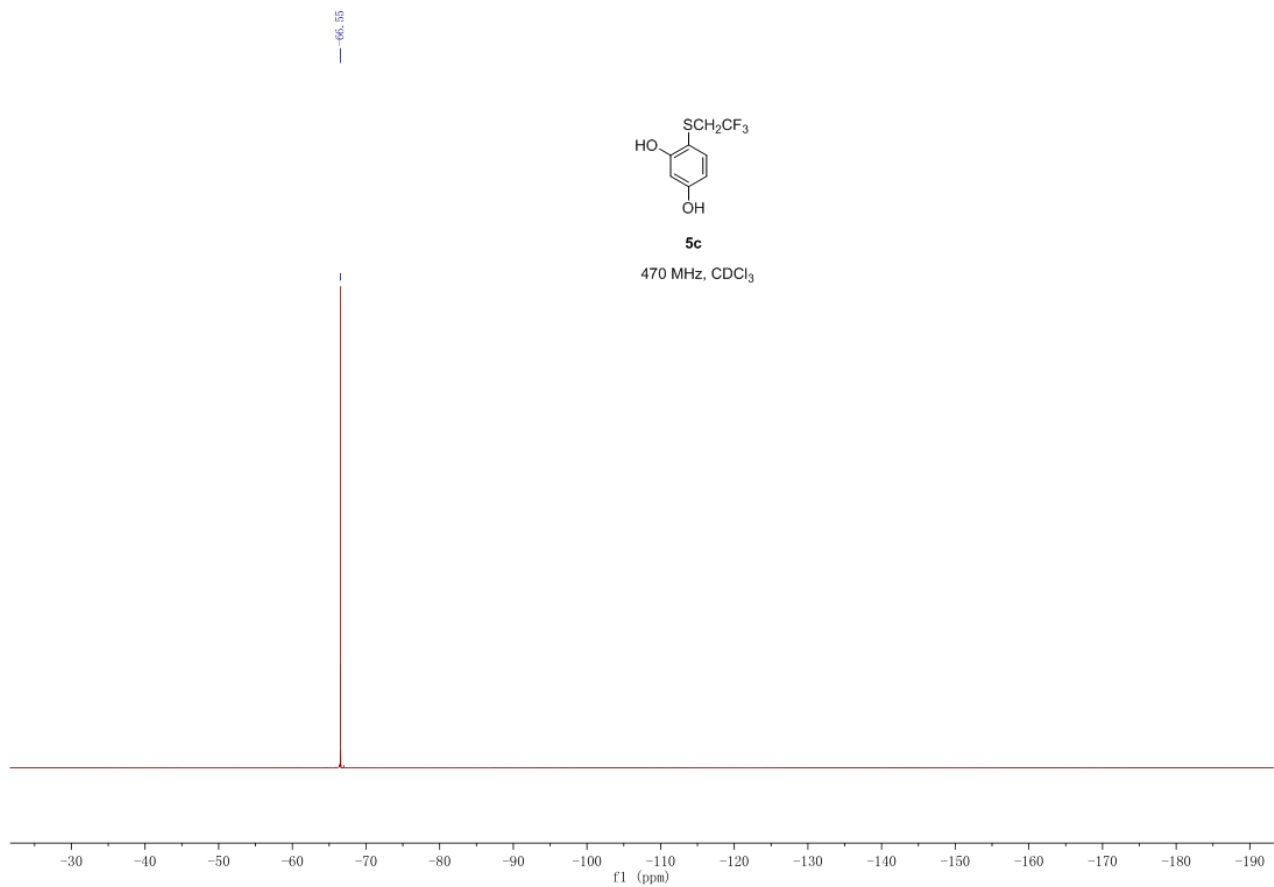
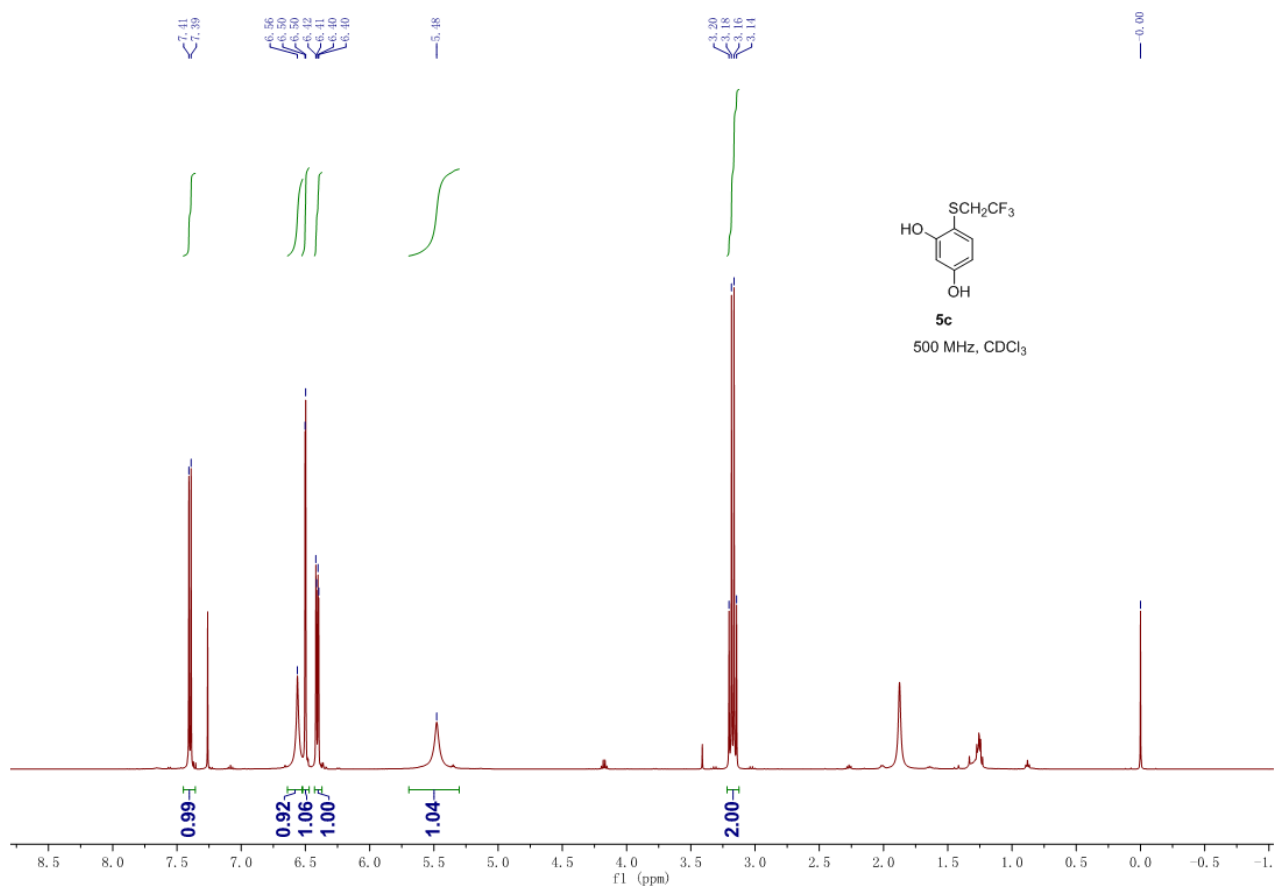


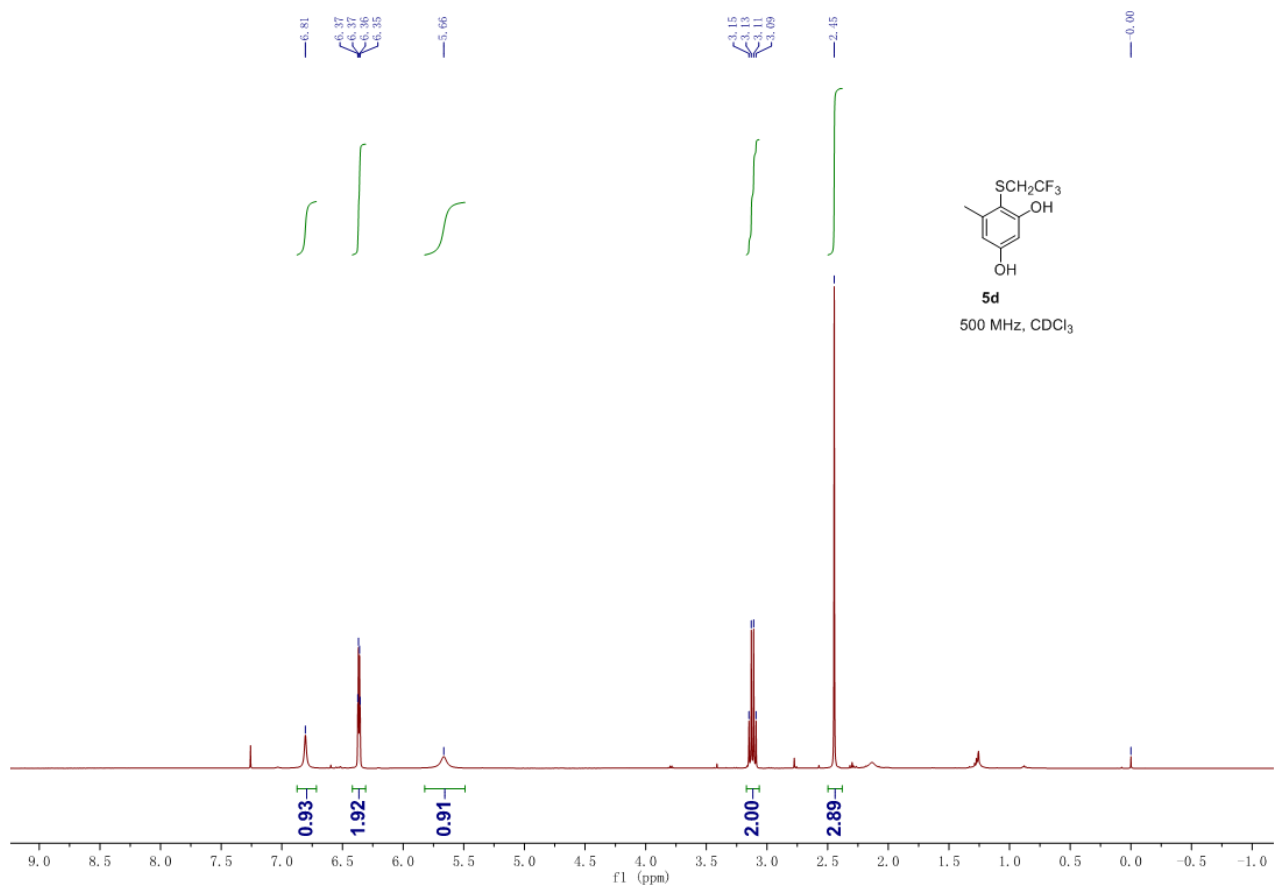
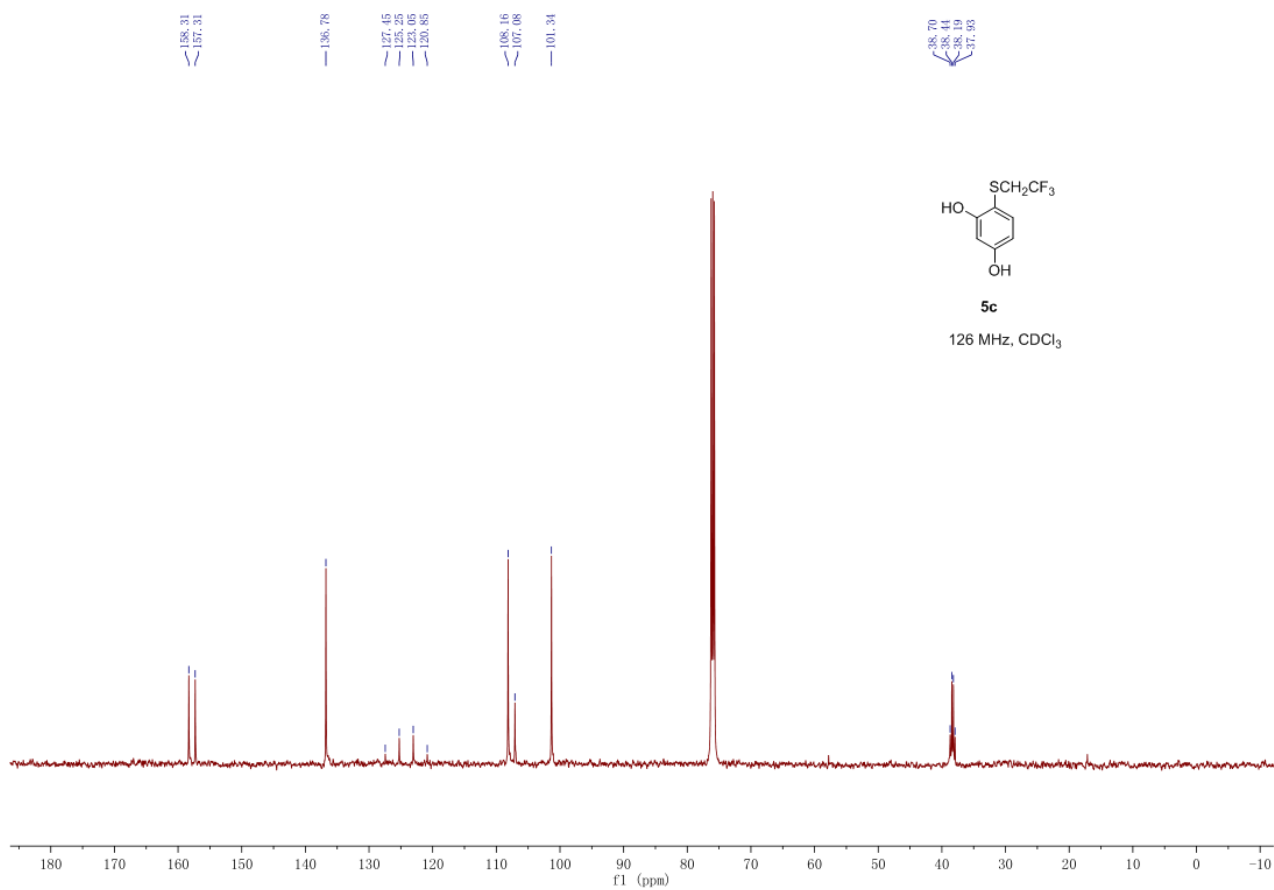


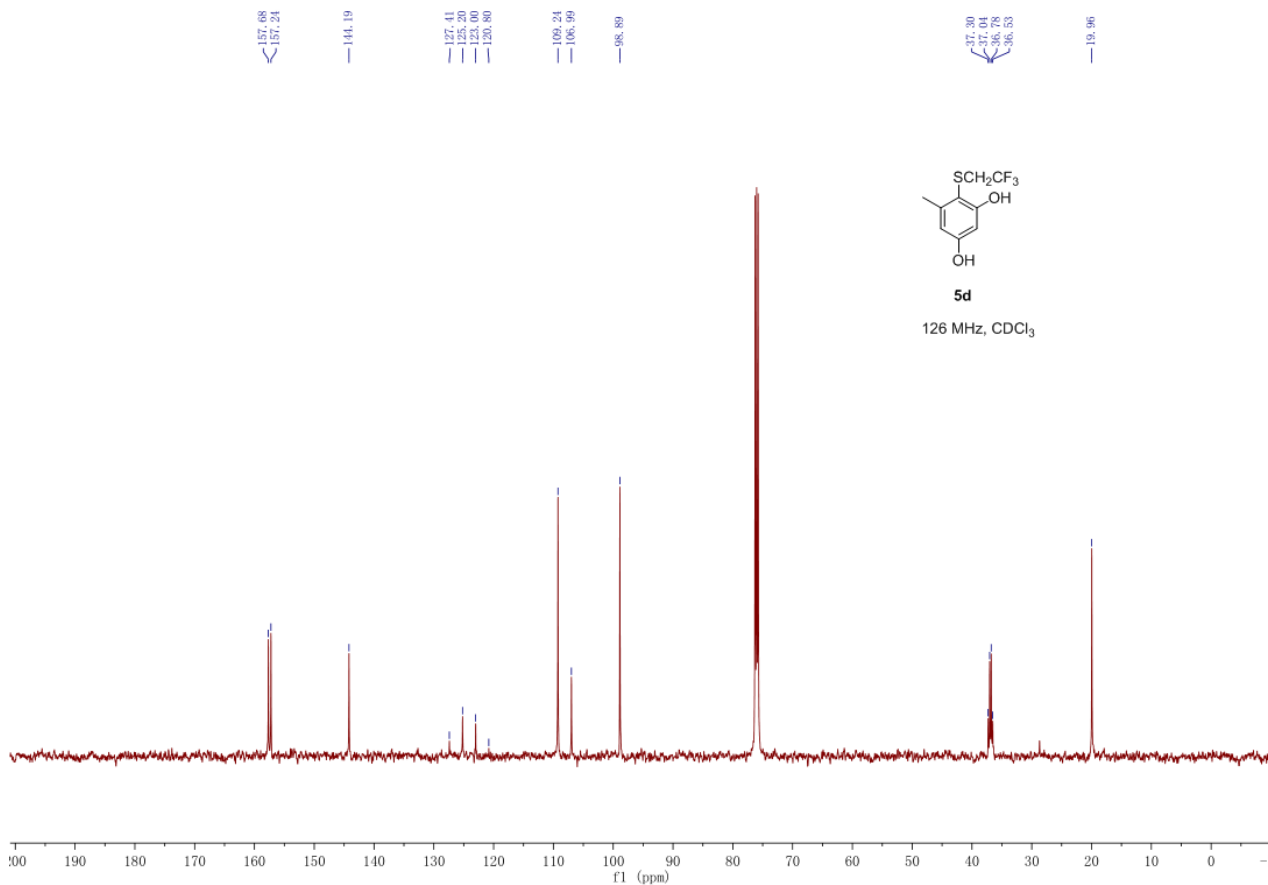
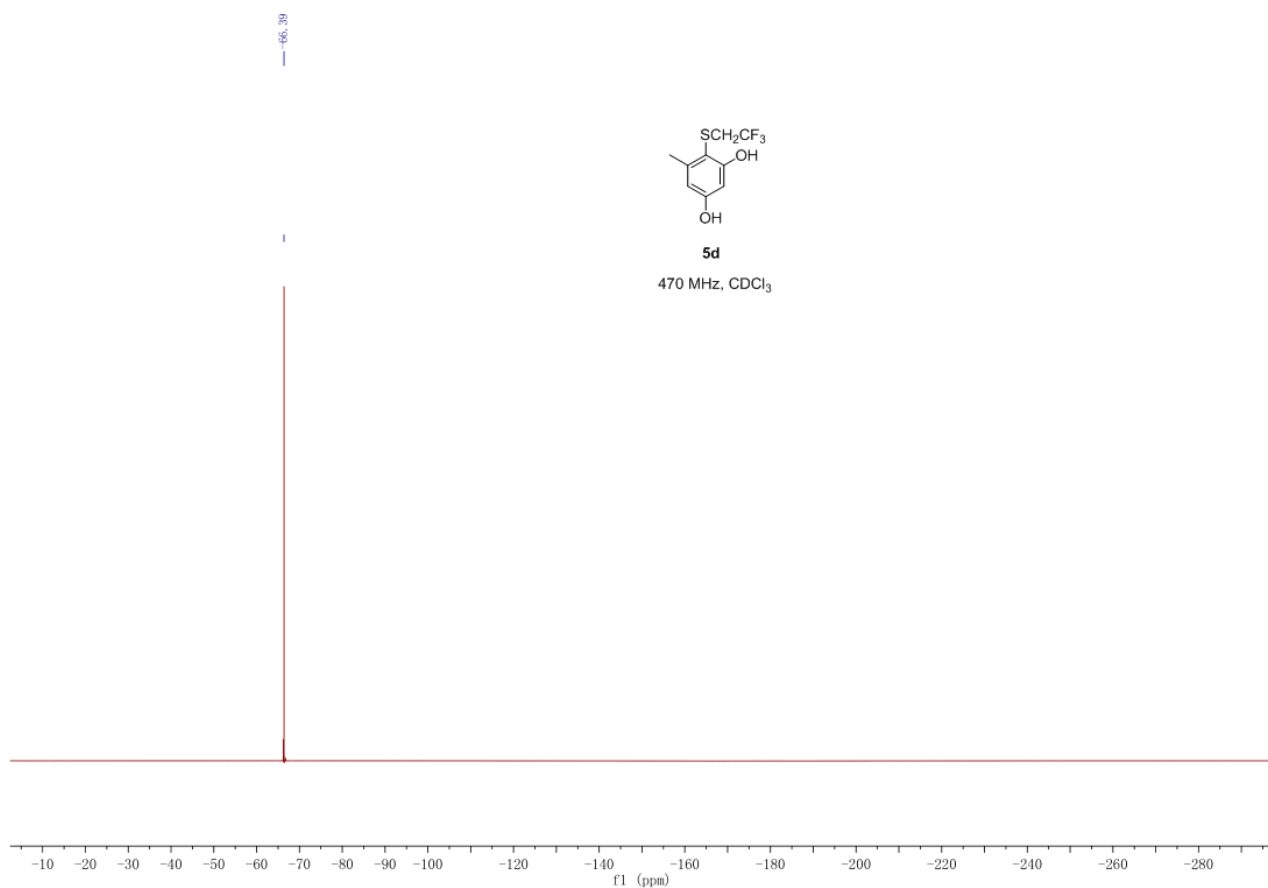


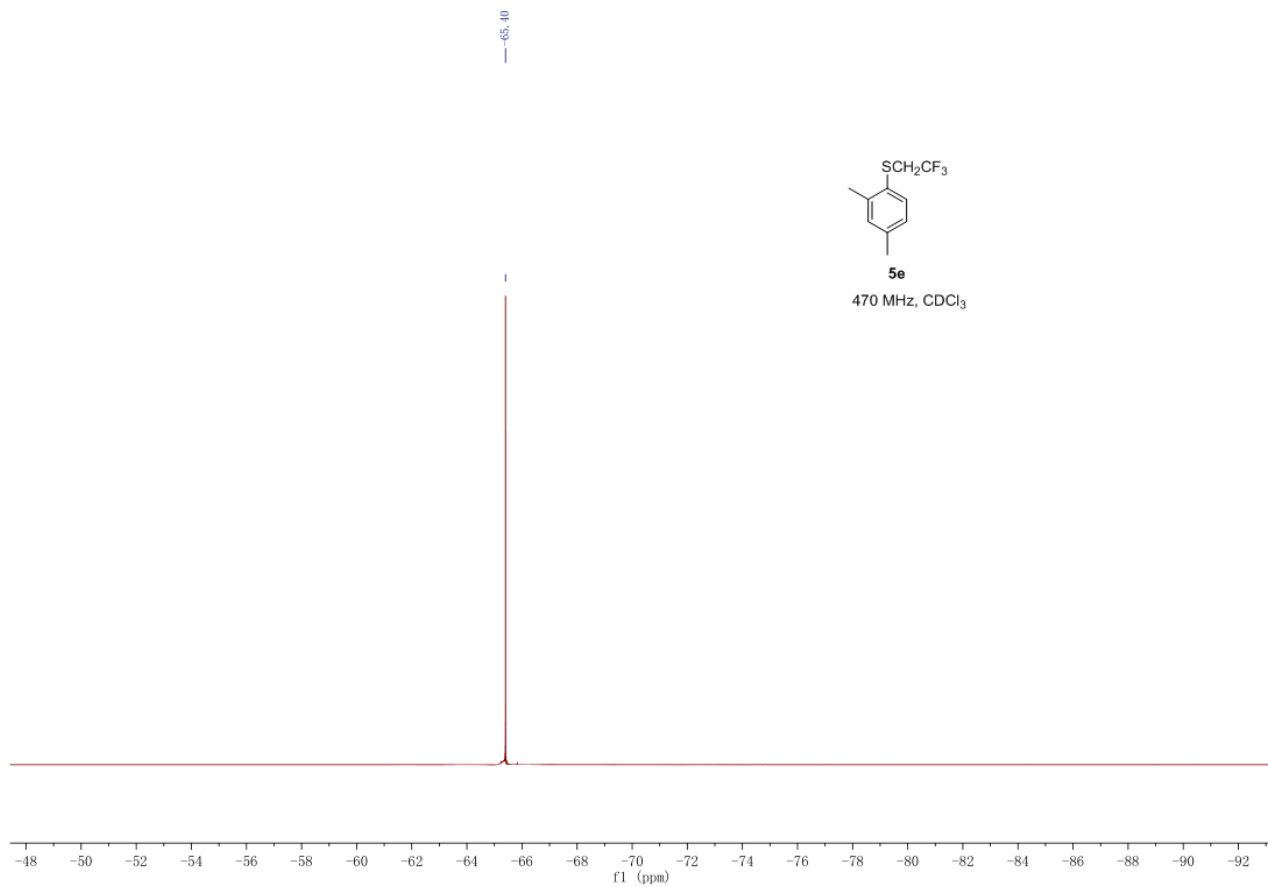
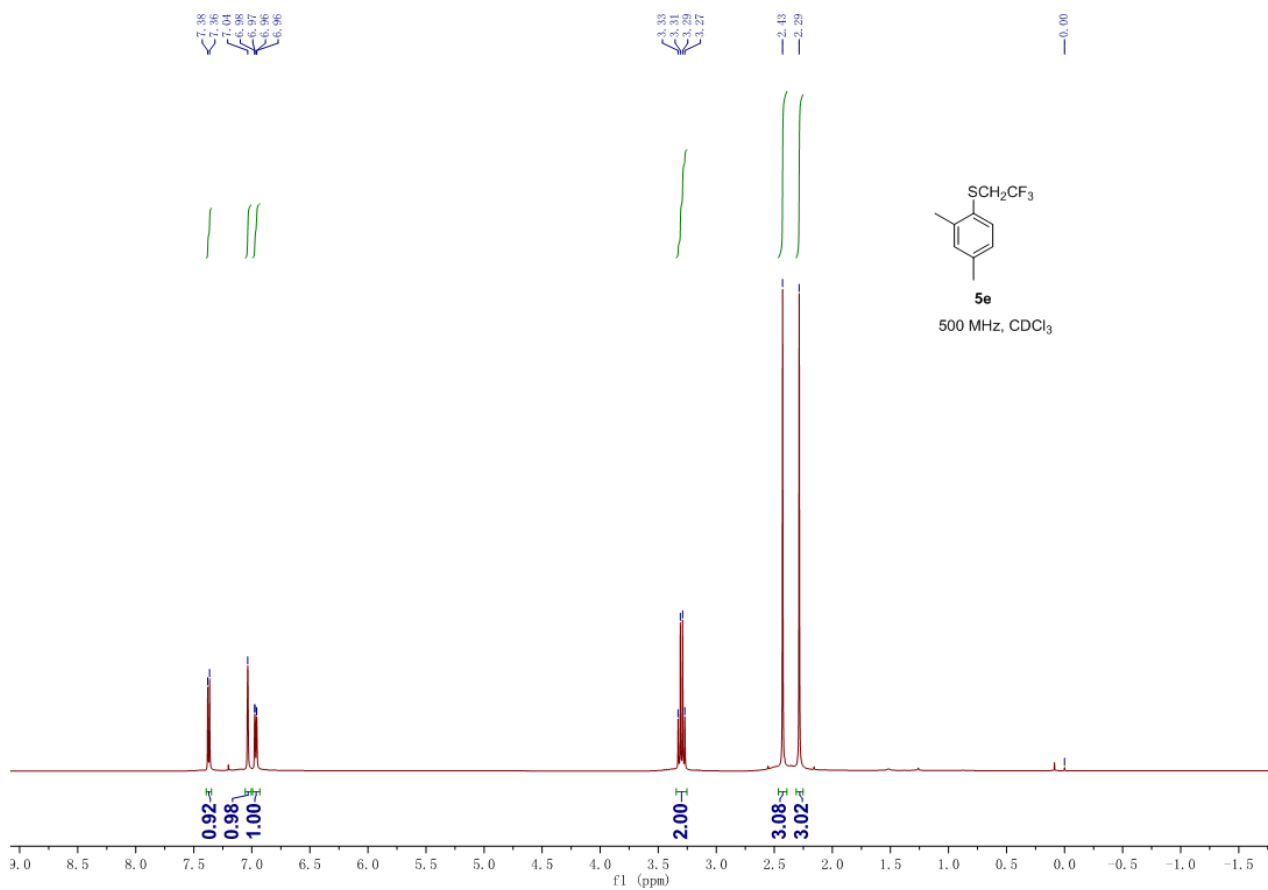


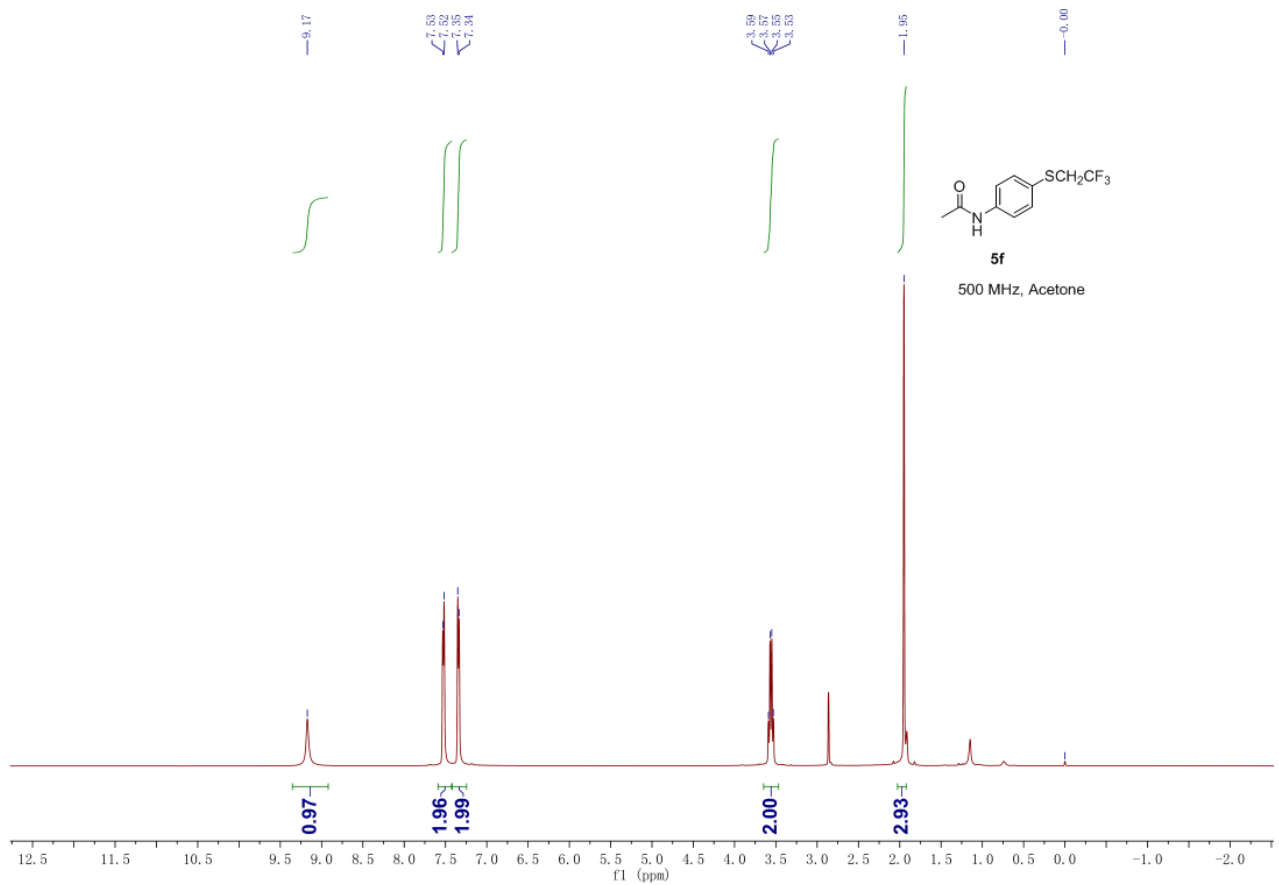
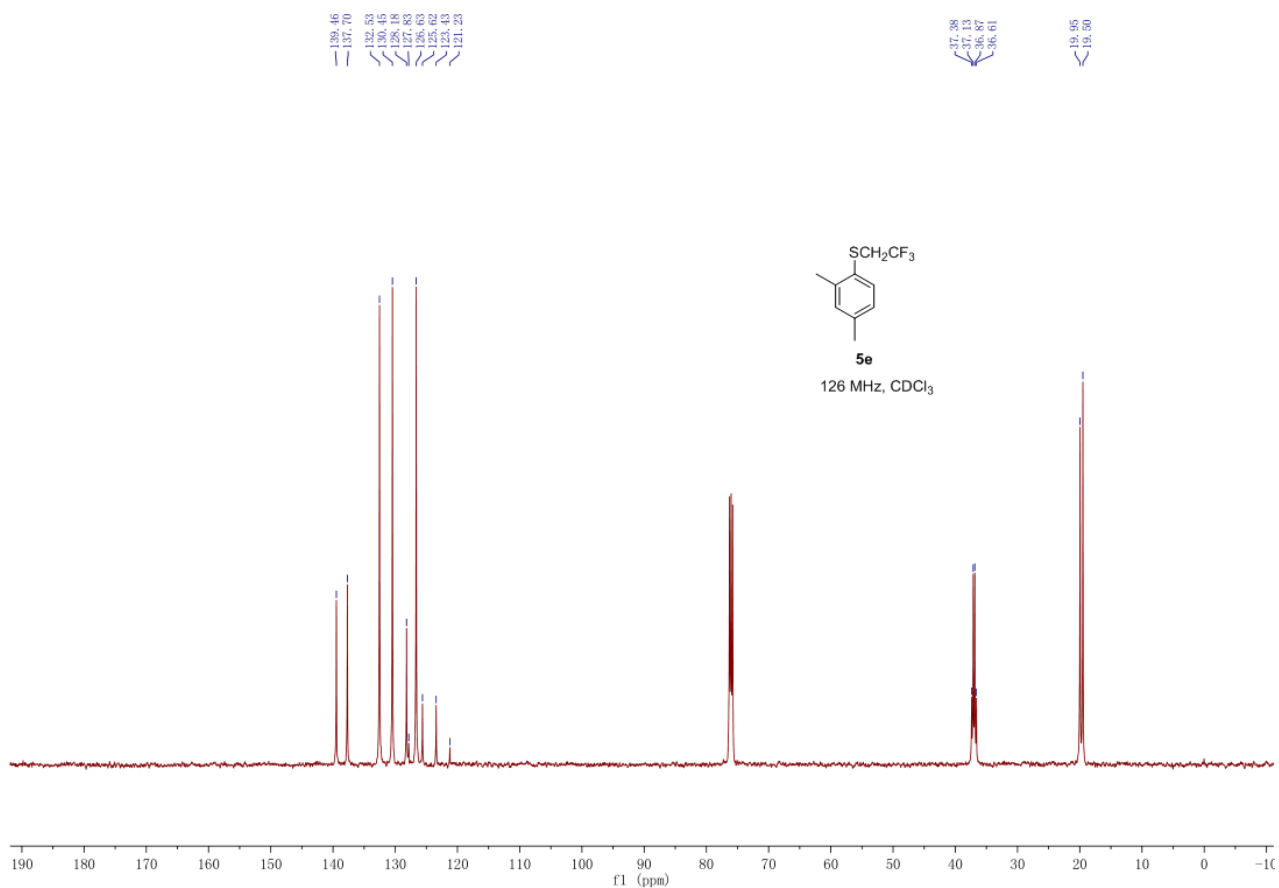


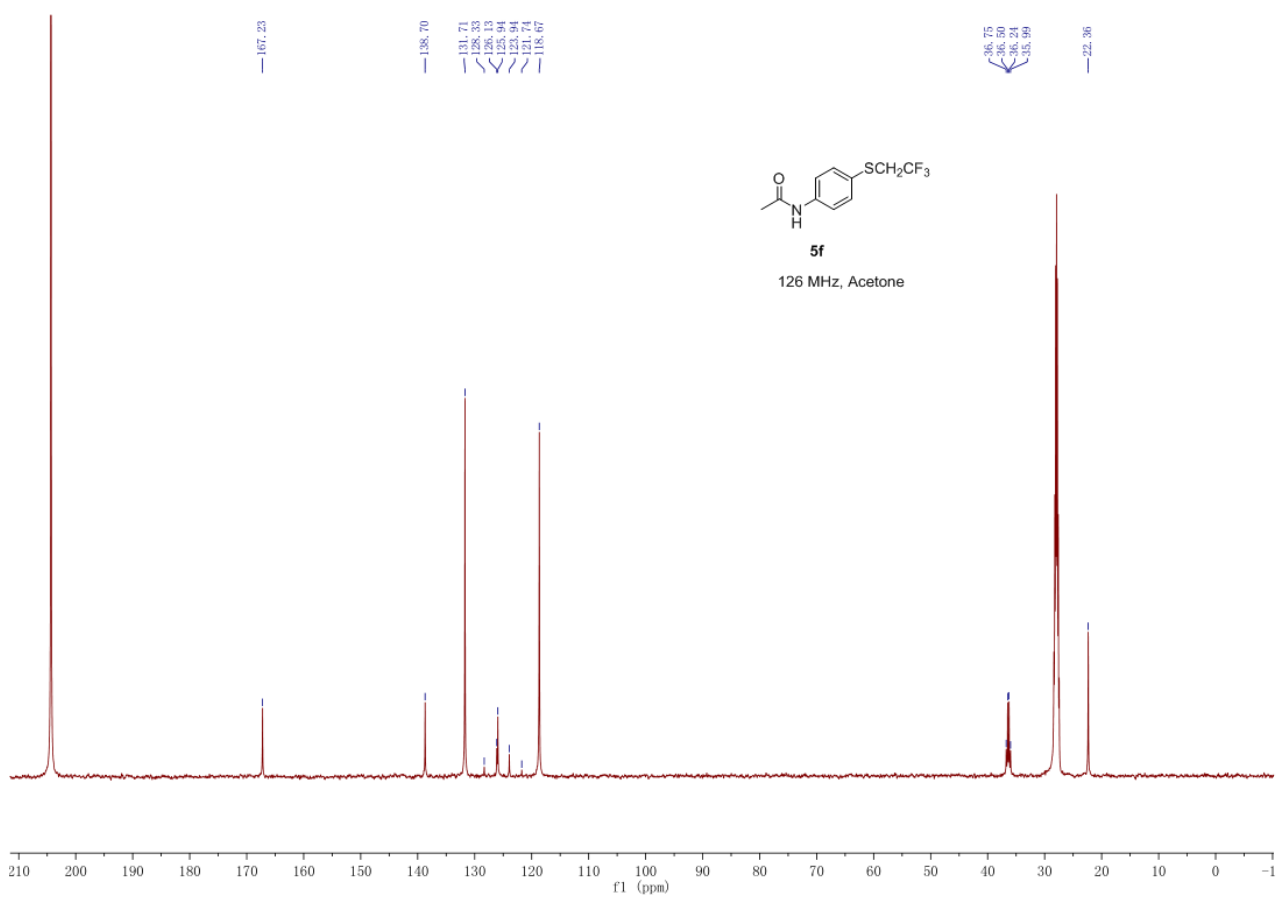
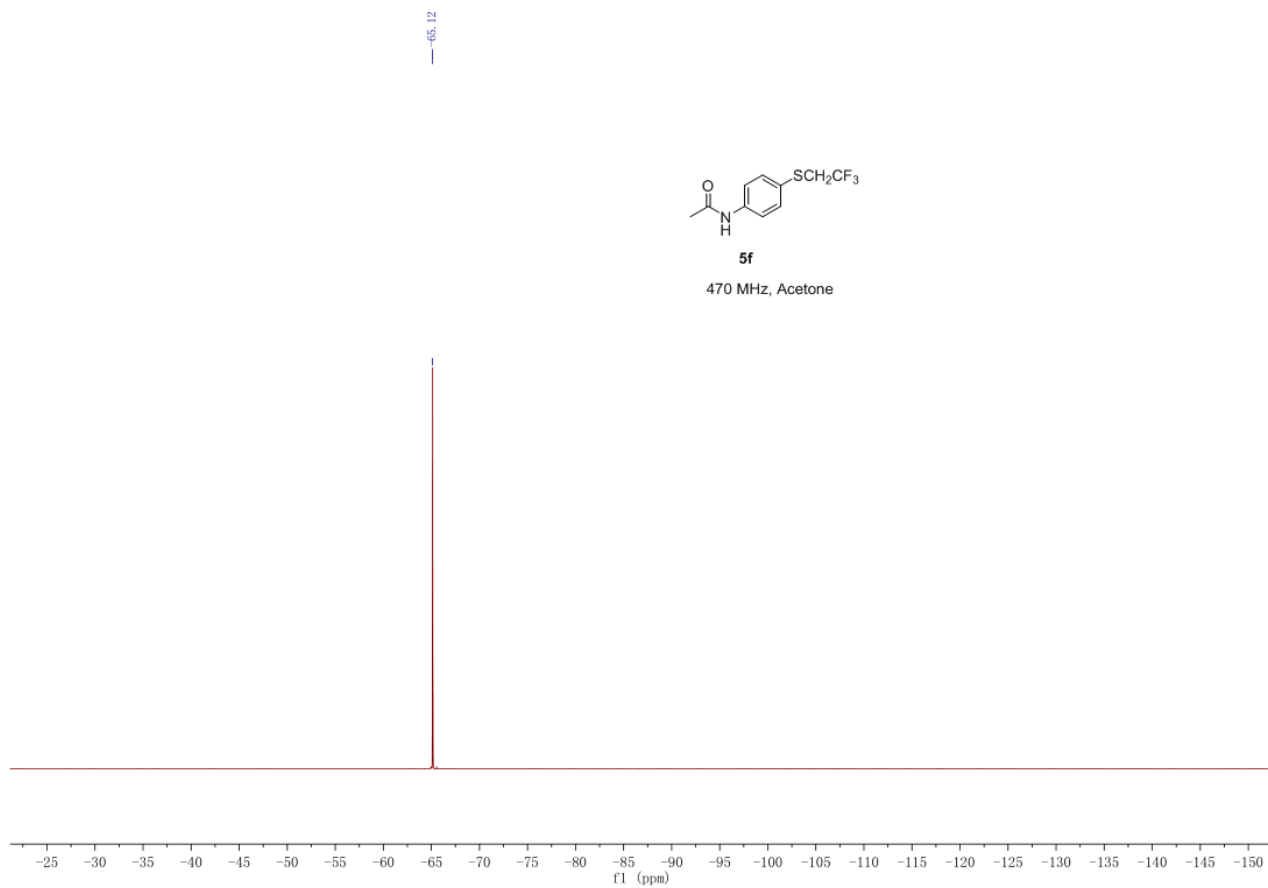


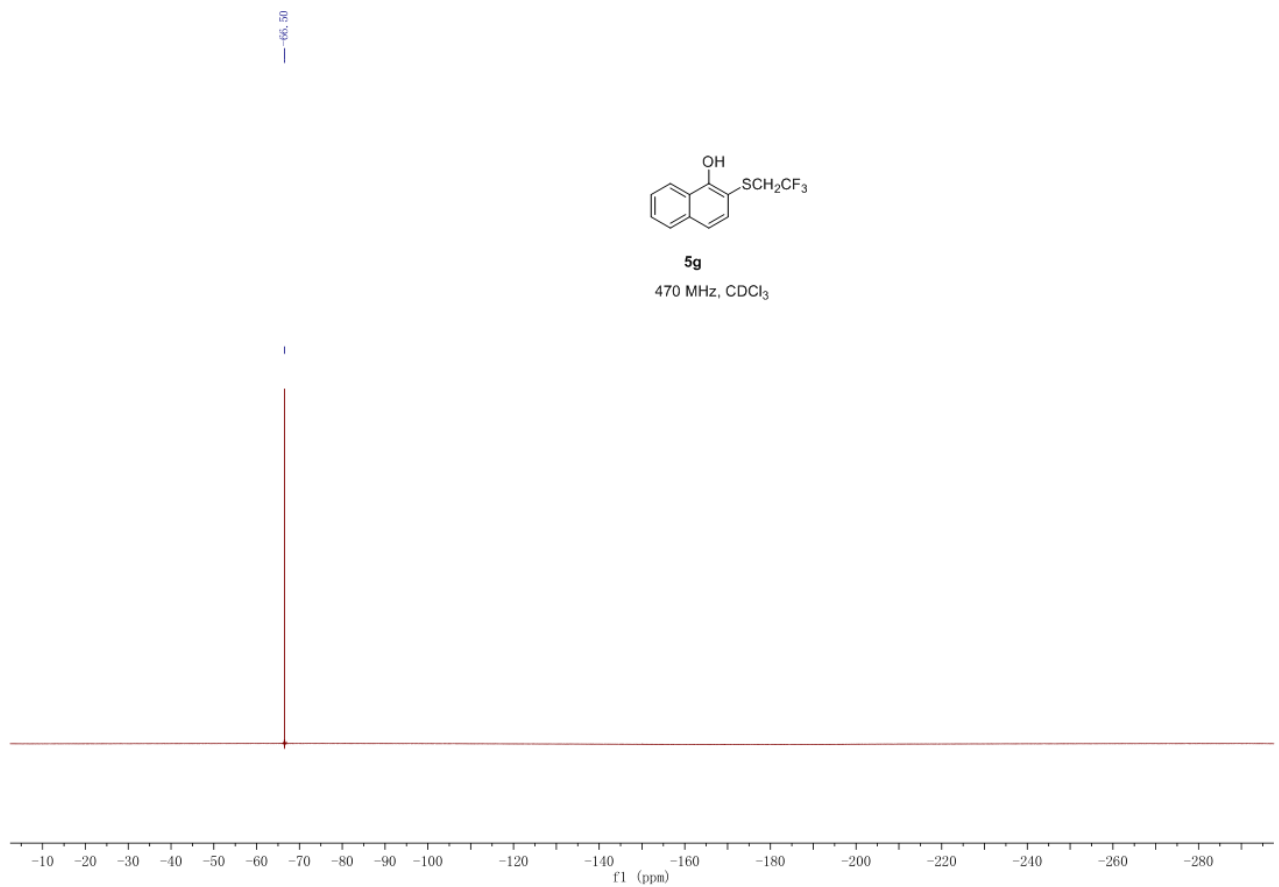
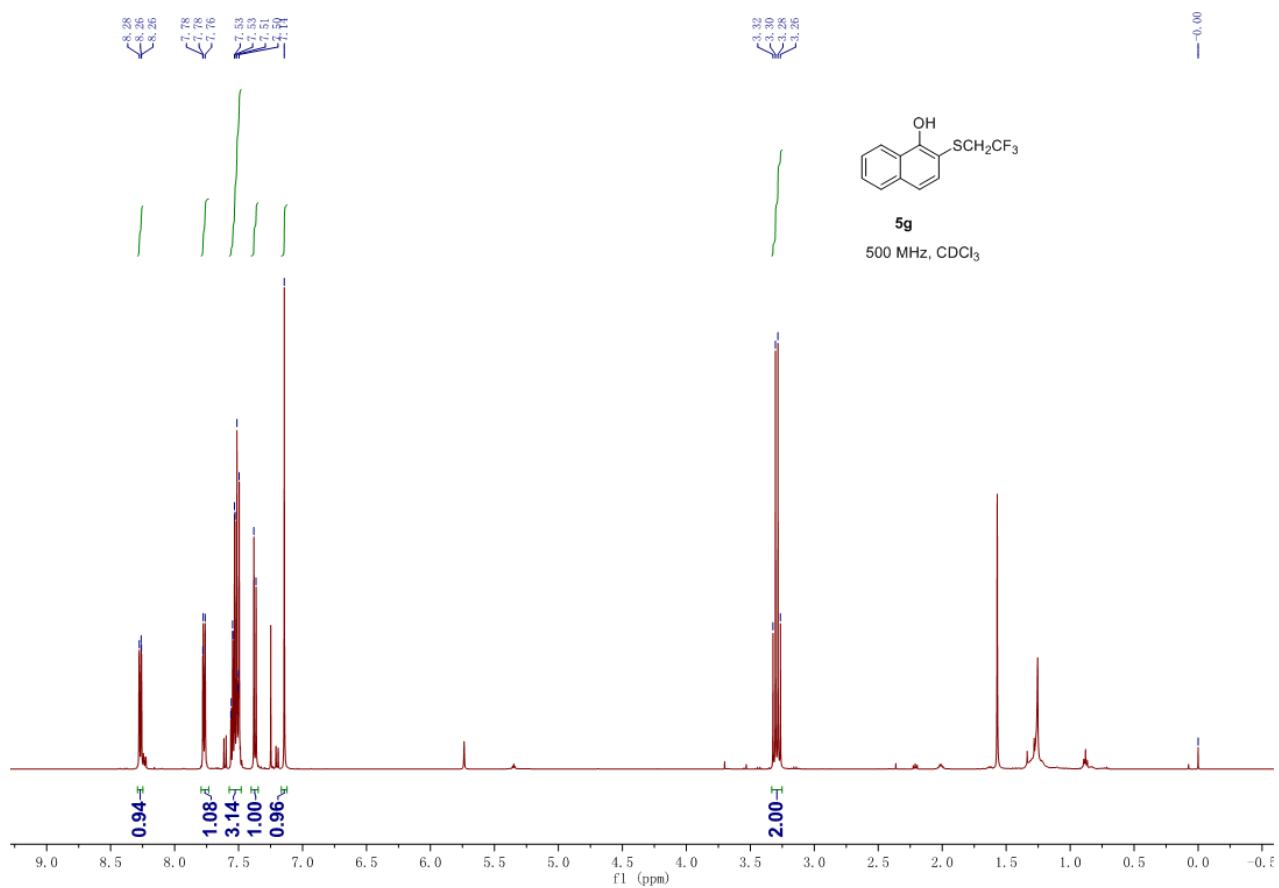


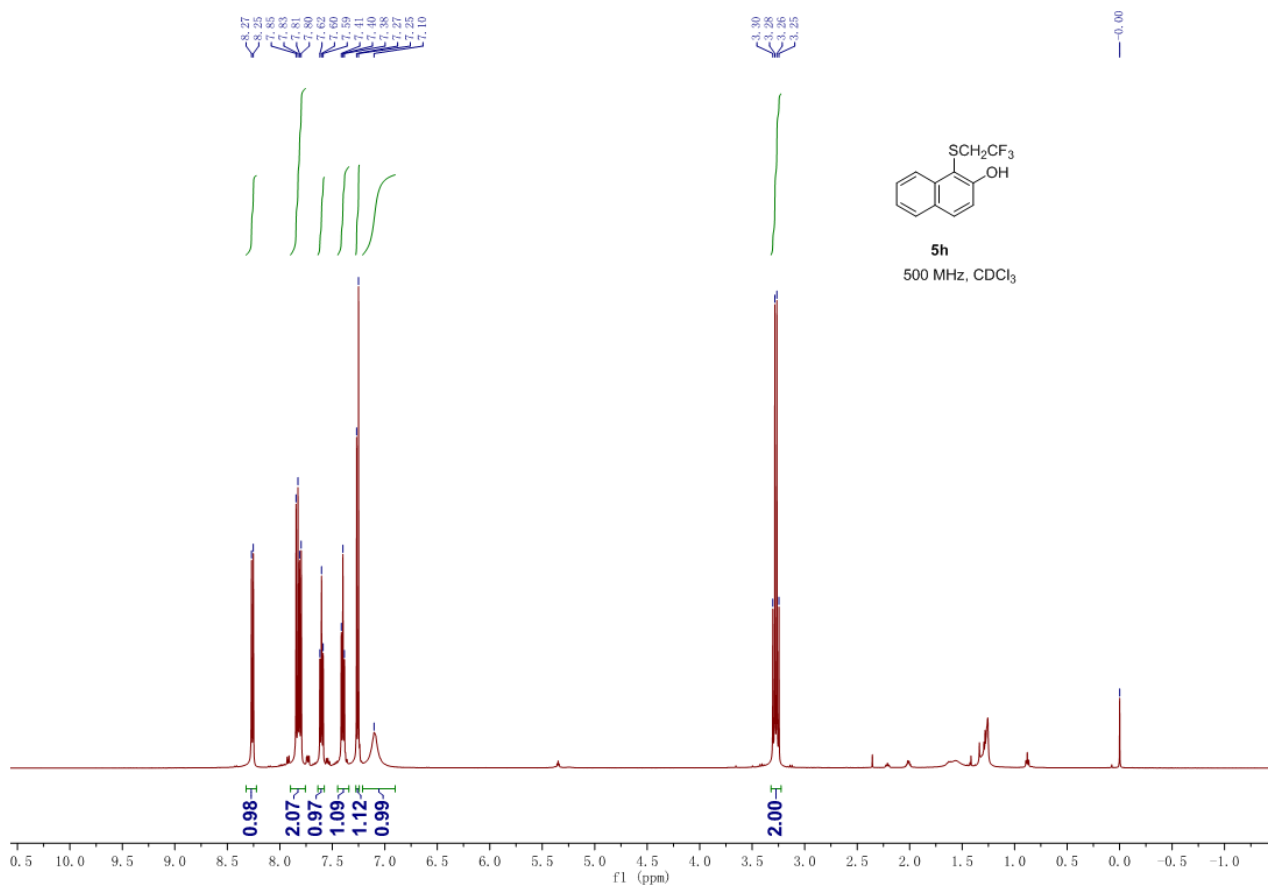
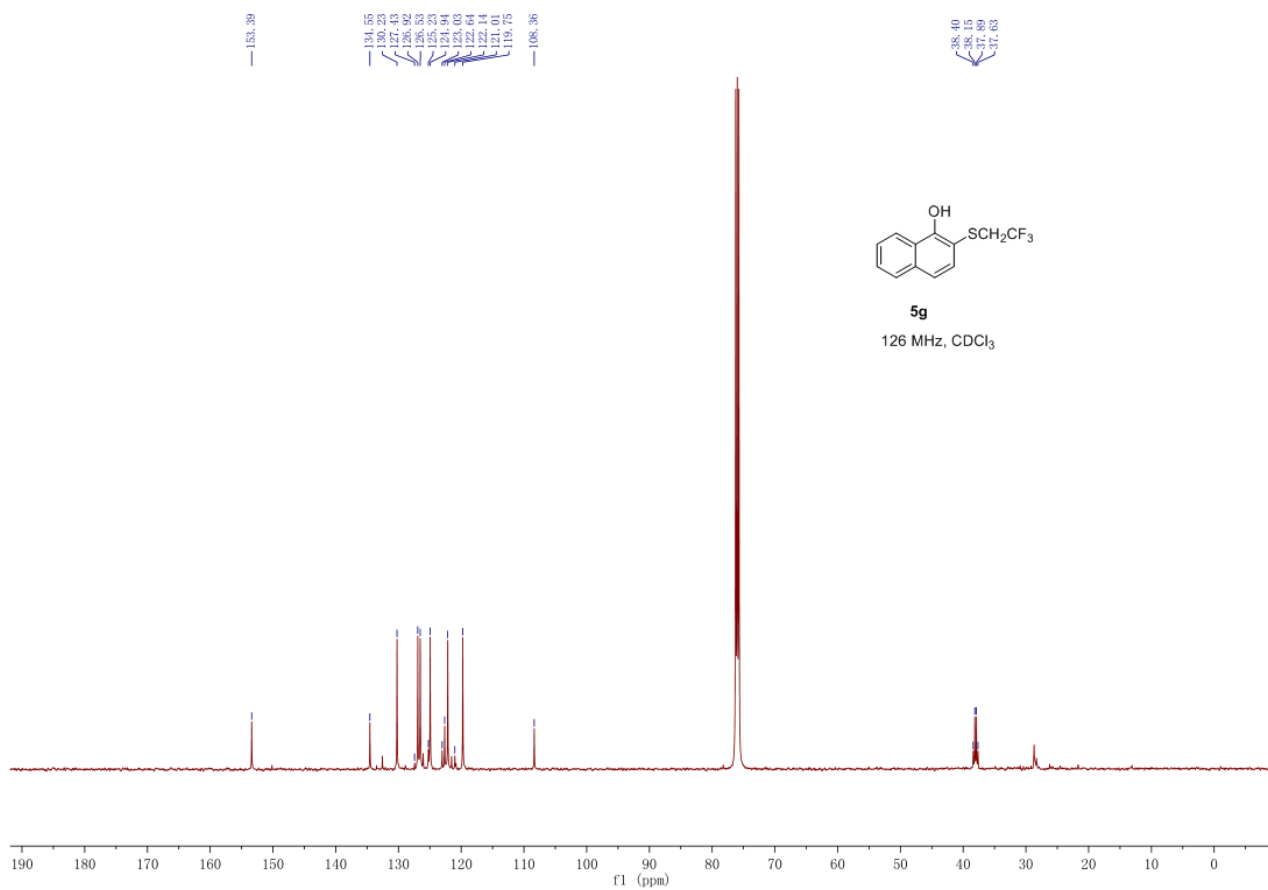


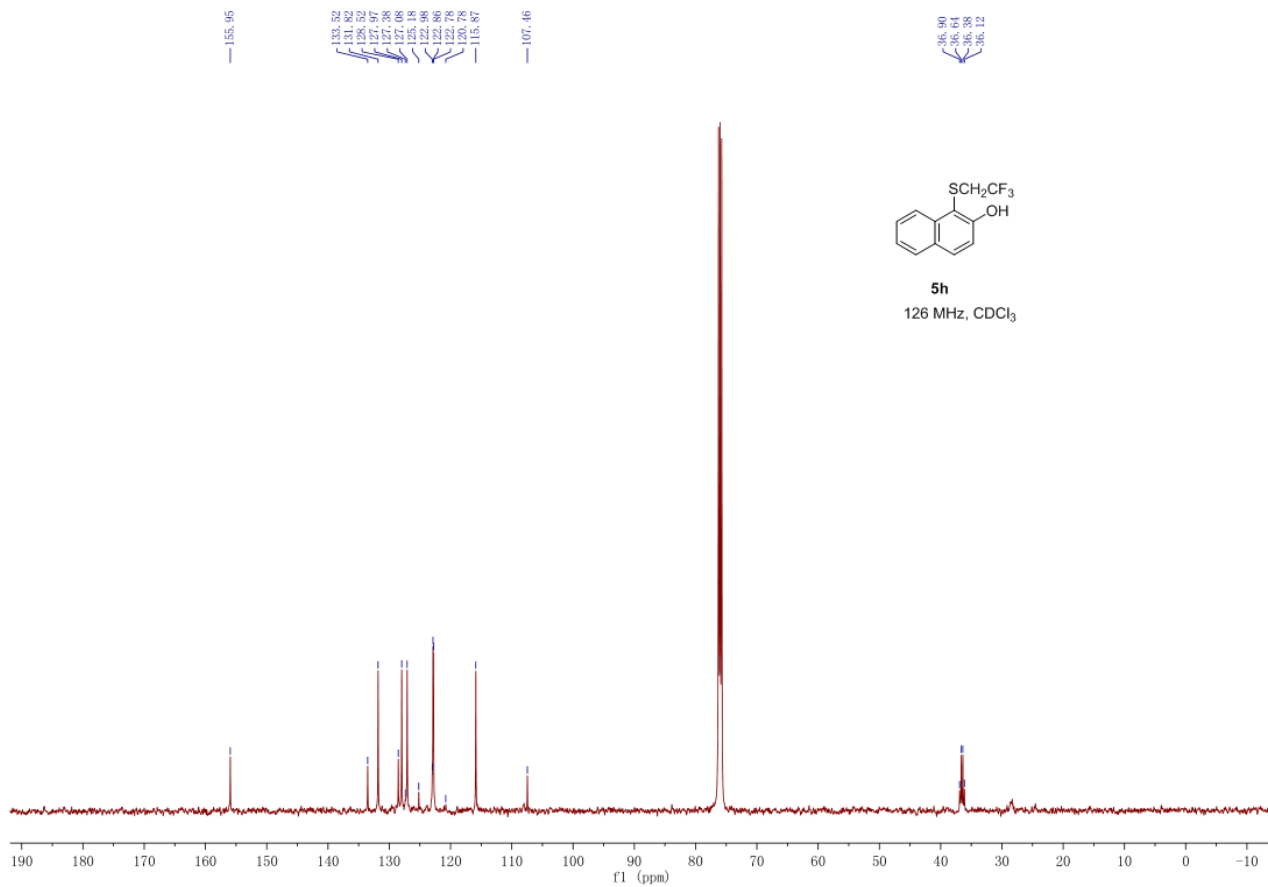
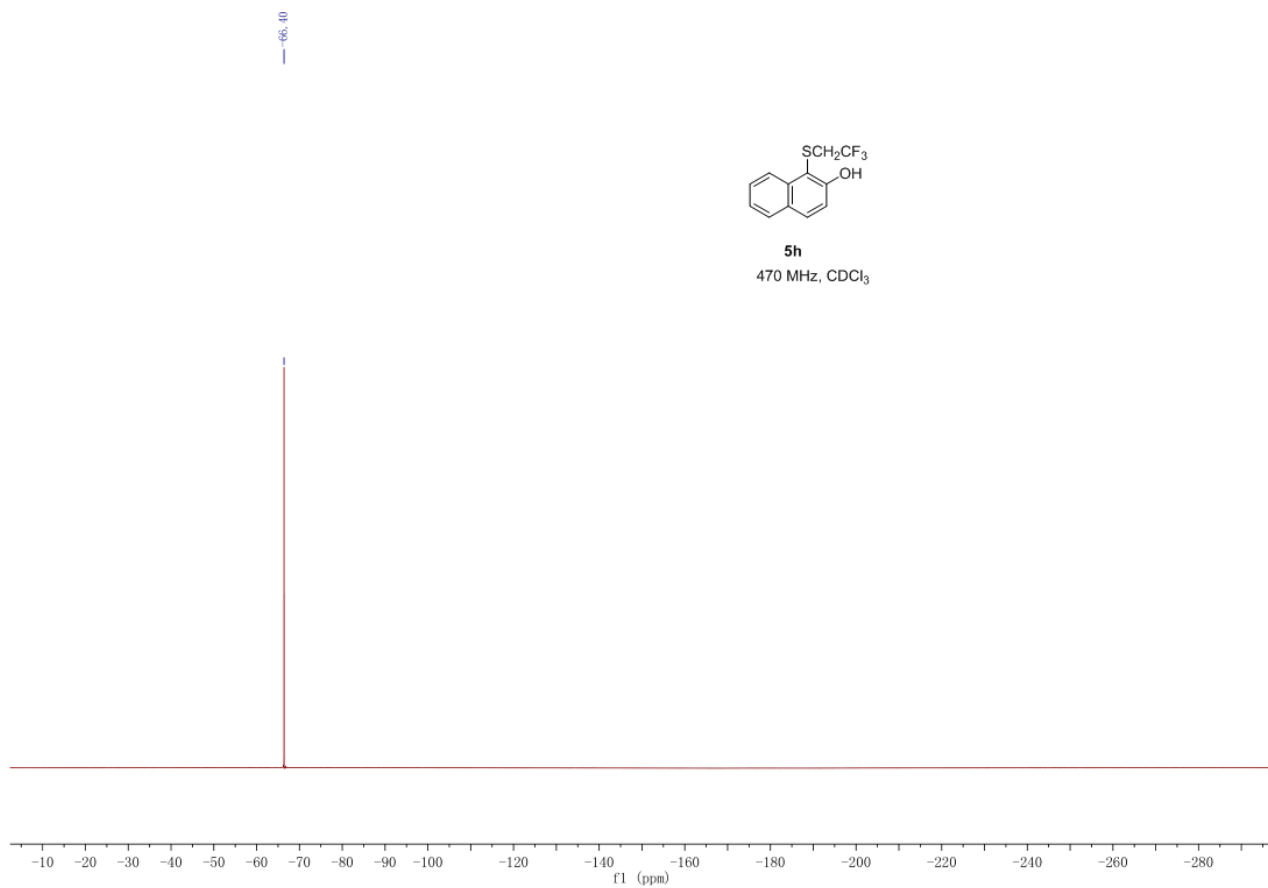


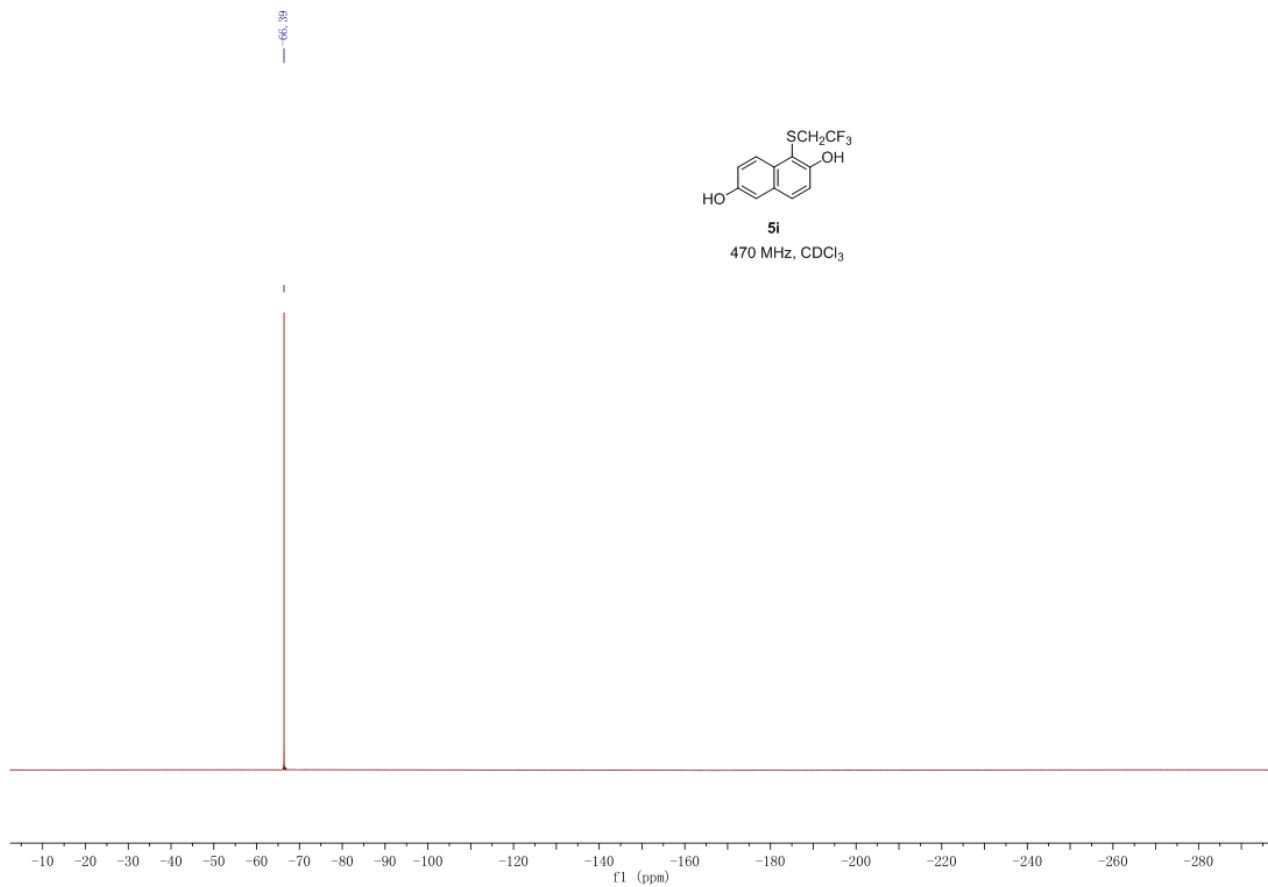
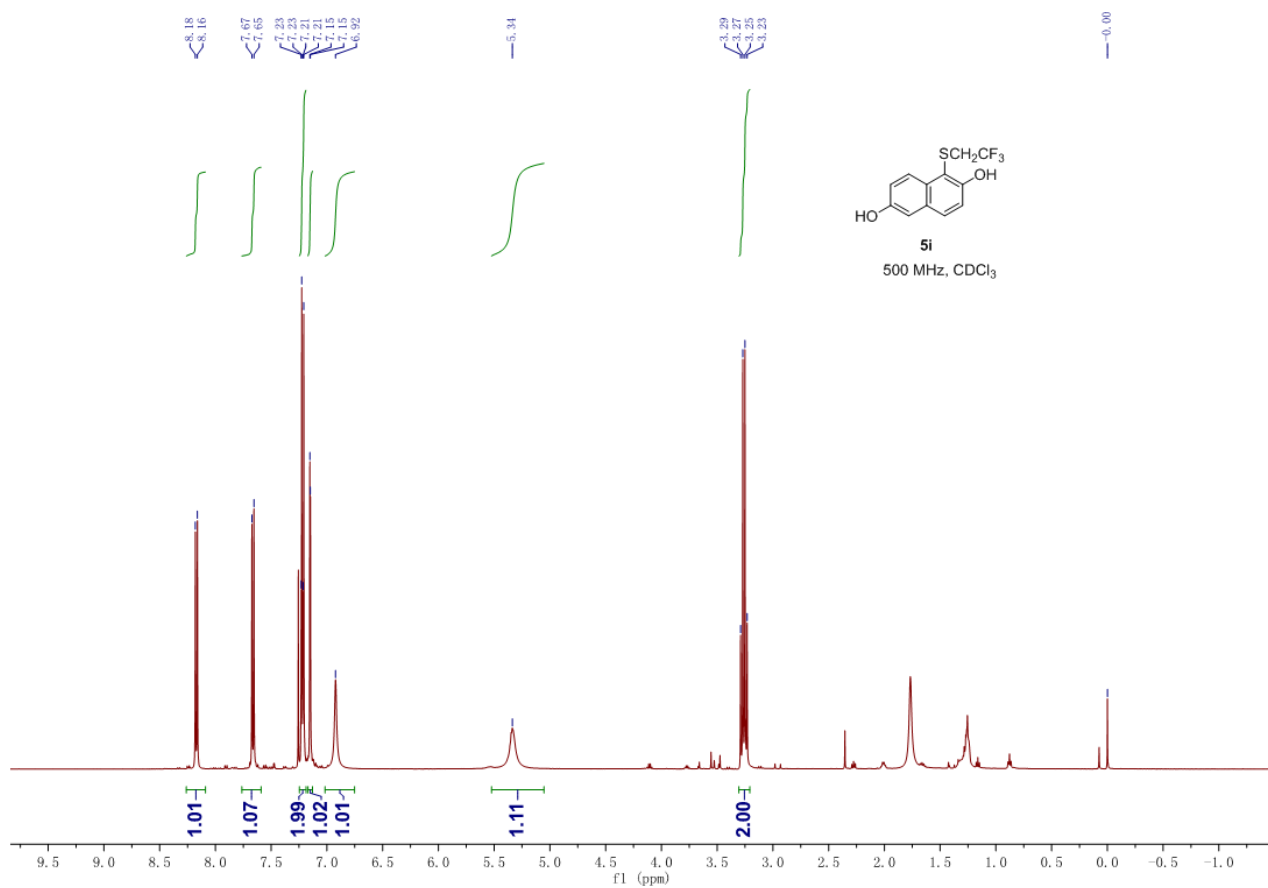


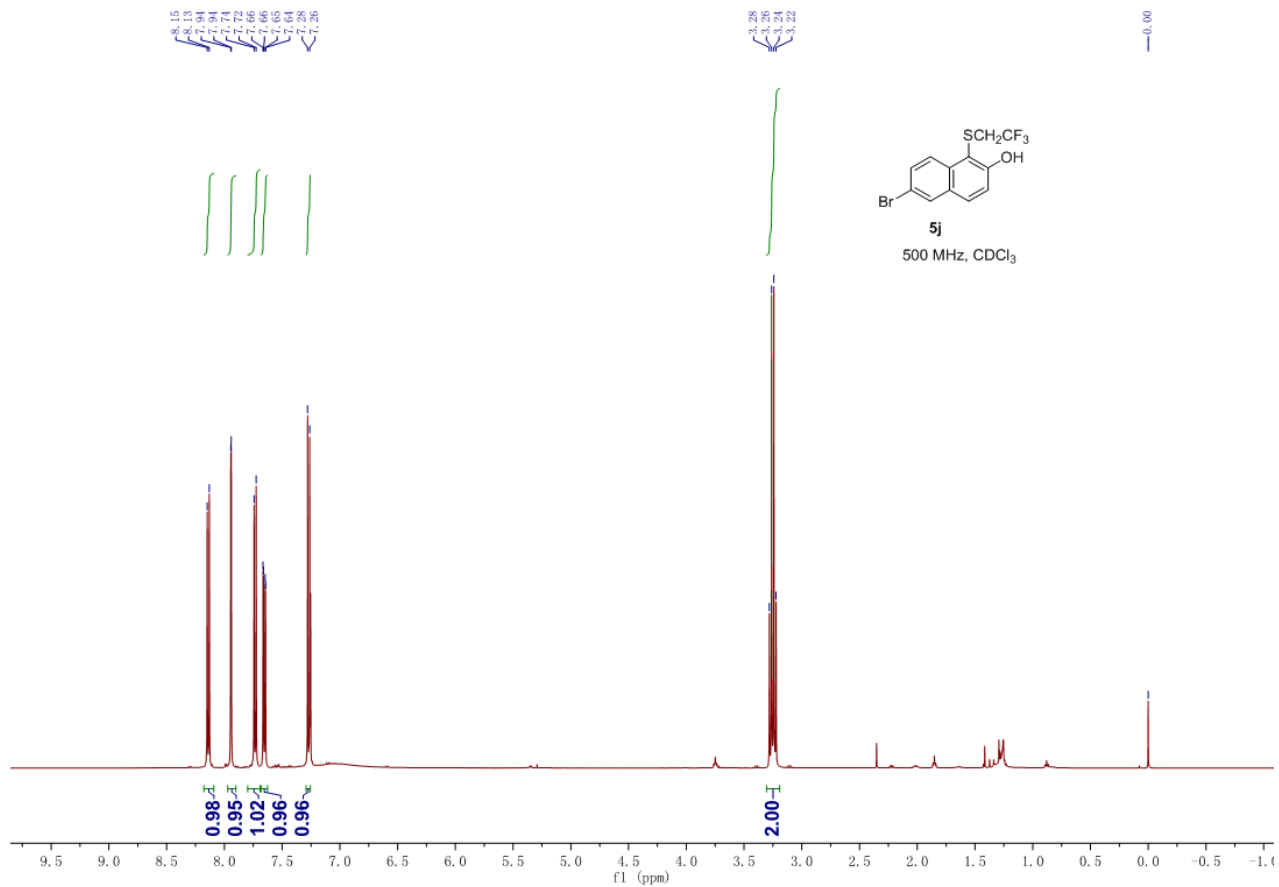
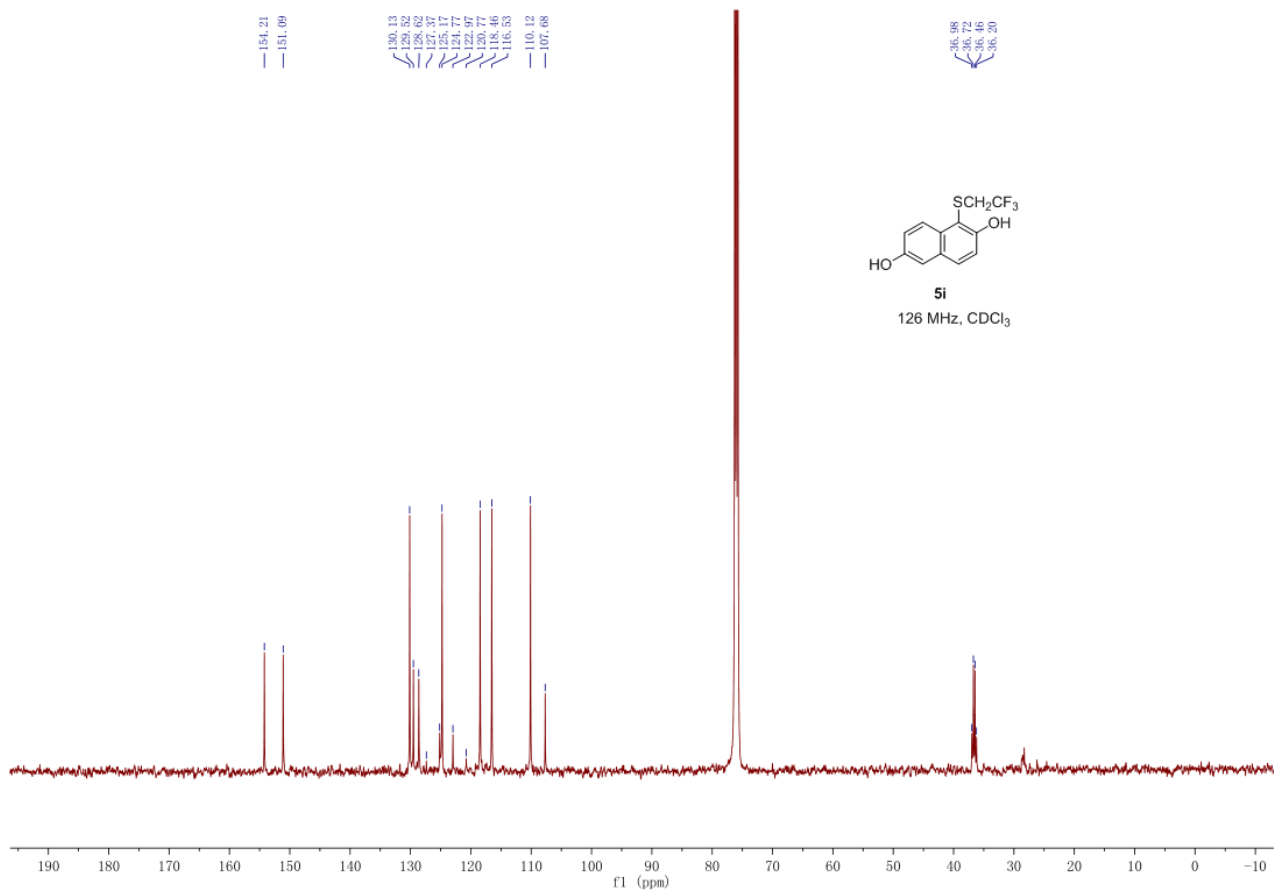


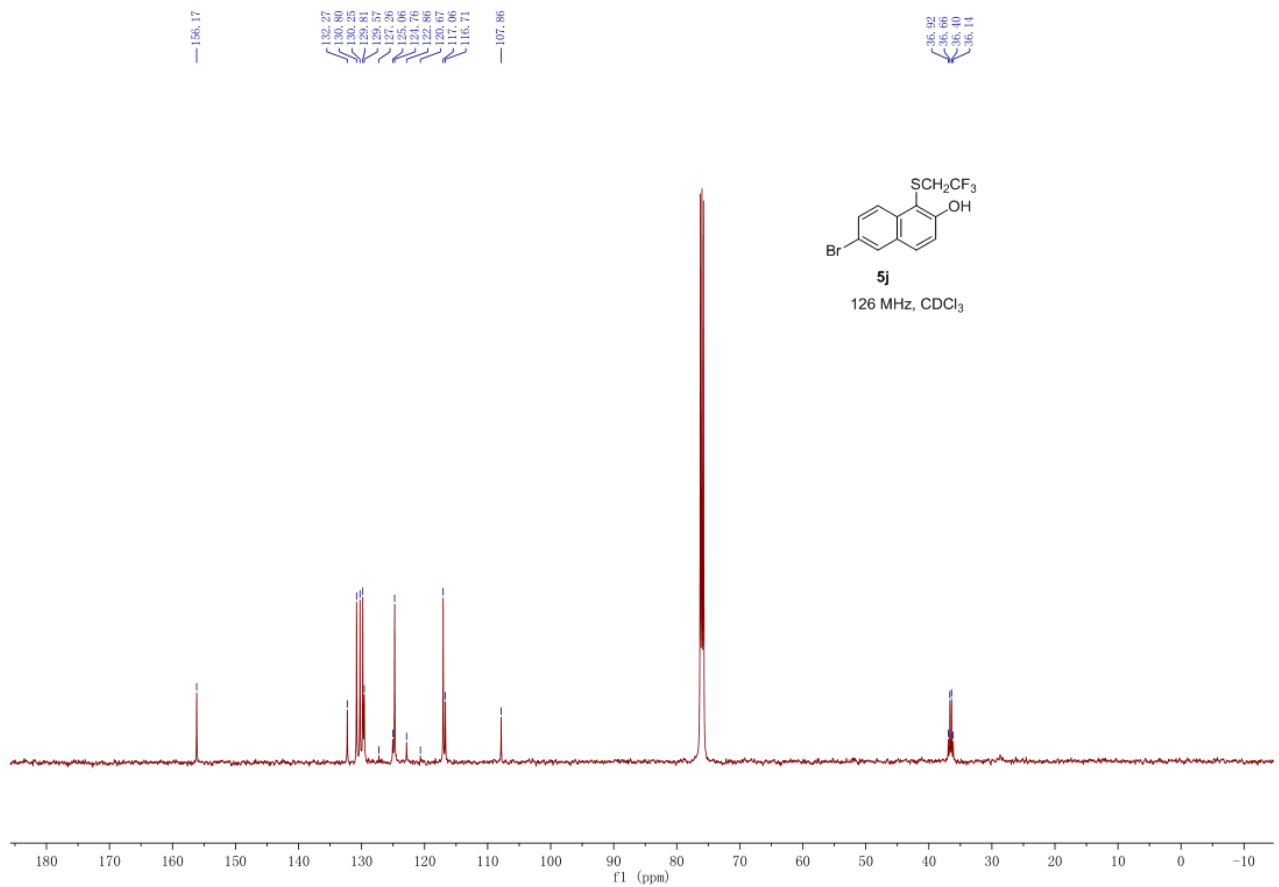
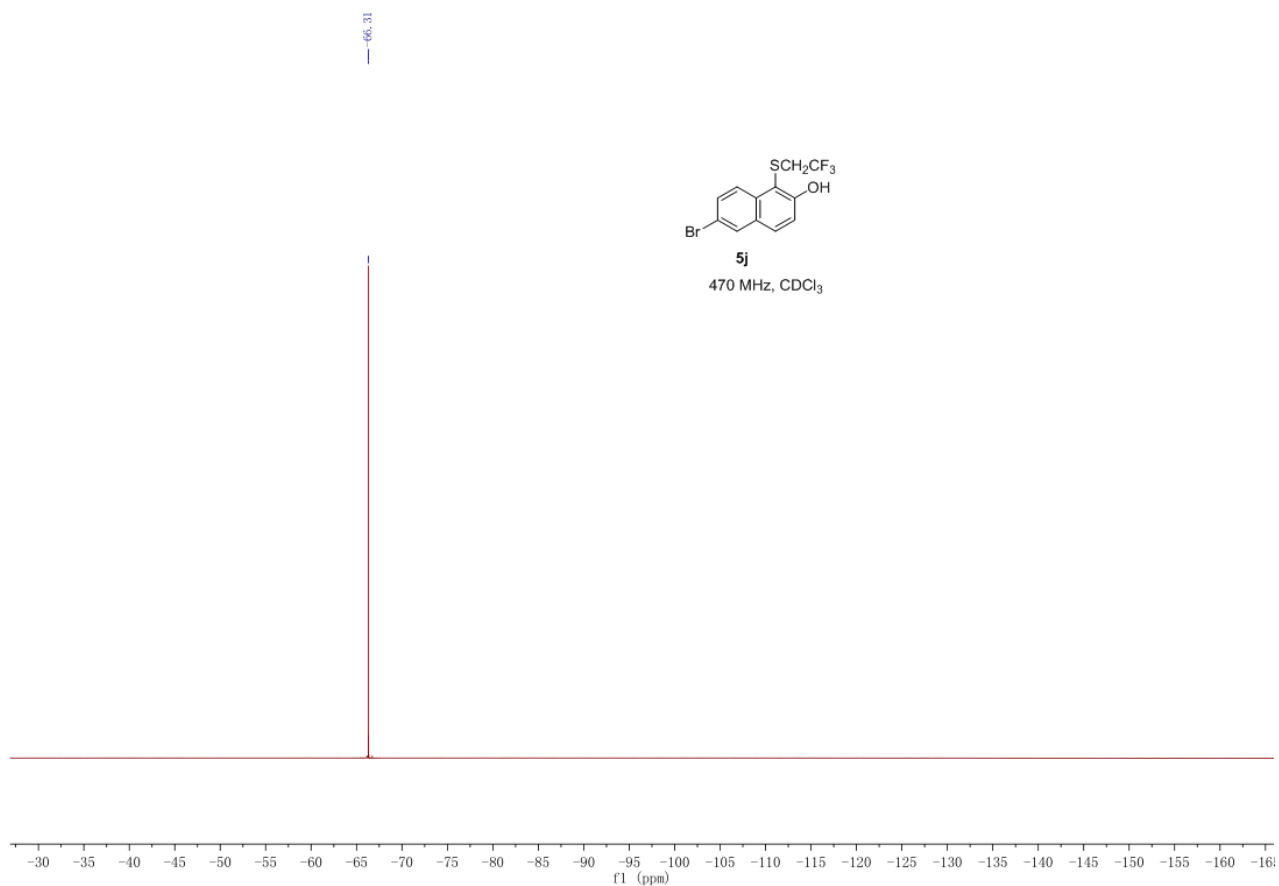


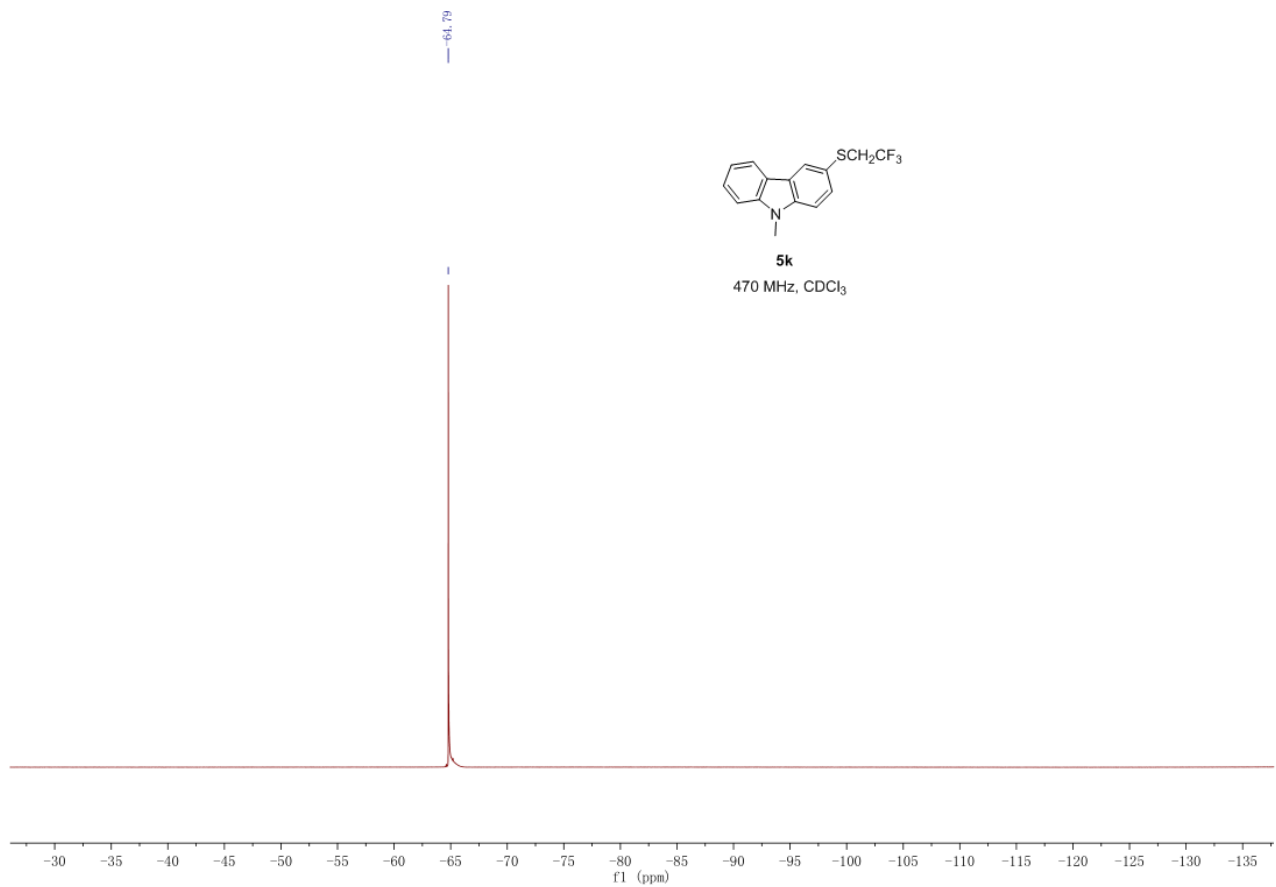
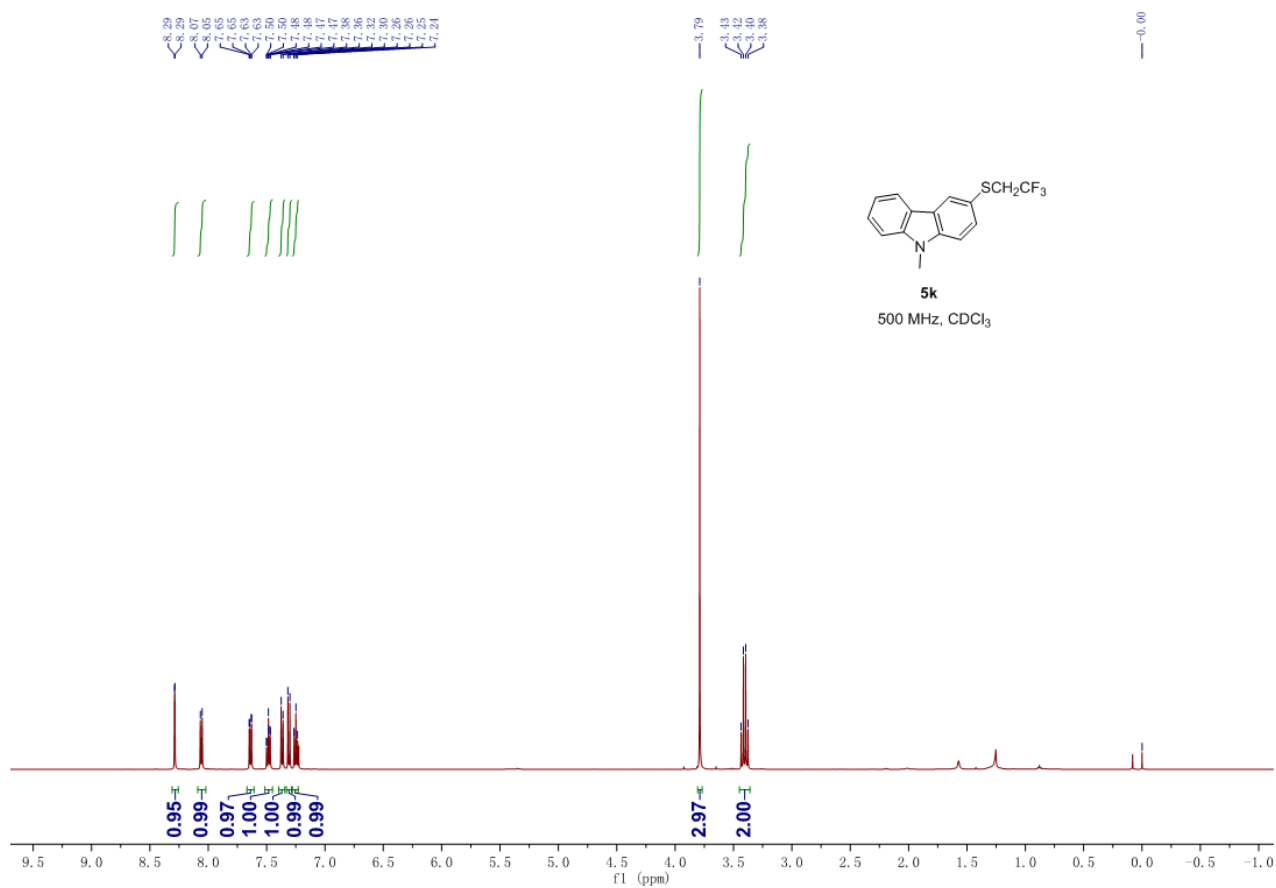


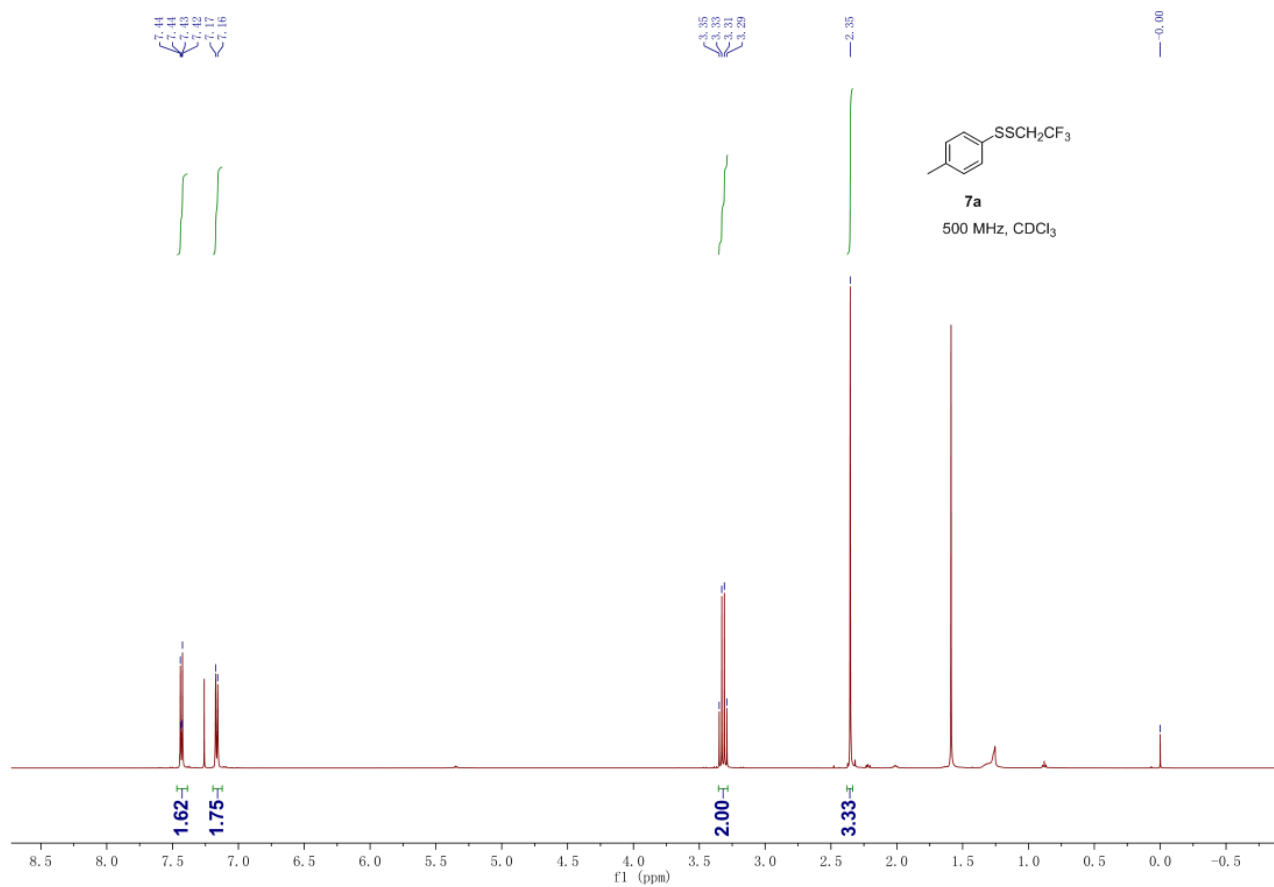
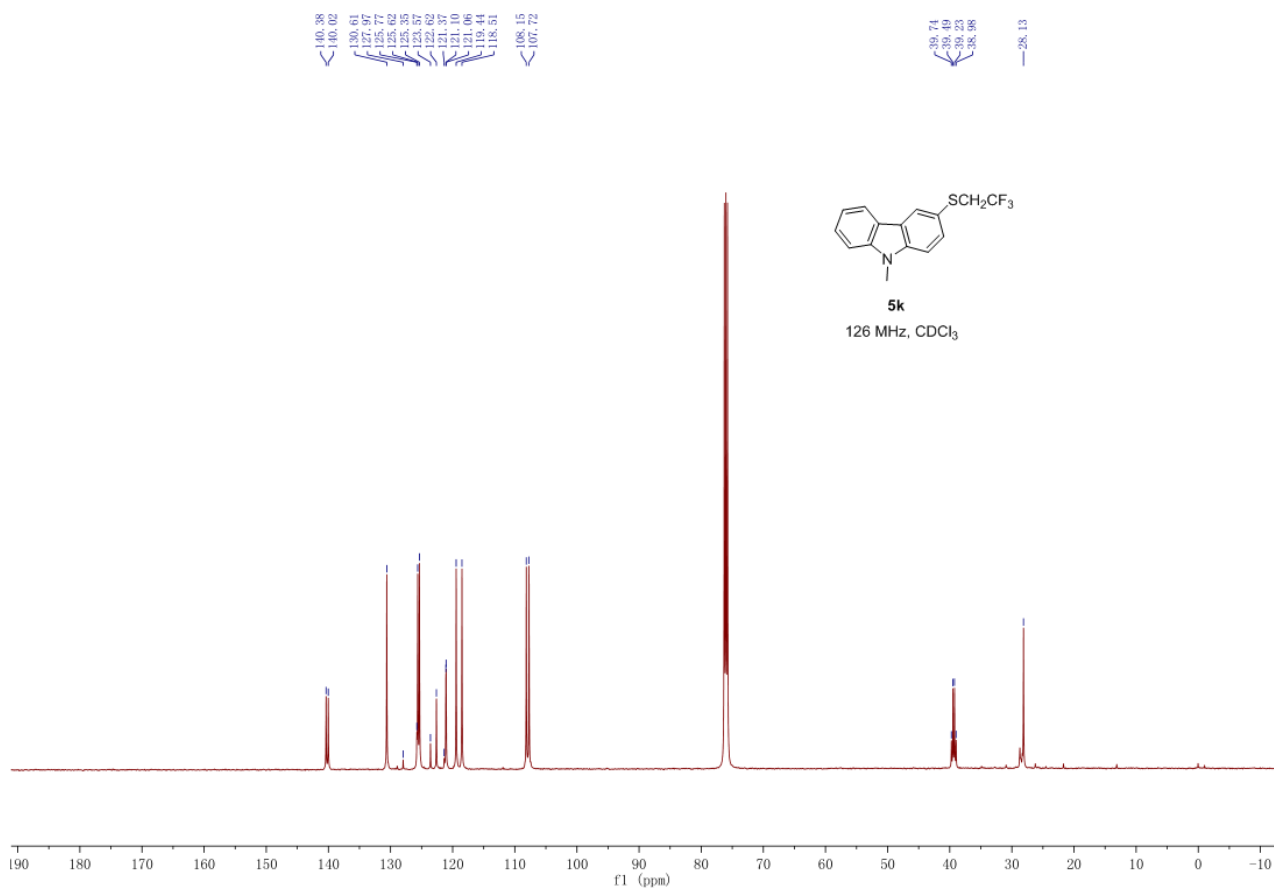


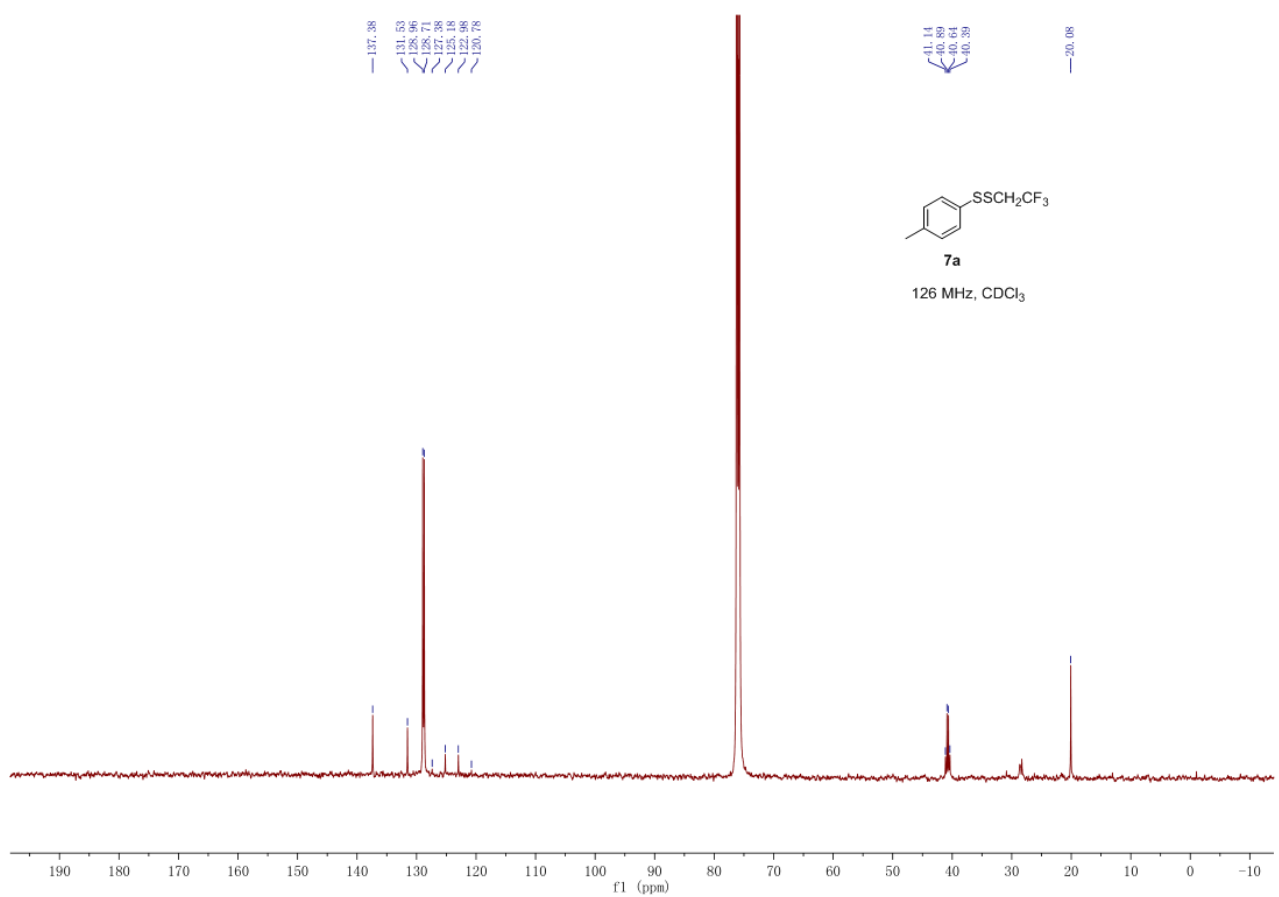
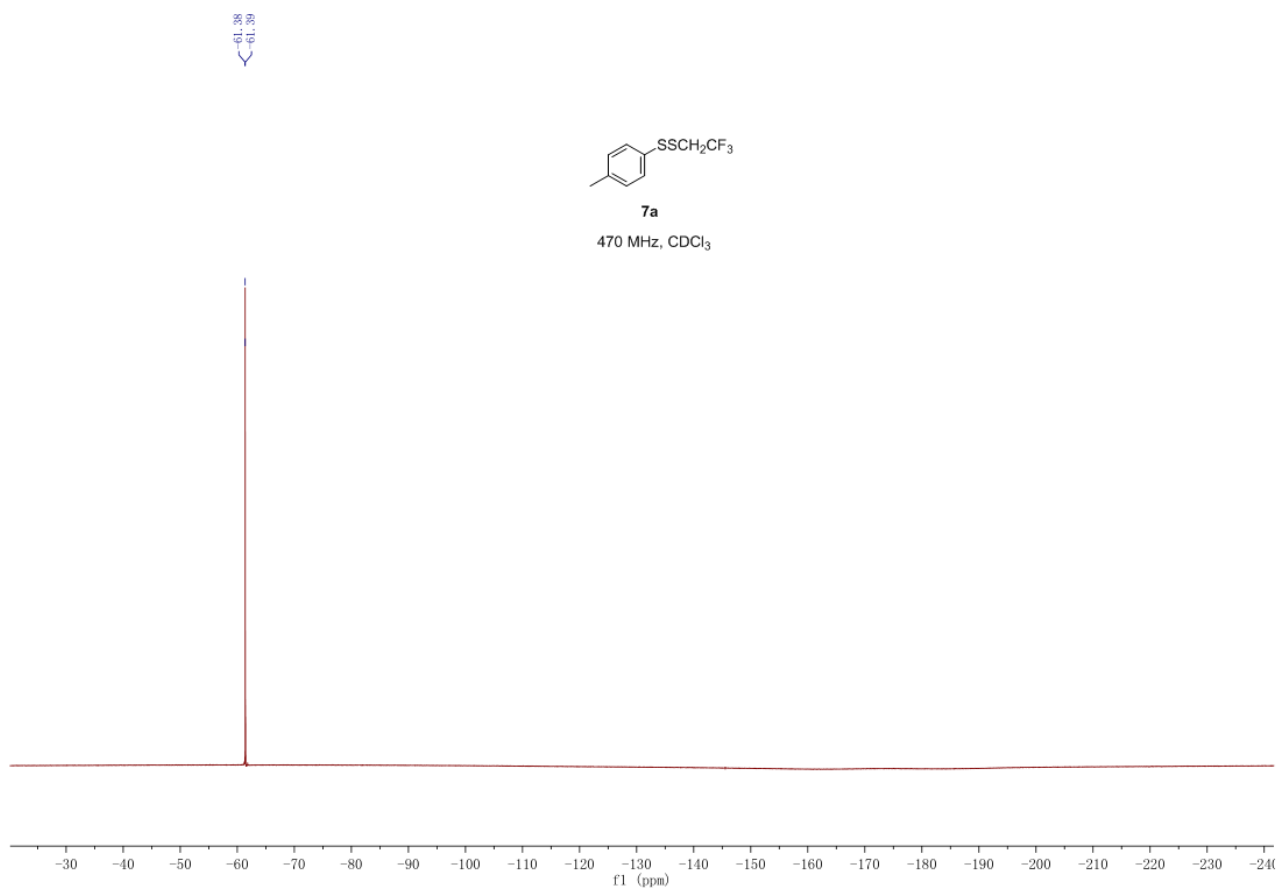


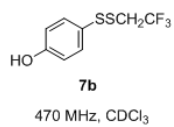
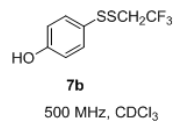


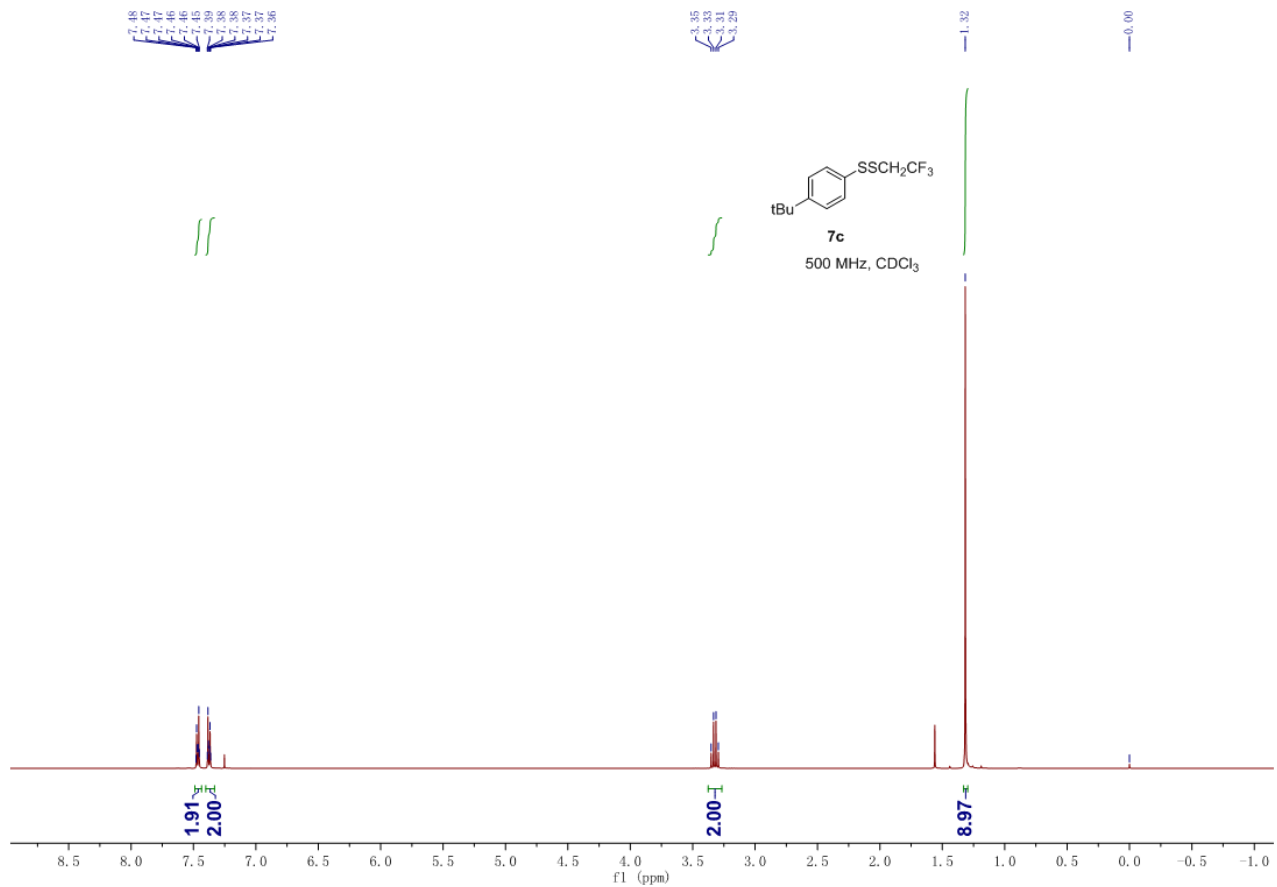
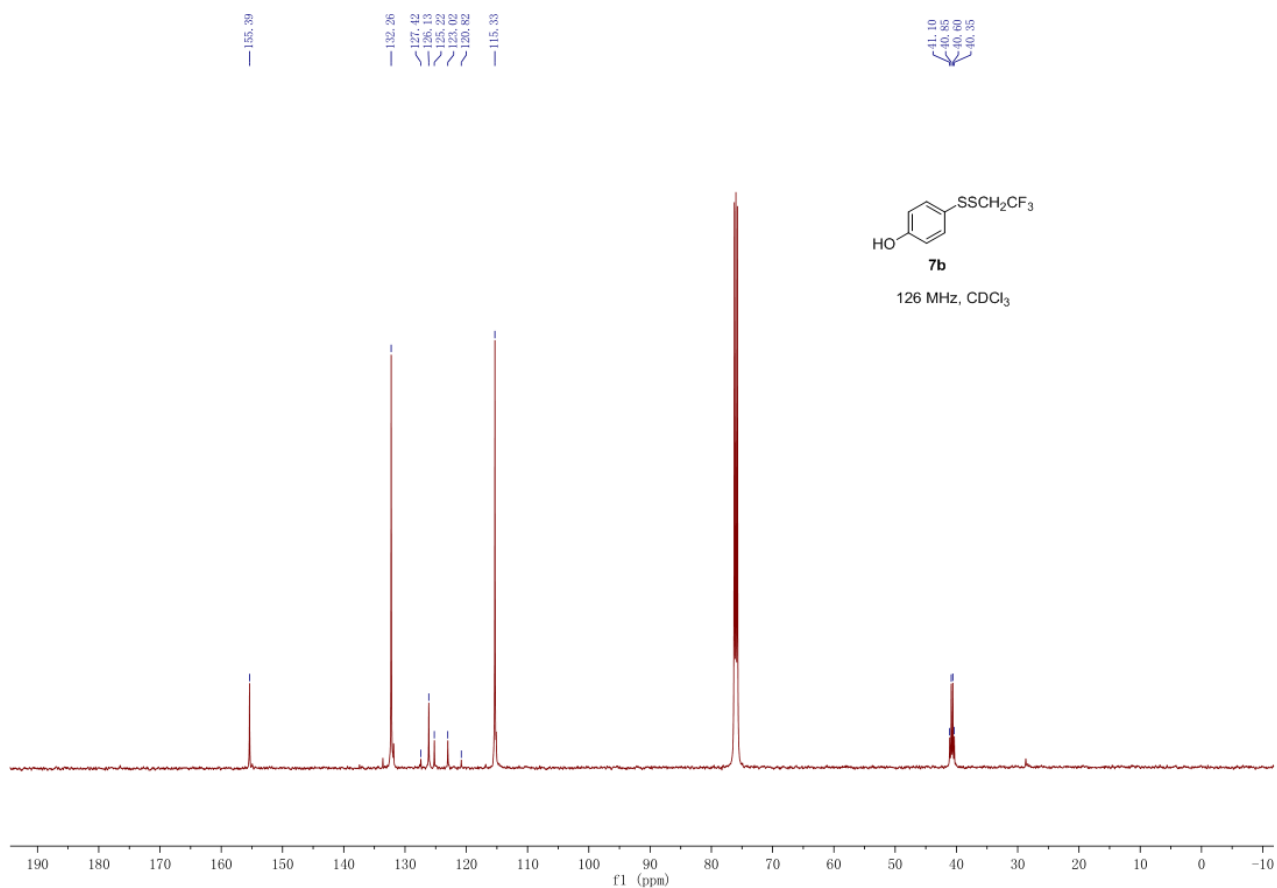


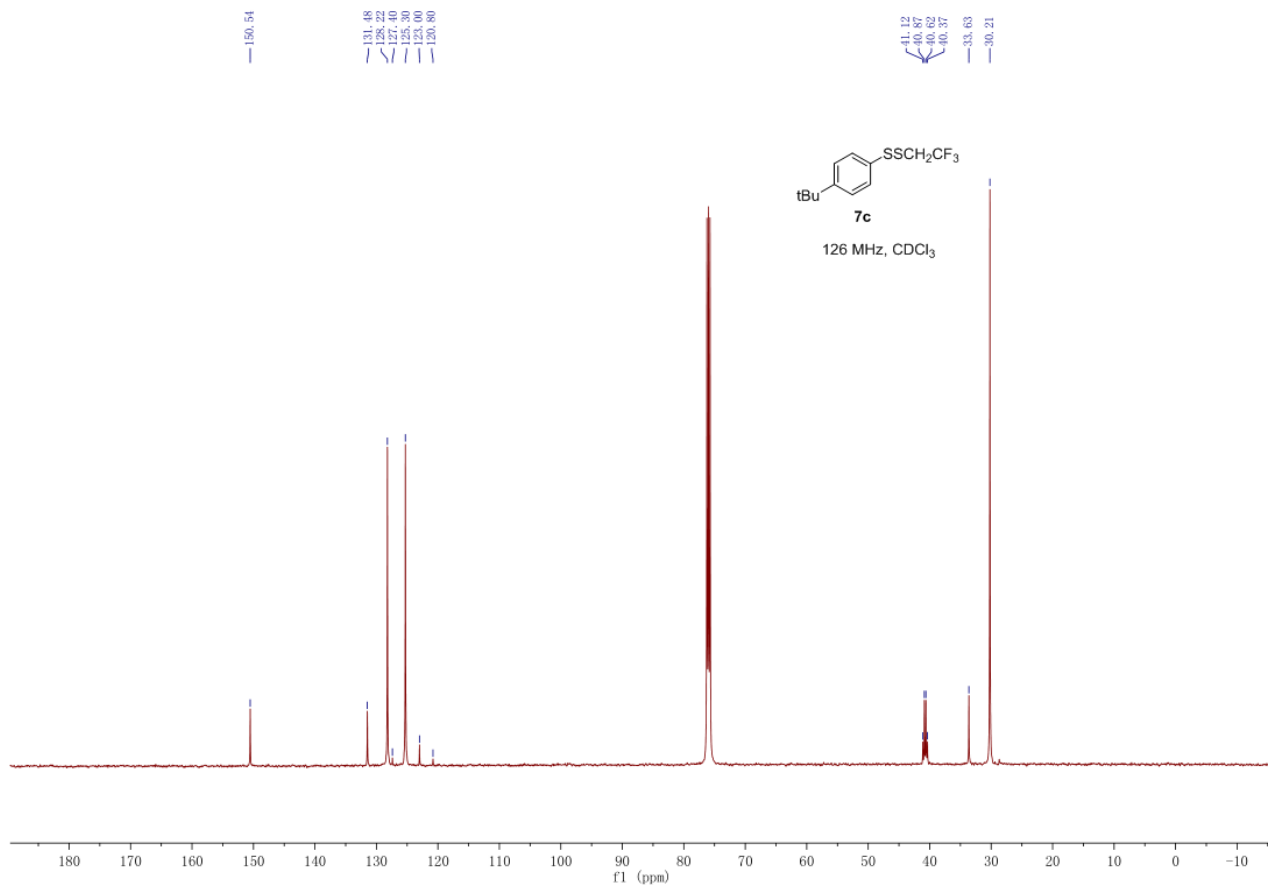
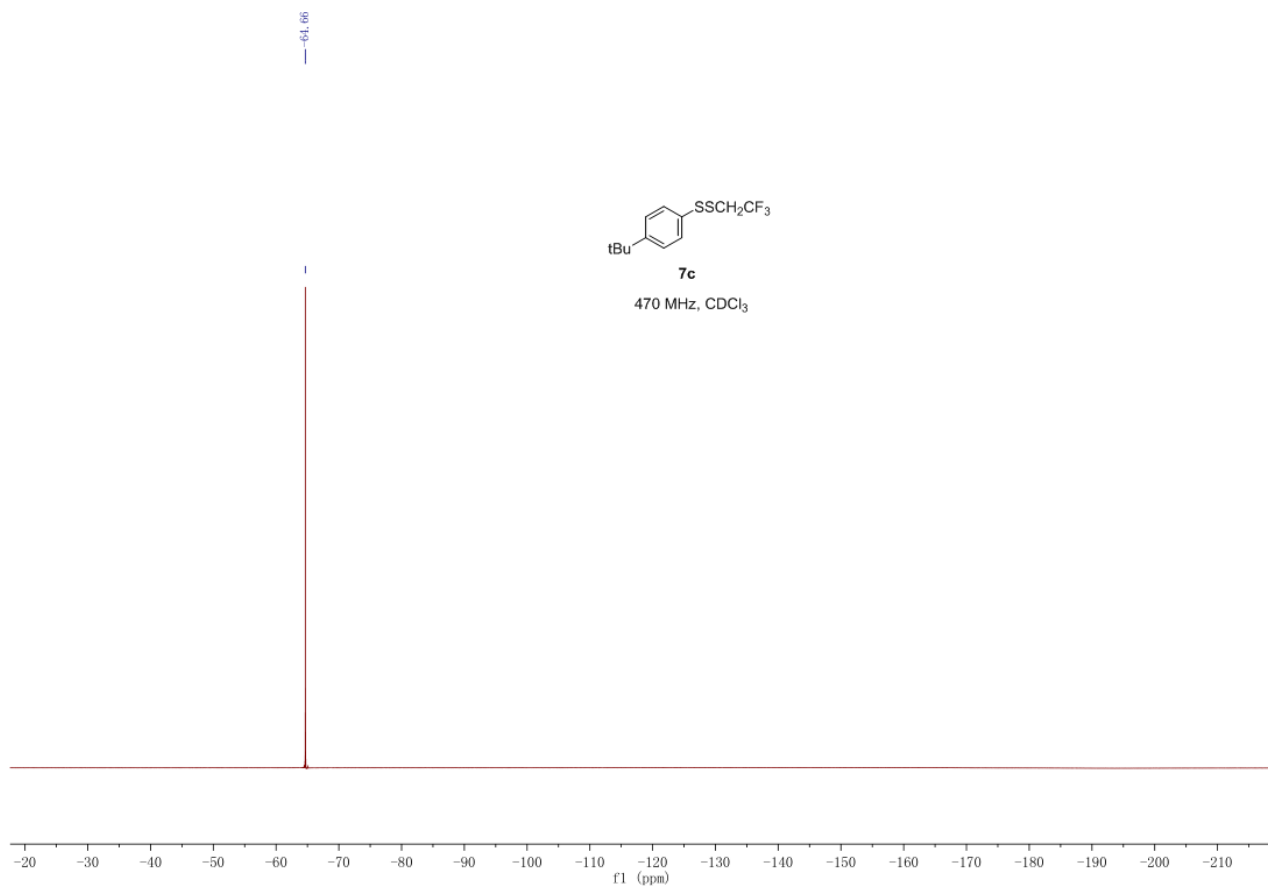


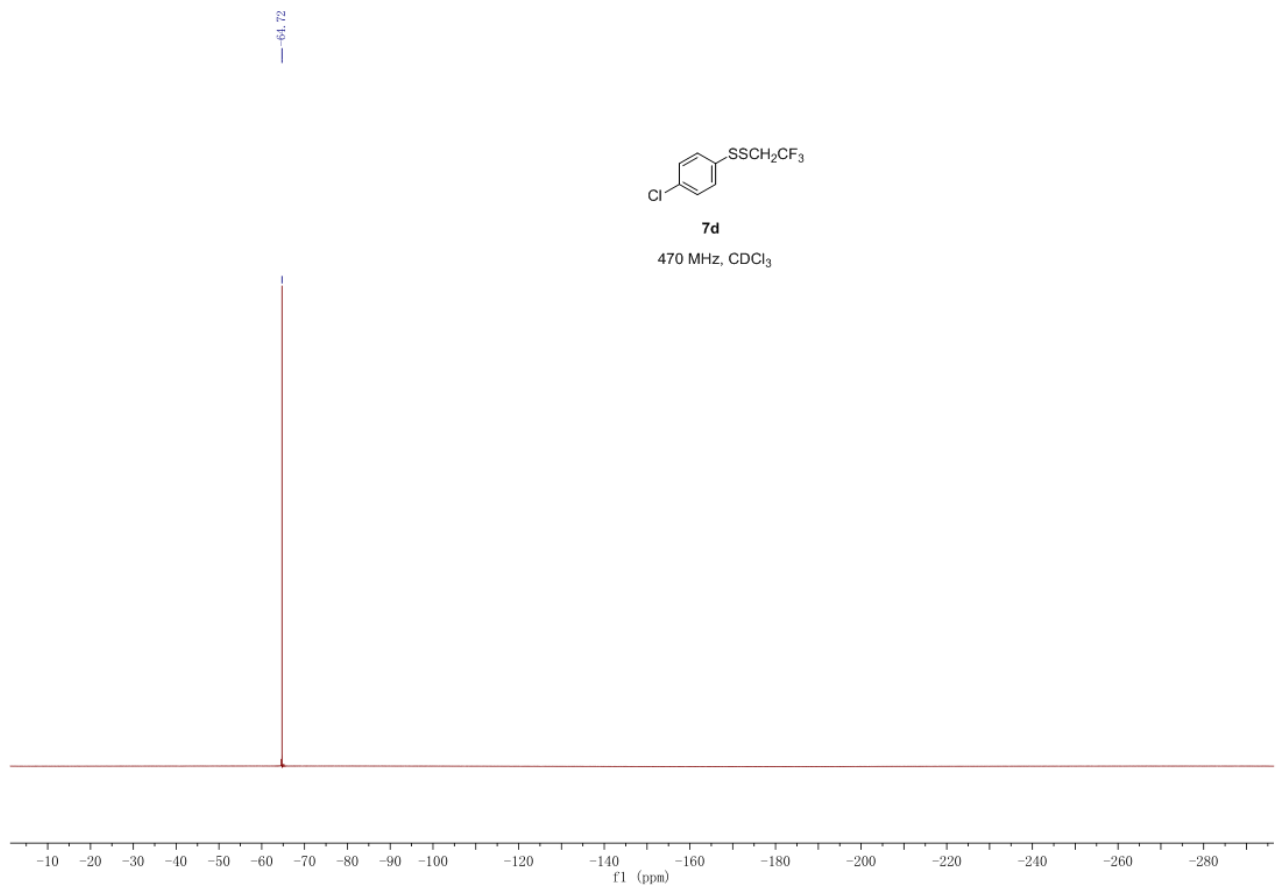
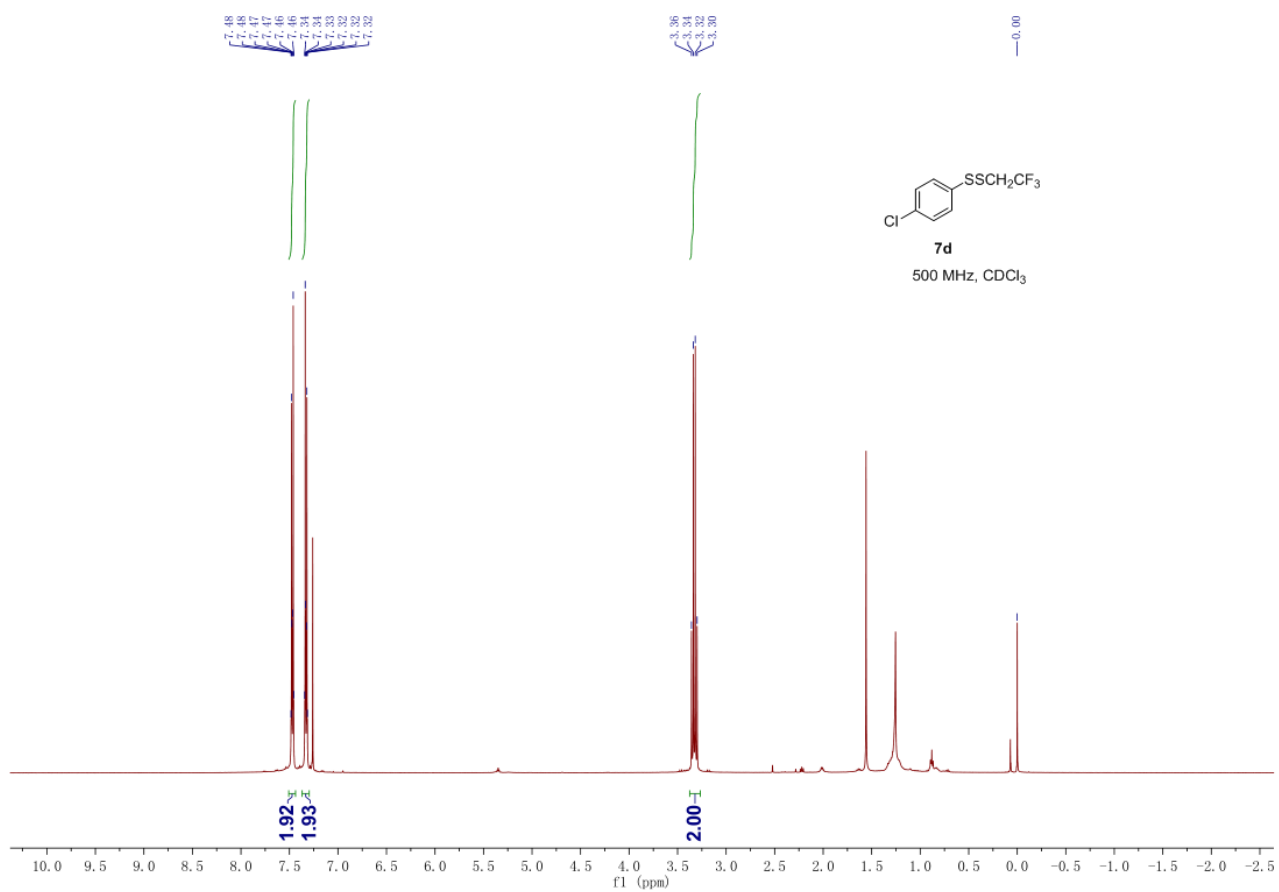


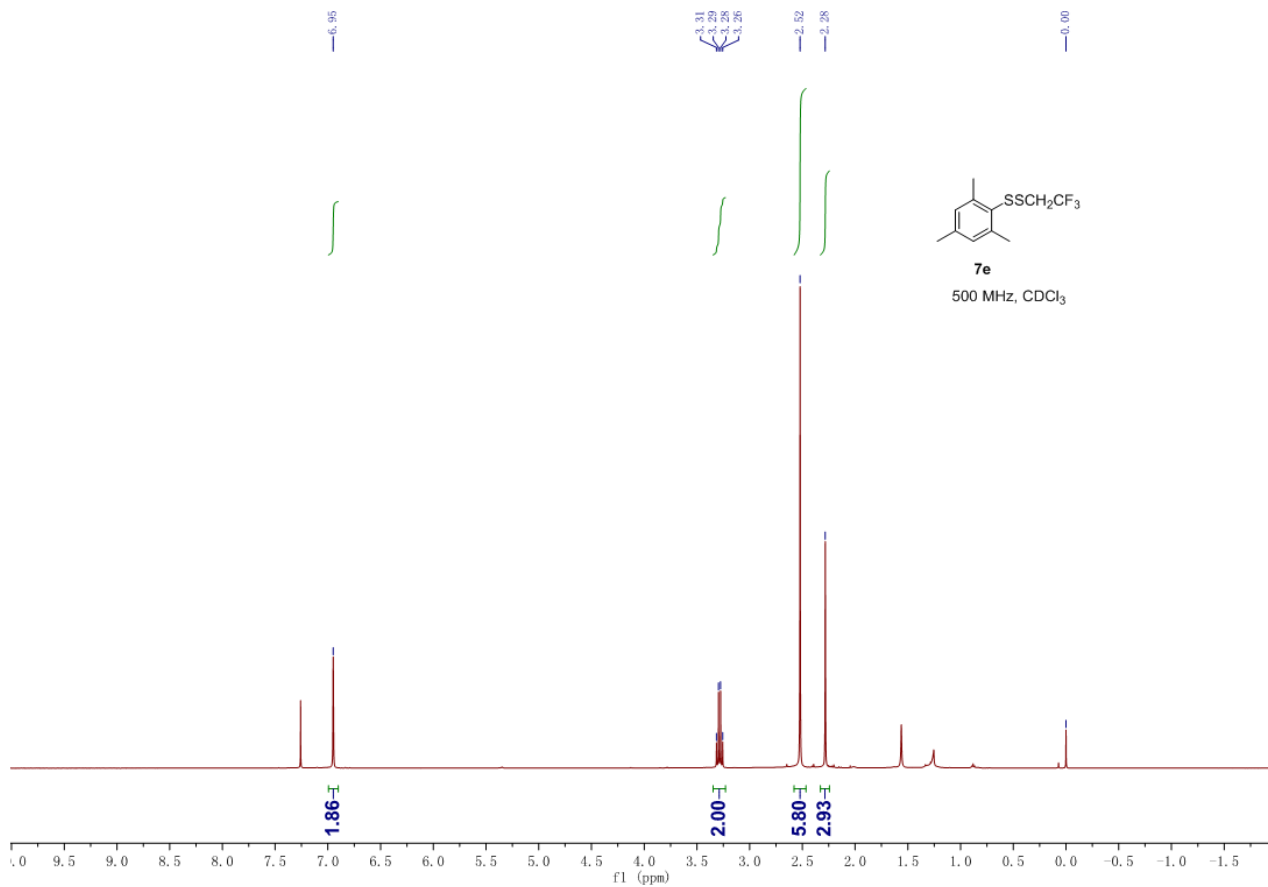
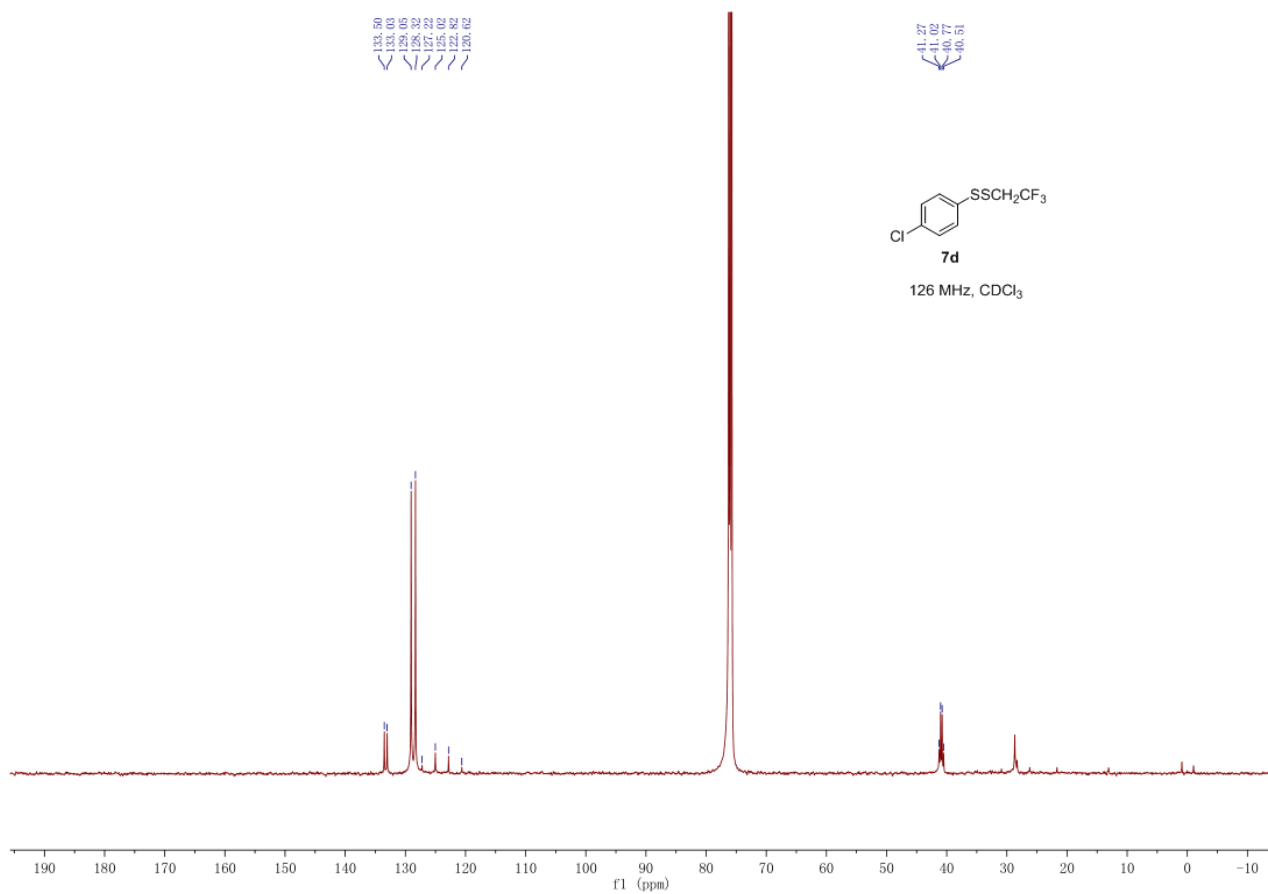


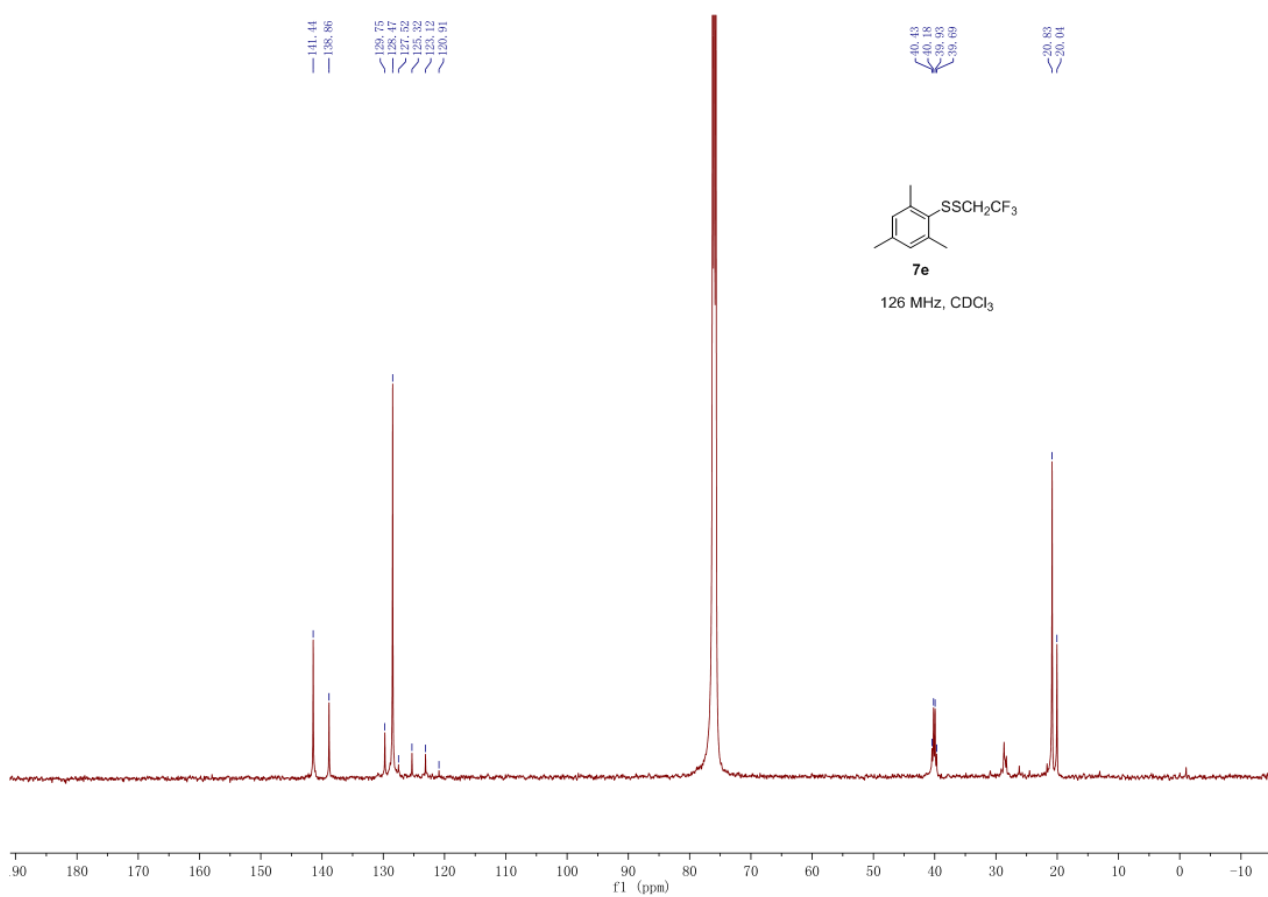
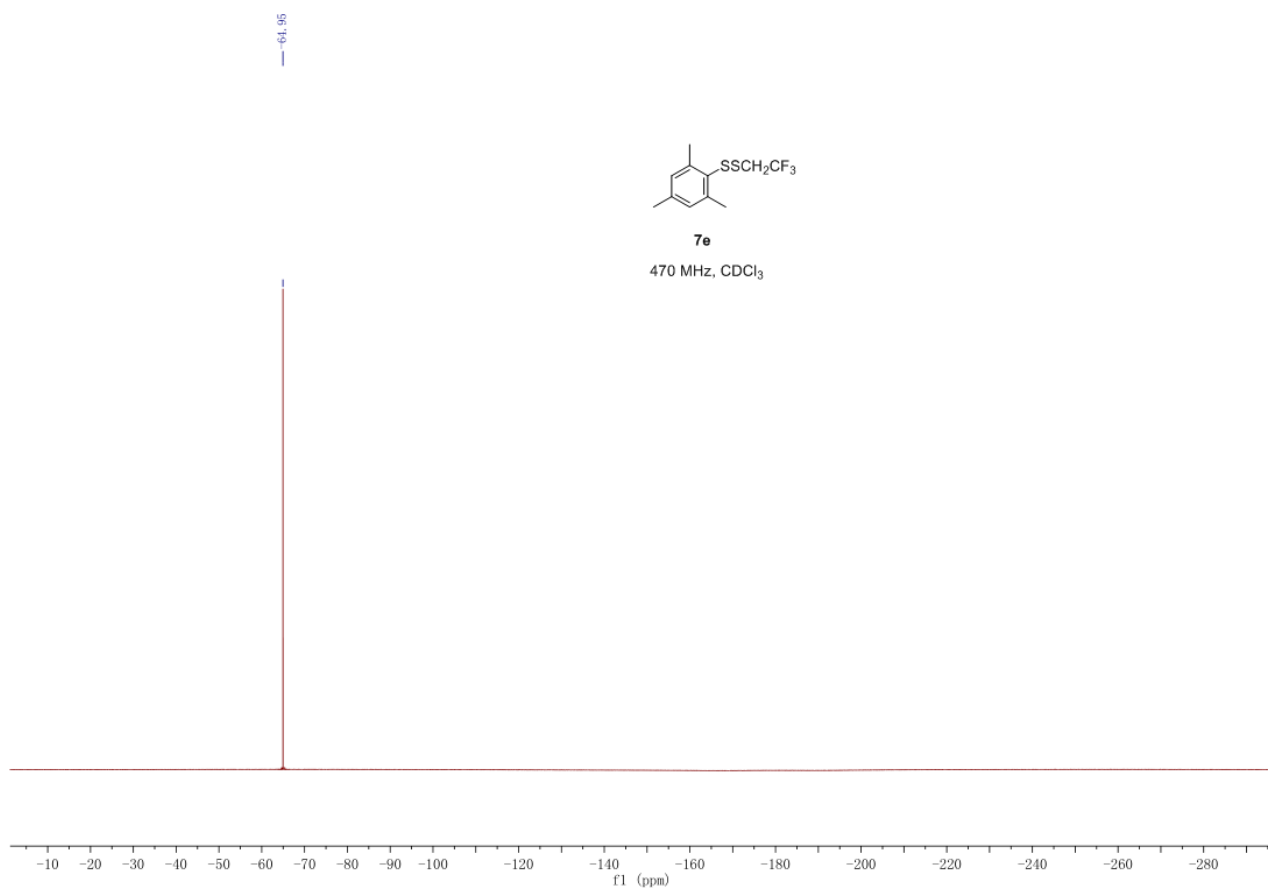


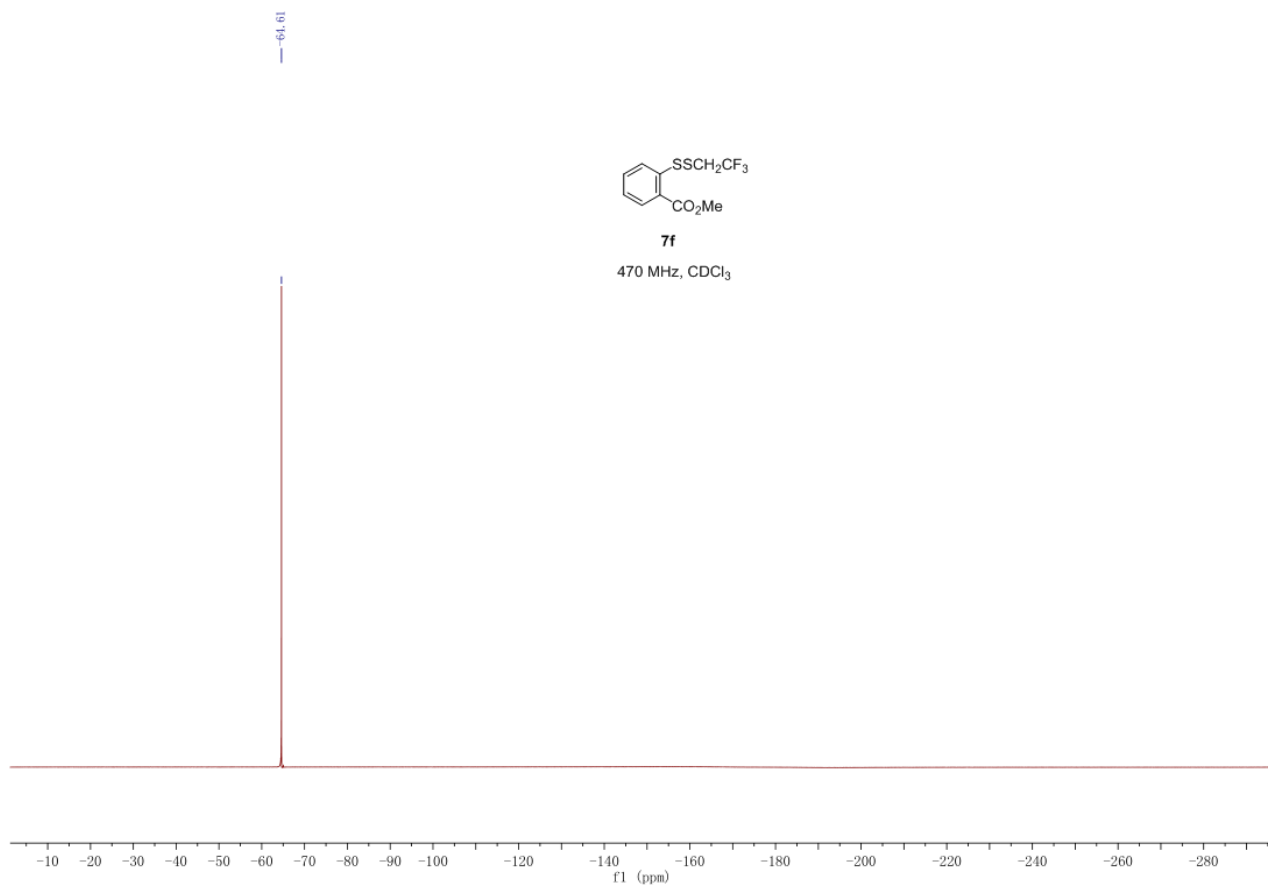
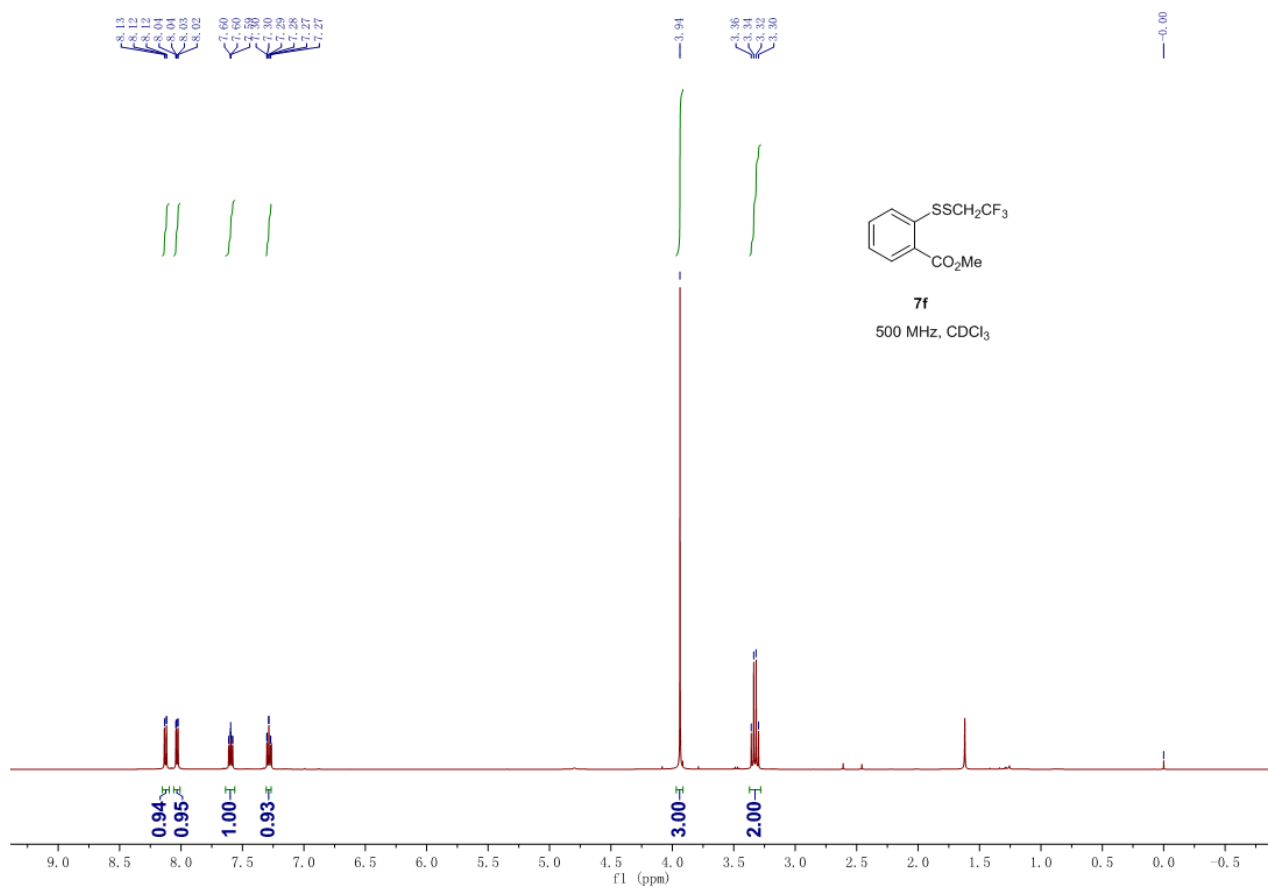


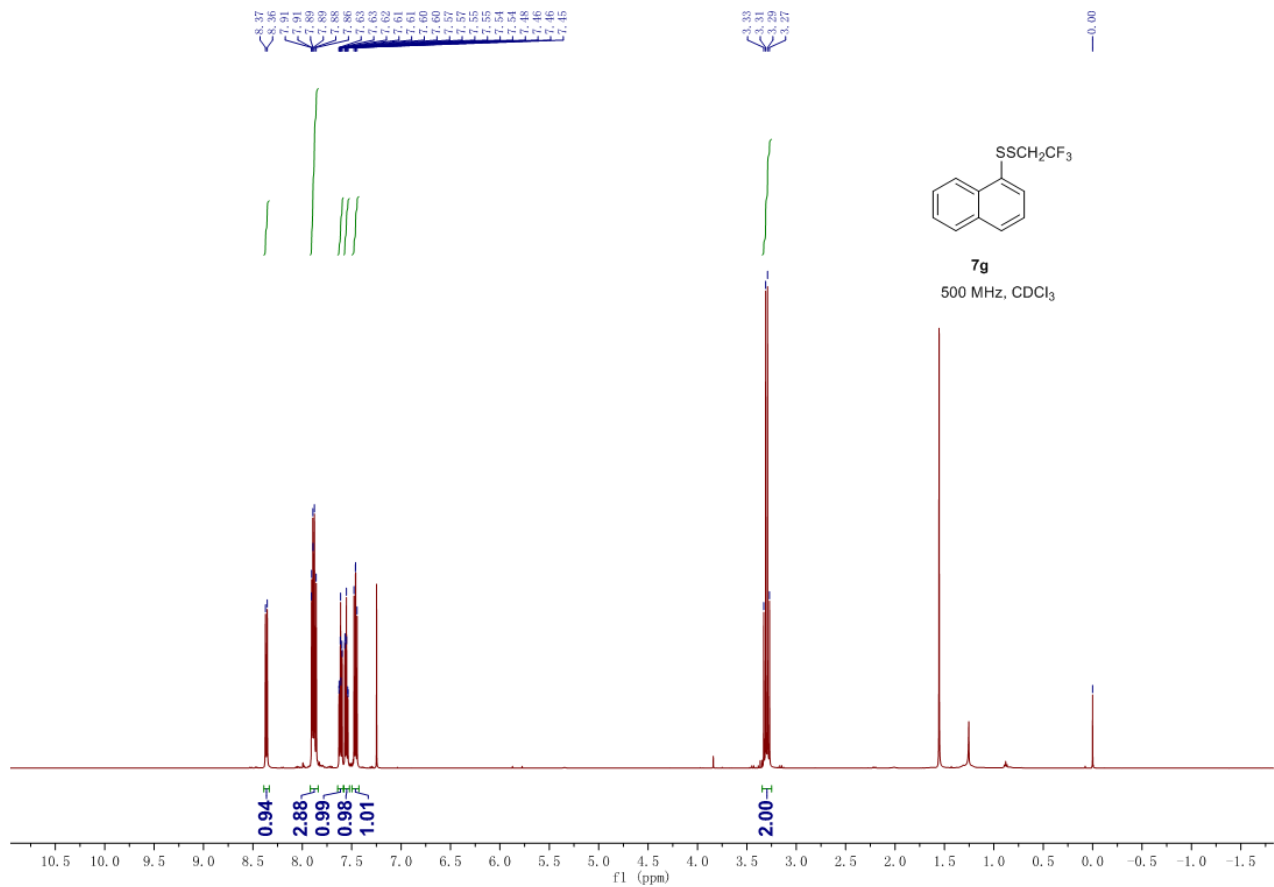
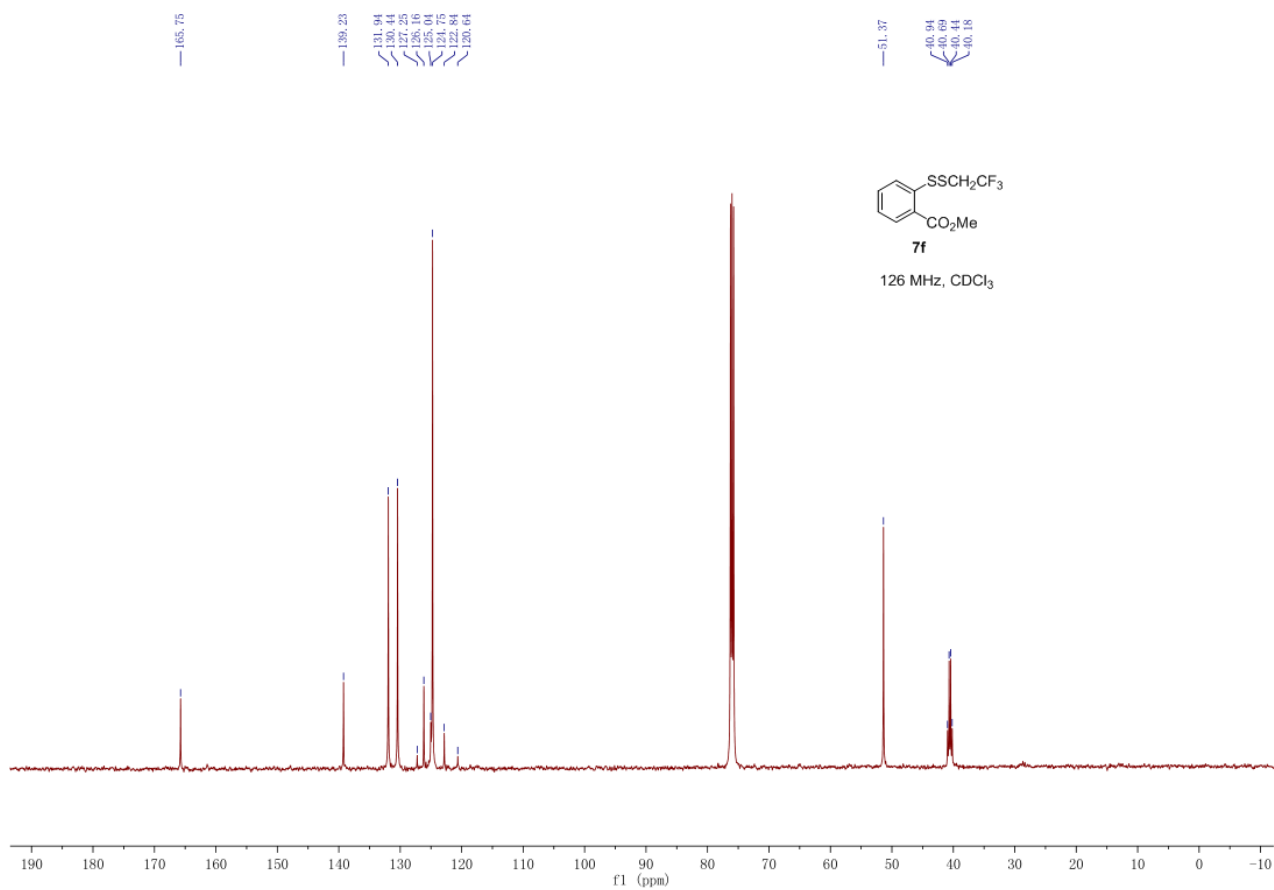


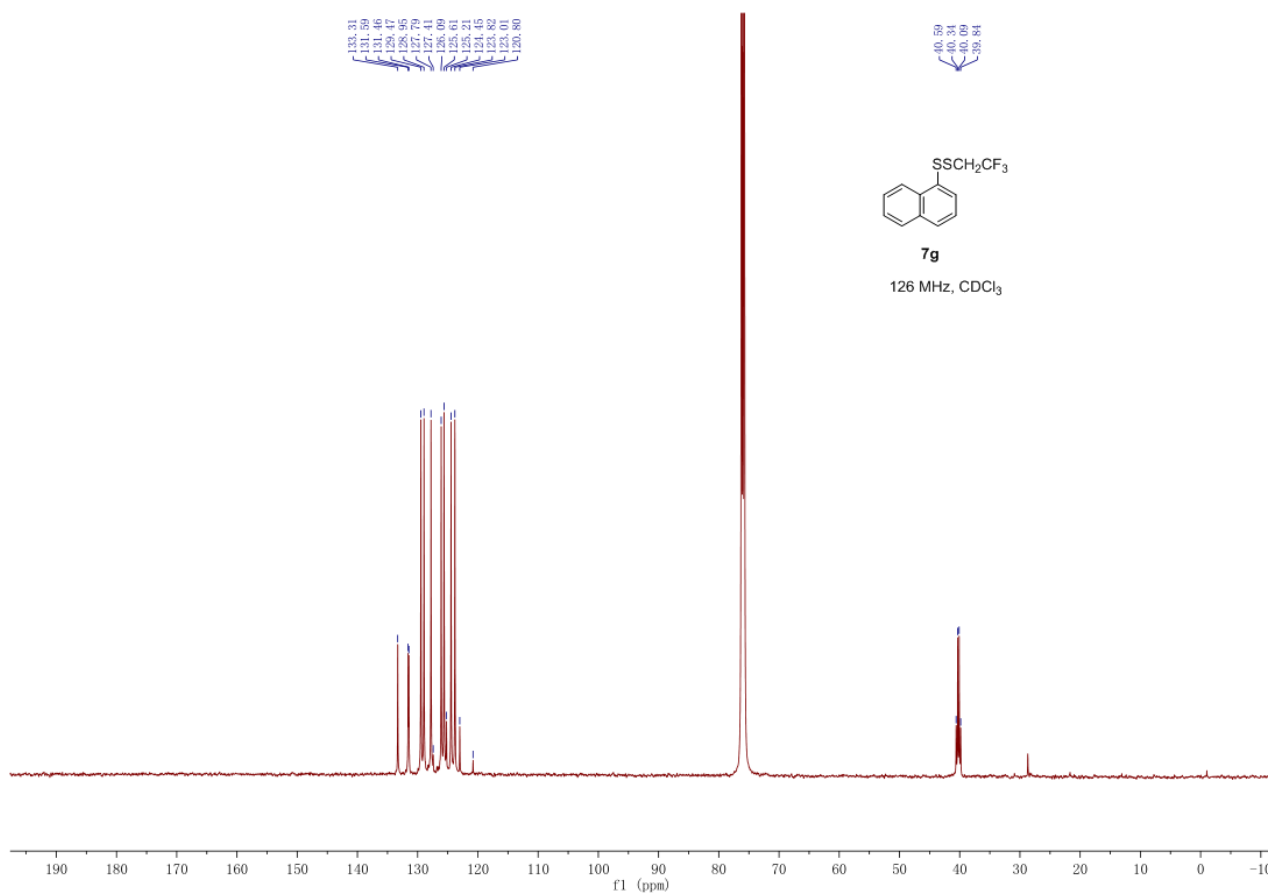
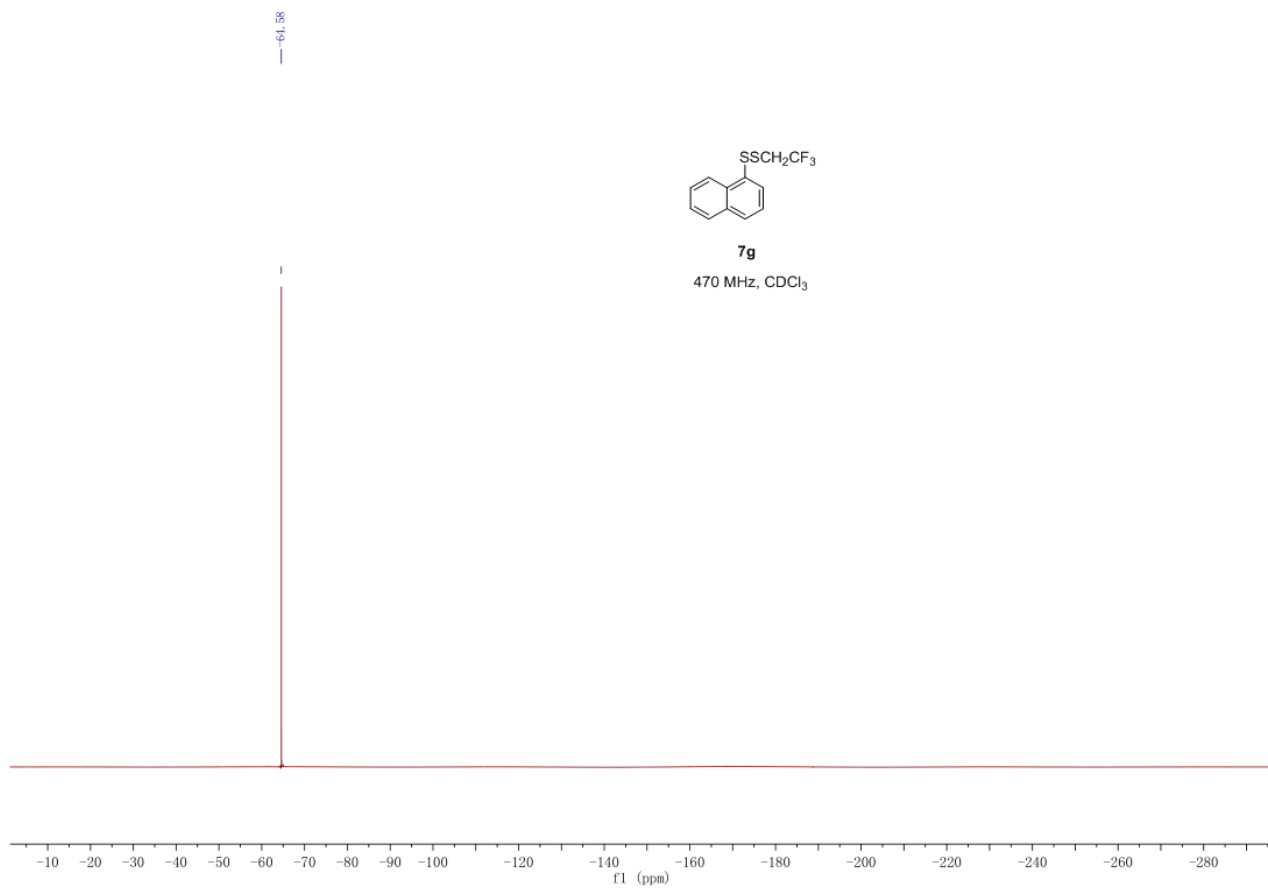


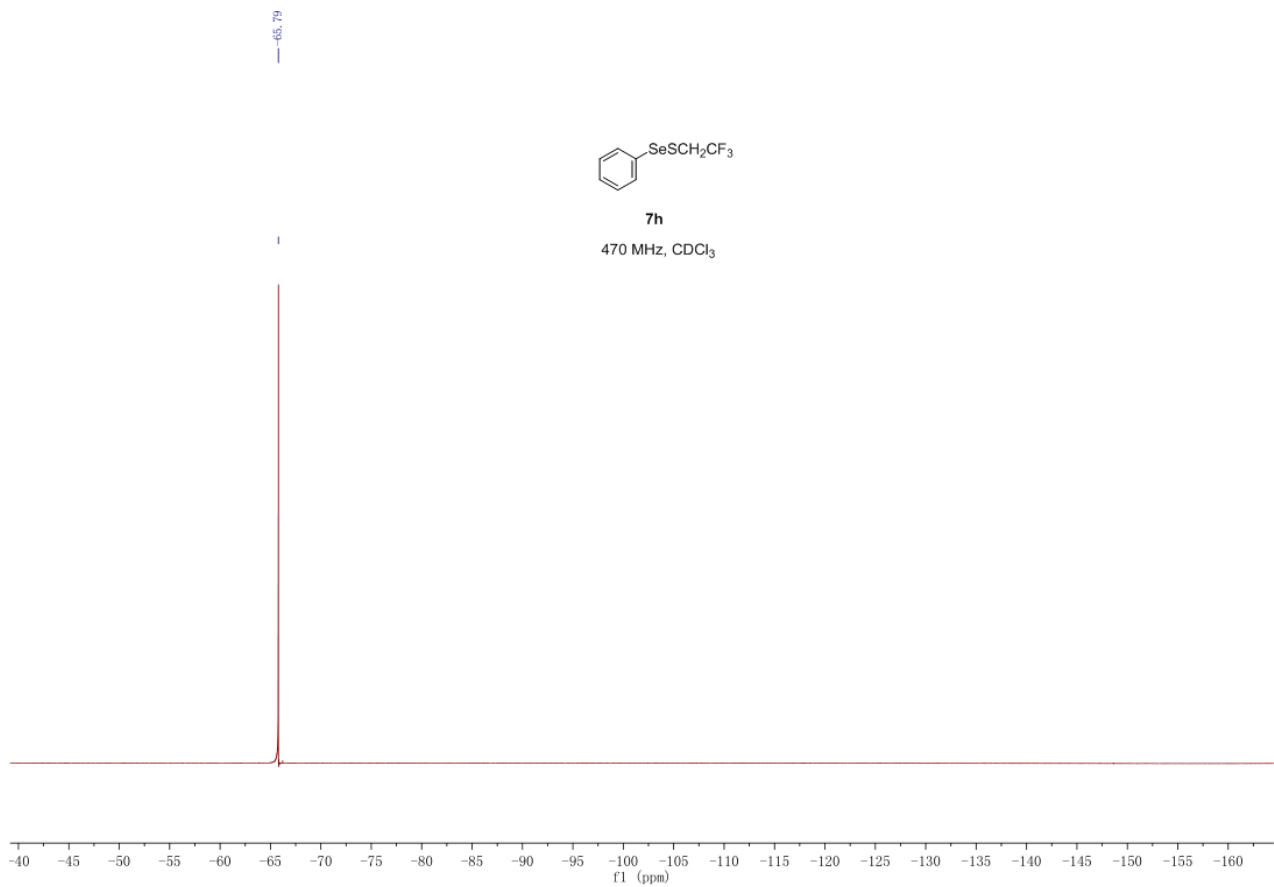
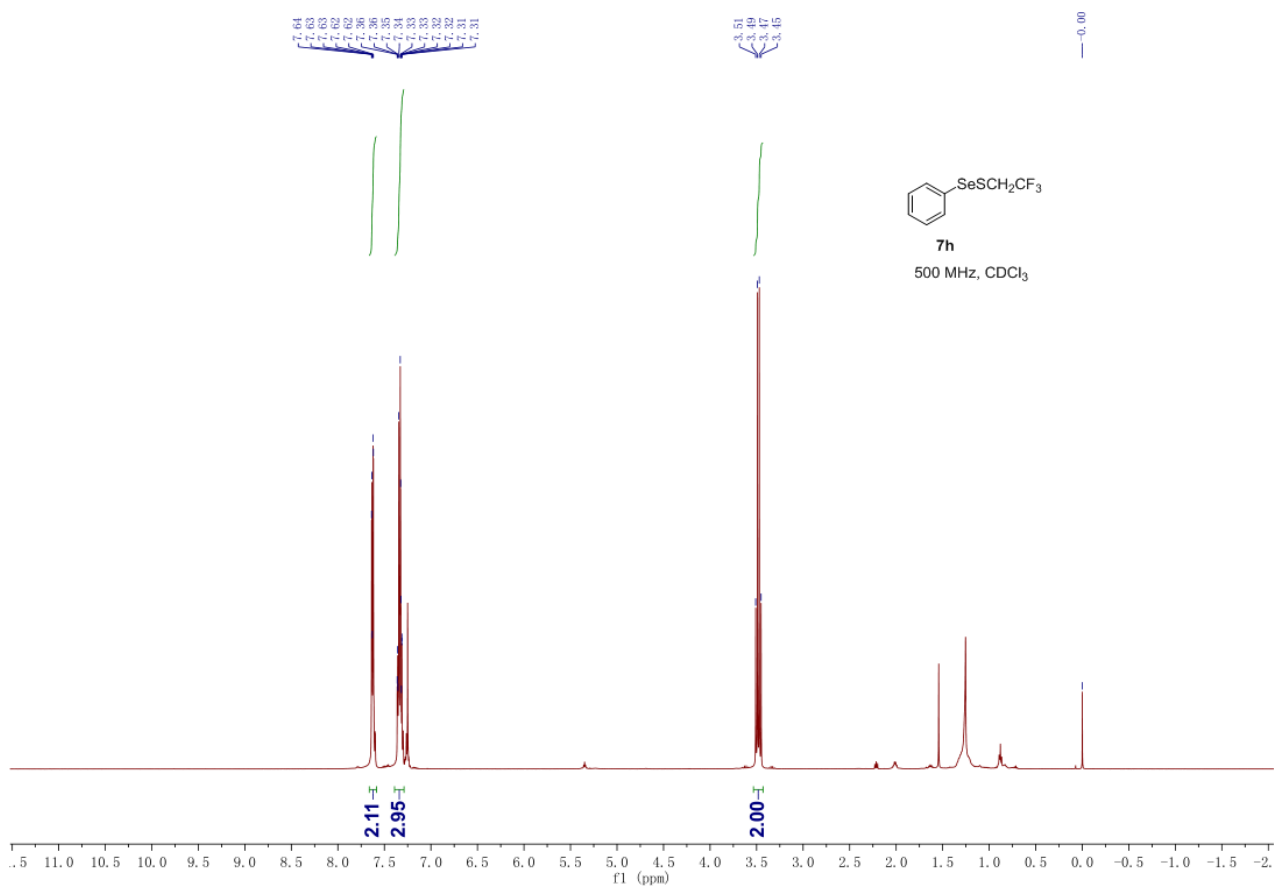


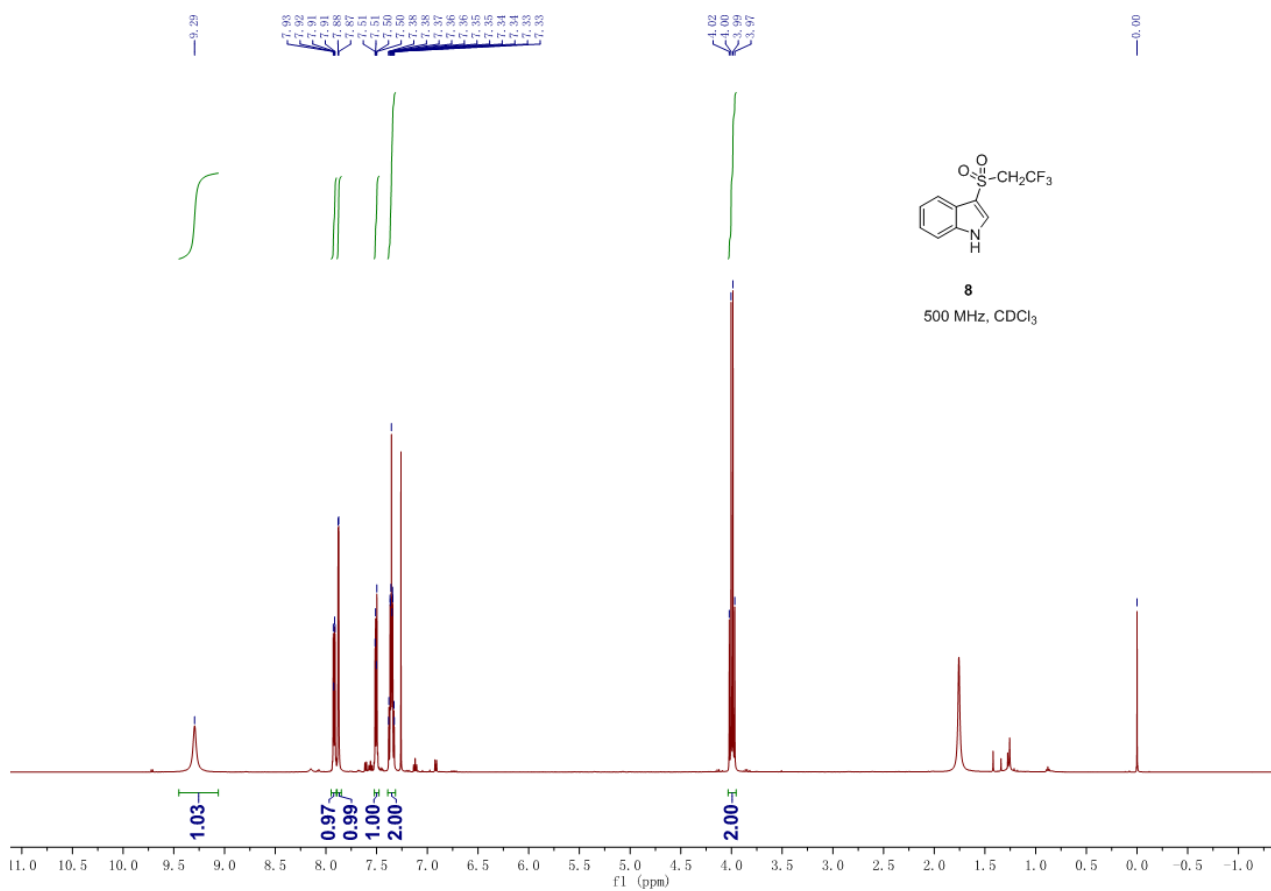
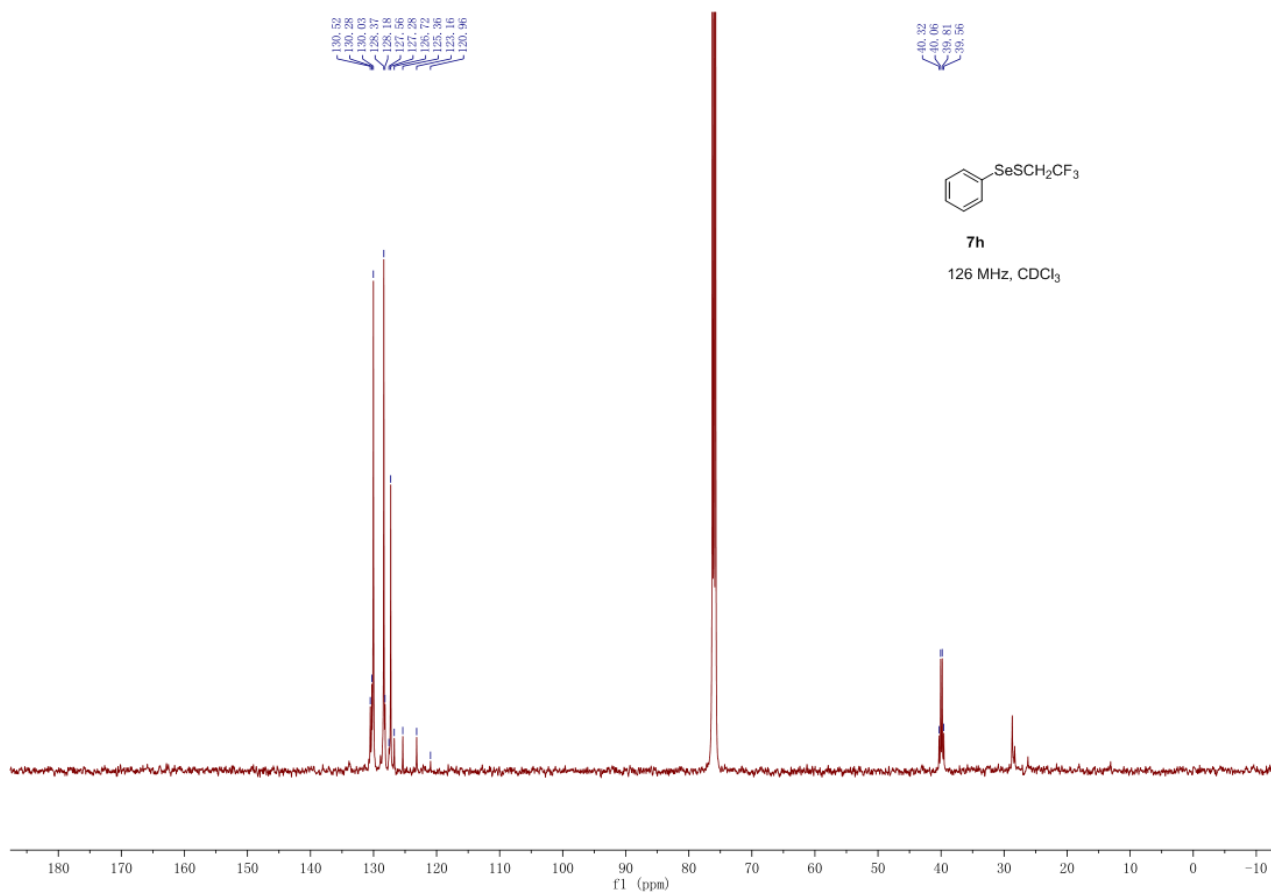


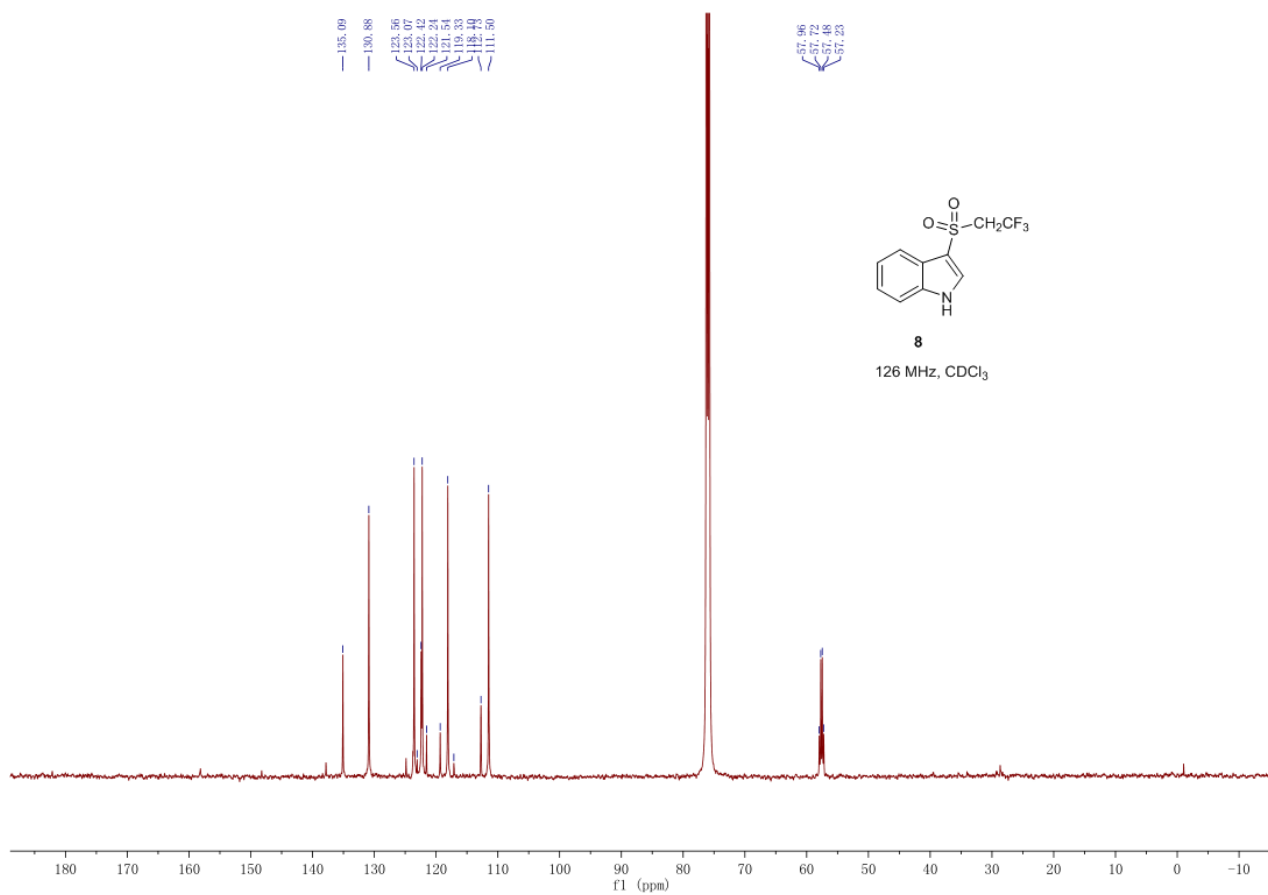
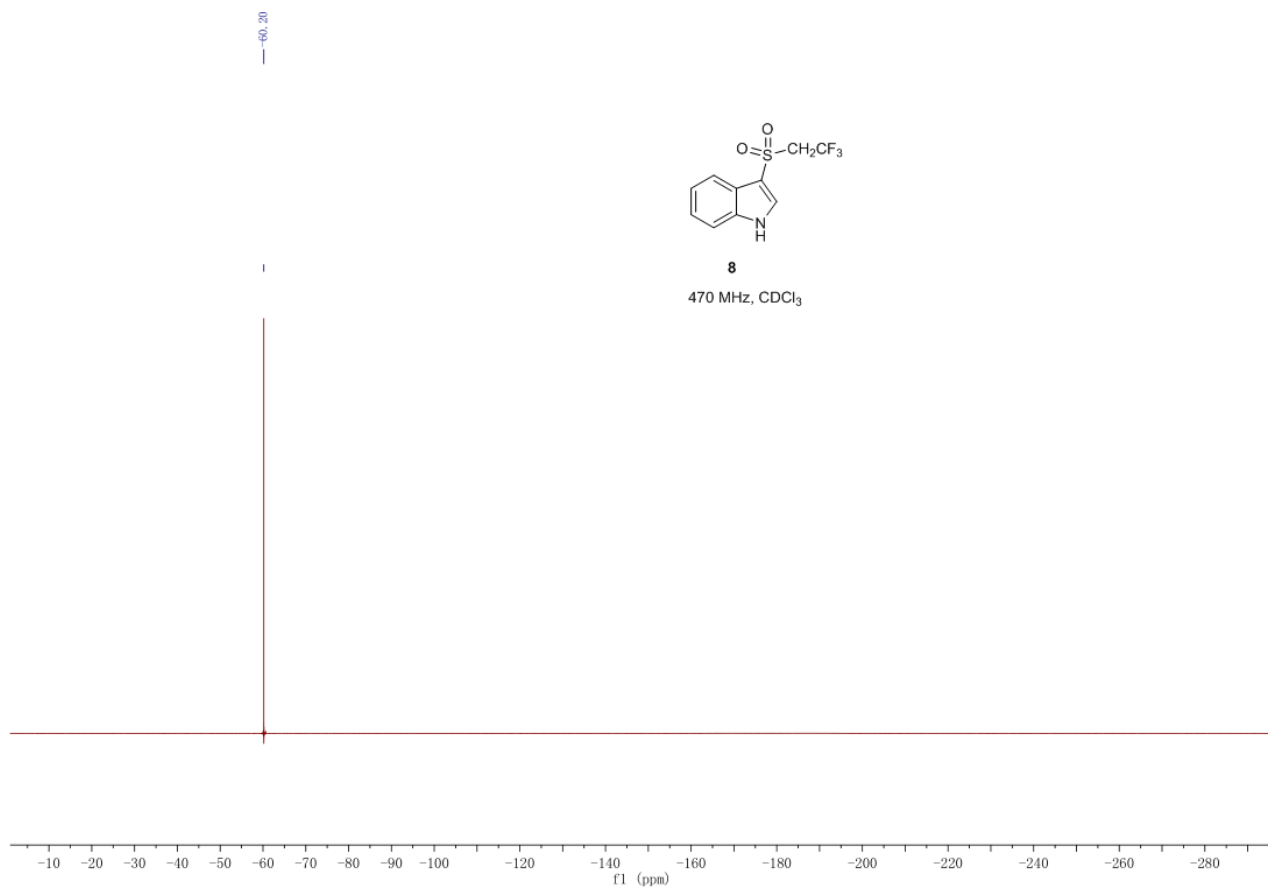


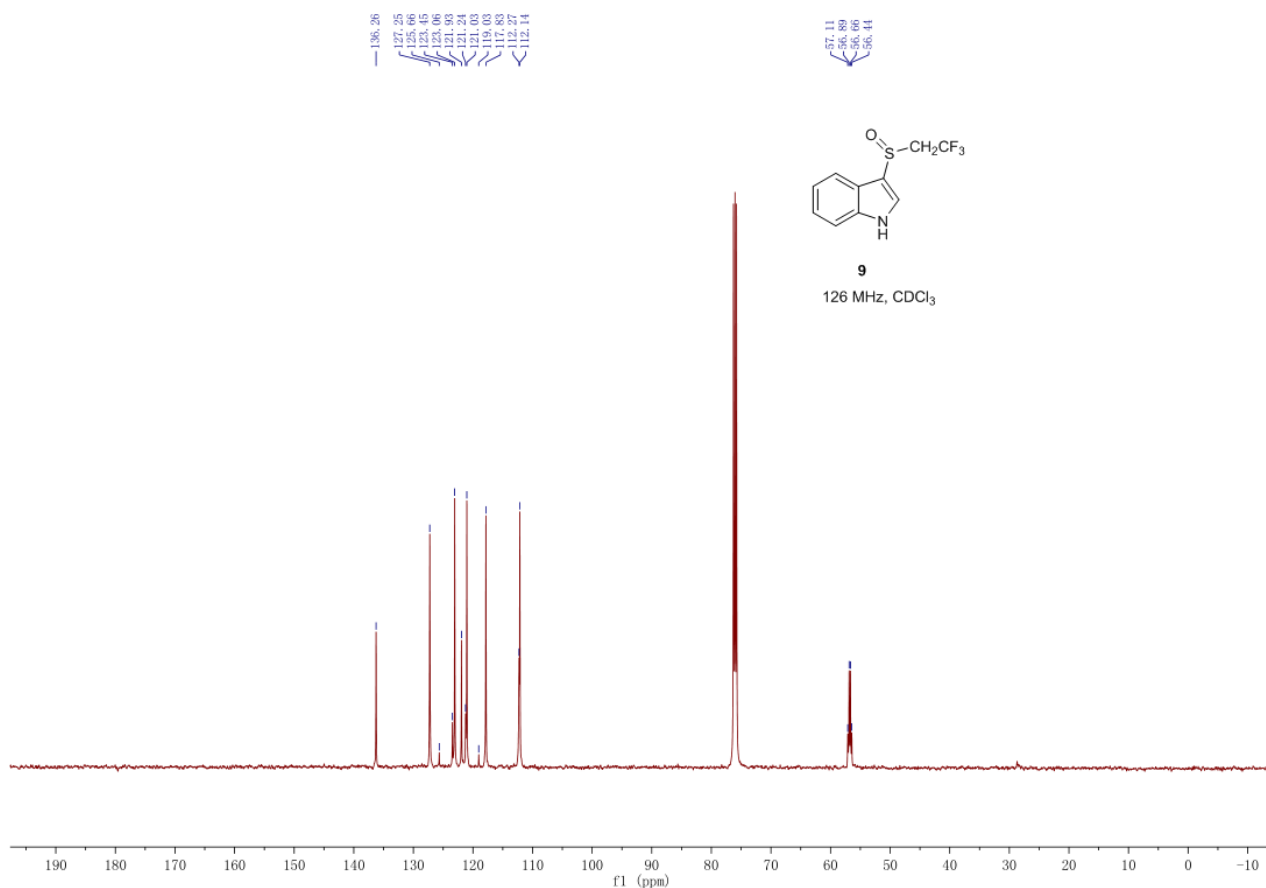








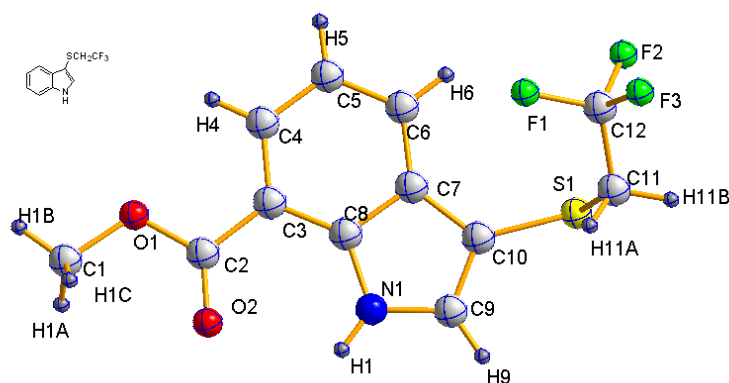




2. X-Ray Crystallographic Data of **3o**

Crystallographic data of complexes was collected at 296 K on a Bruker APEX-II CCD system equipped with graphite-monochromated Mo-K α radiation ($\lambda = 0.071073$ nm) using ω - ϕ scan technique. Diffraction data were integrated by the SAINT program, which was also used for intensity corrections for Lorentz and polarization effects. Semi-empirical absorption correction was applied using SADABS. The structures were solved by direct methods and all non-hydrogen atoms were refined anisotropically on F^2 by full-matrix least-squares using the SHELXL-97 crystallographic software package. The ellipsoid contour percent probability level is 50%.

X-ray crystal structure of compound **3o** (CCDC # 1577556)



complex	3o
Formula	C ₁₂ H ₁₀ F ₃ NO ₂ S
Formula weight	289.27
Crystal system	Monoclinic
space group	<i>P</i> 2 ₁ / <i>n</i>
<i>a</i> (Å)	12.5508(18)
<i>b</i> (Å)	4.7813(7)
<i>c</i> (Å)	20.425(3)
α (°)	90
β (°)	103.082(4)
γ (°)	90
Volume(Å ³)	1193.9(3)
<i>Z</i>	4
<i>T</i> (K)	153(2)
<i>D</i> _{calcd} (g/m ³)	1.609
<i>F</i> (000)	592
Reflections collected	2097
Unique reflections	1725
Goof	1.007
<i>R</i> ₁ [<i>I</i> > 2σ(<i>I</i>)]	0.0346
<i>wR</i> ₂ [<i>I</i> > 2σ(<i>I</i>)]	0.0824 ^a
CCDC NO.	1577556