

Mild Regiospecific Synthesis of 1-Alkoxy-isochromenes Catalyzed by Well-Defined [Silver(I)(Pyridine-Containing Ligand)] Complexes

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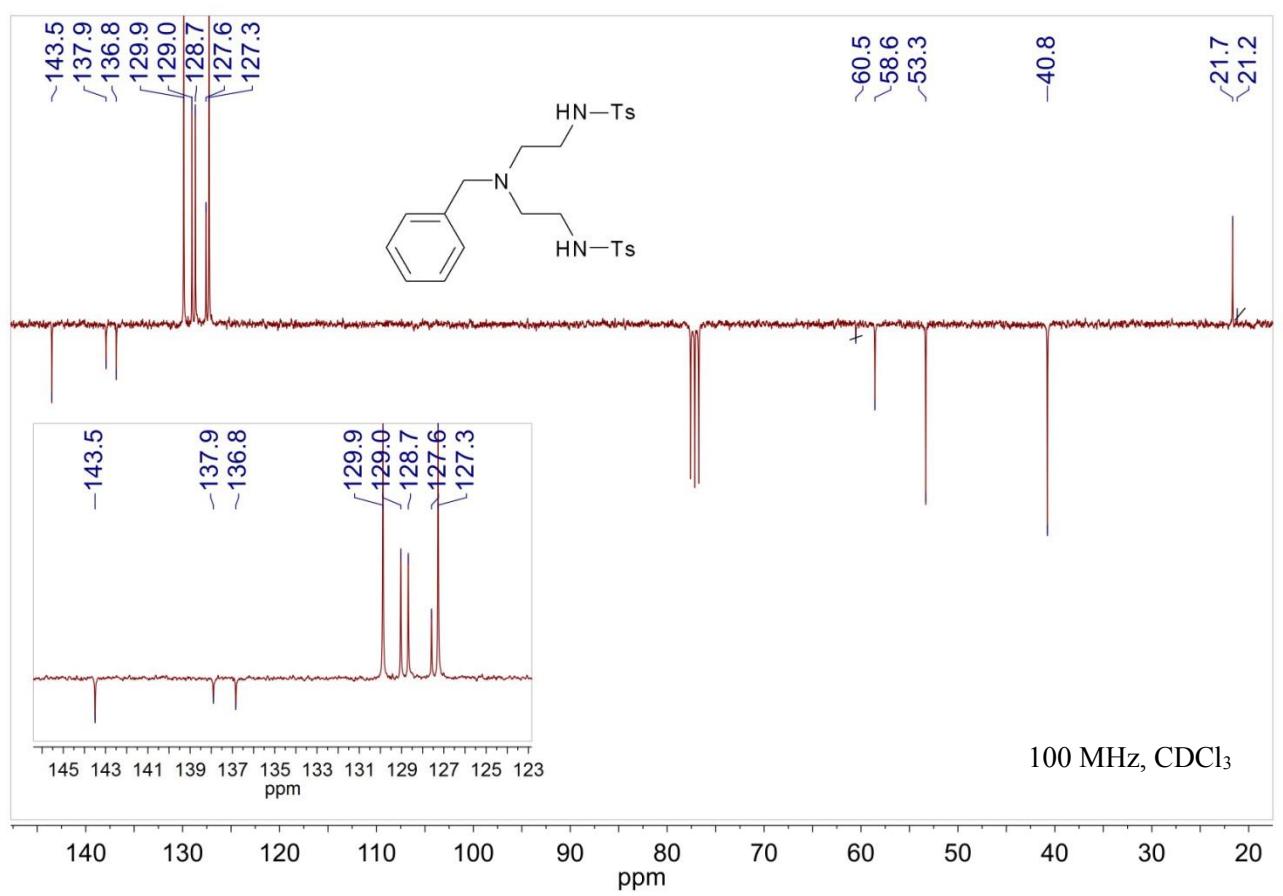
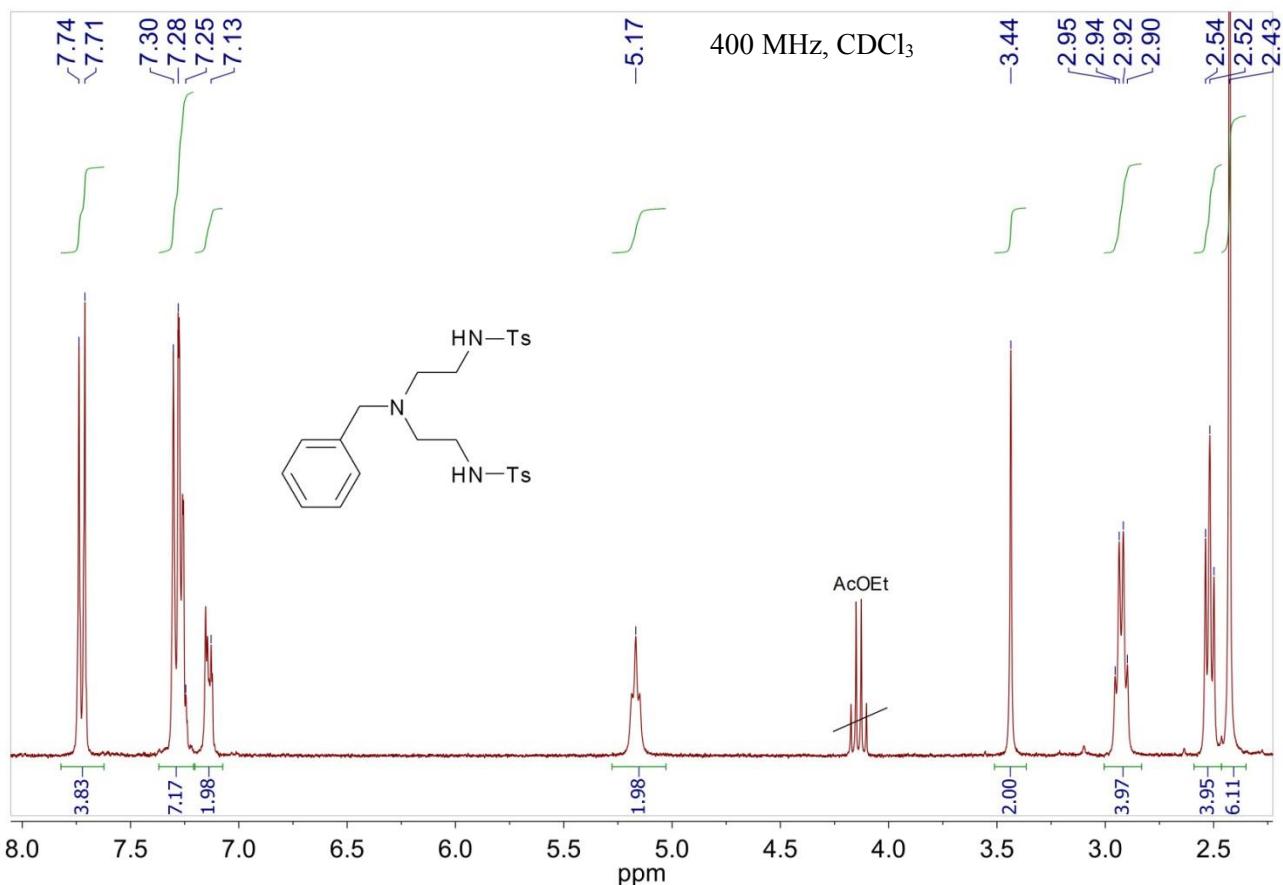
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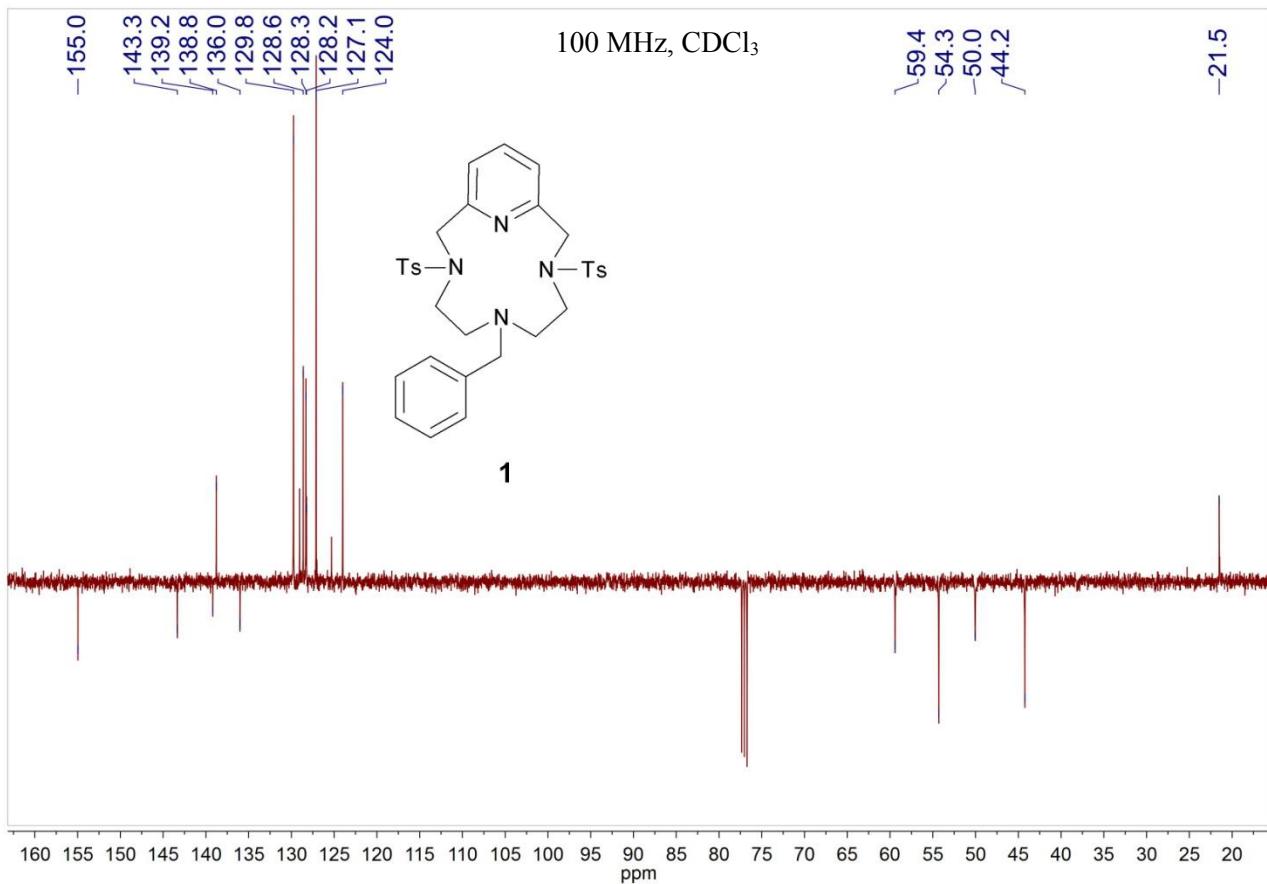
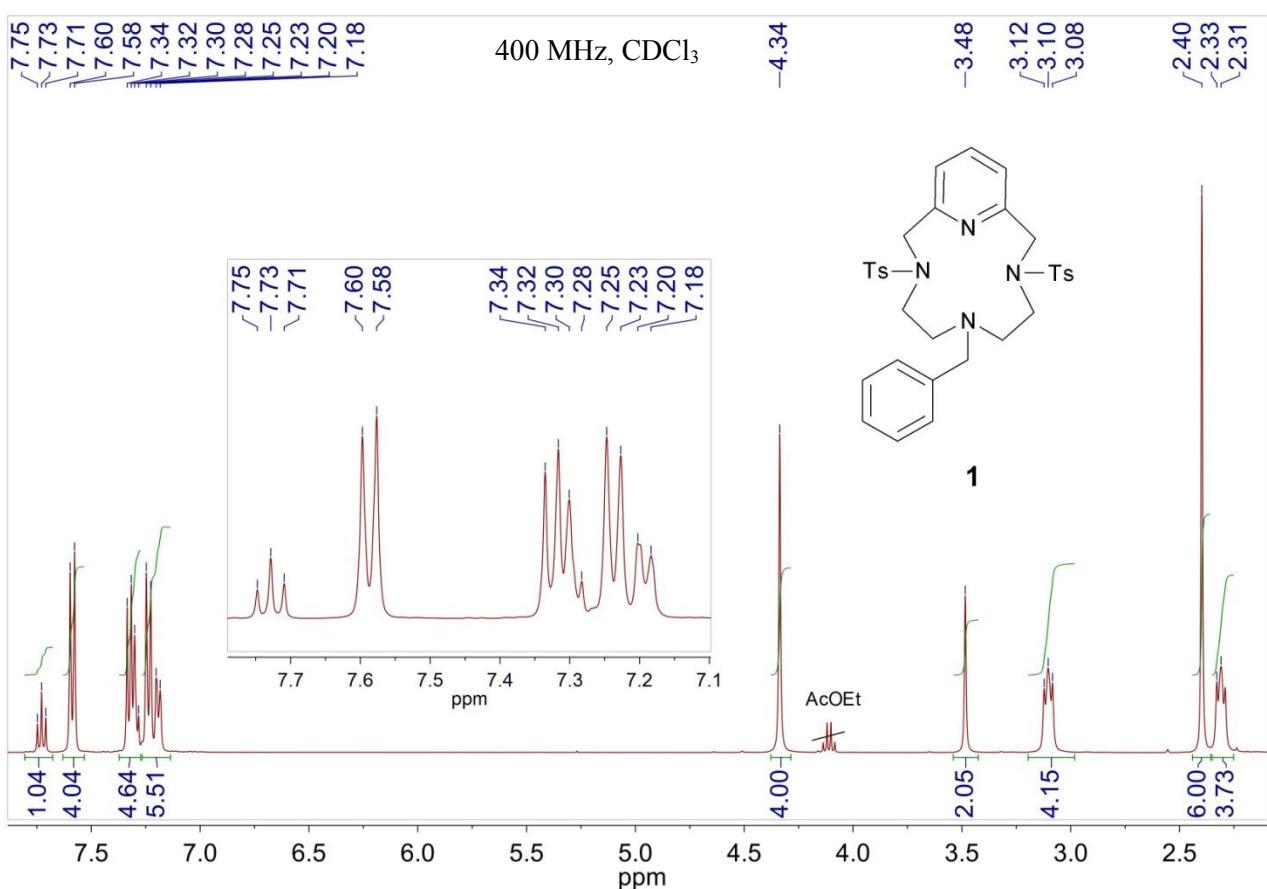
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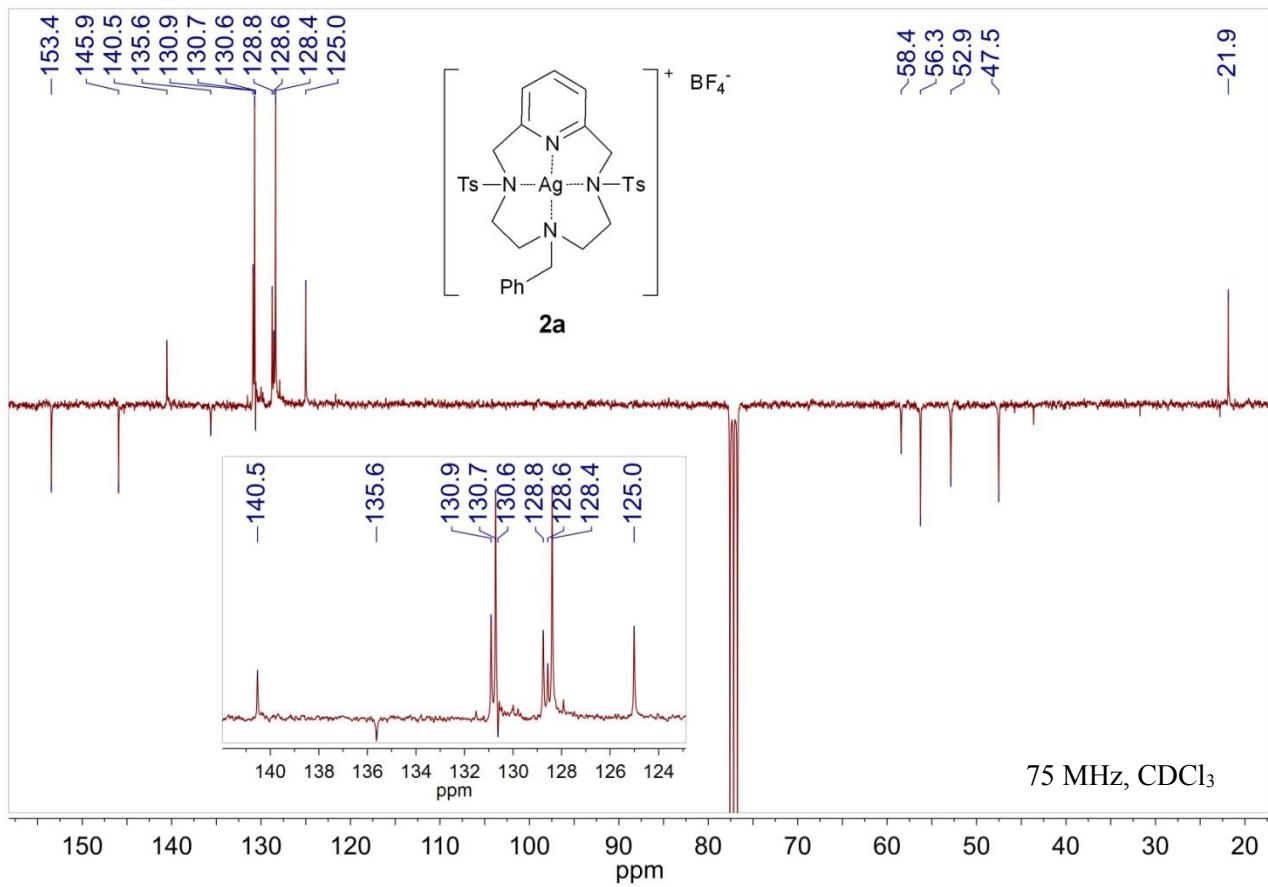
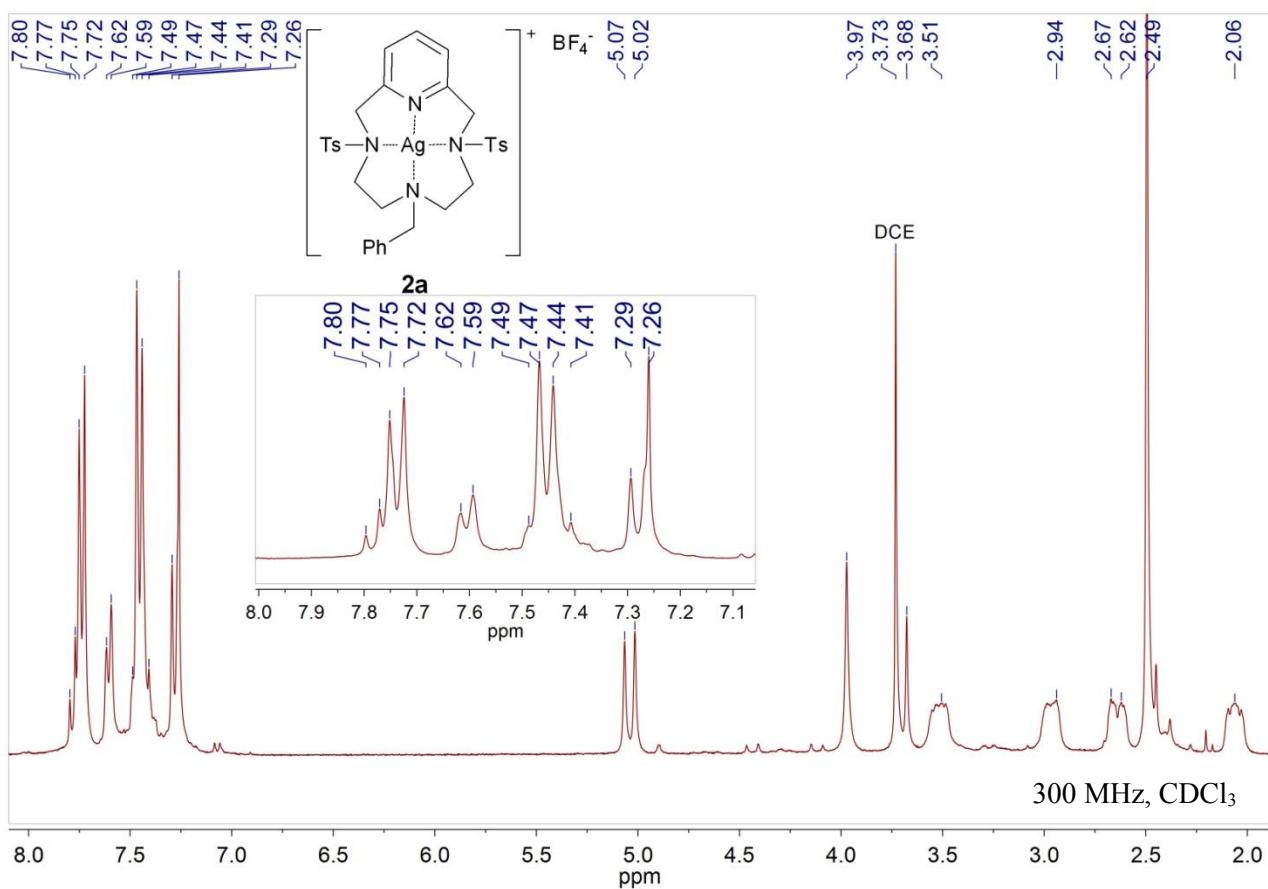
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SUPPORTING INFORMATION

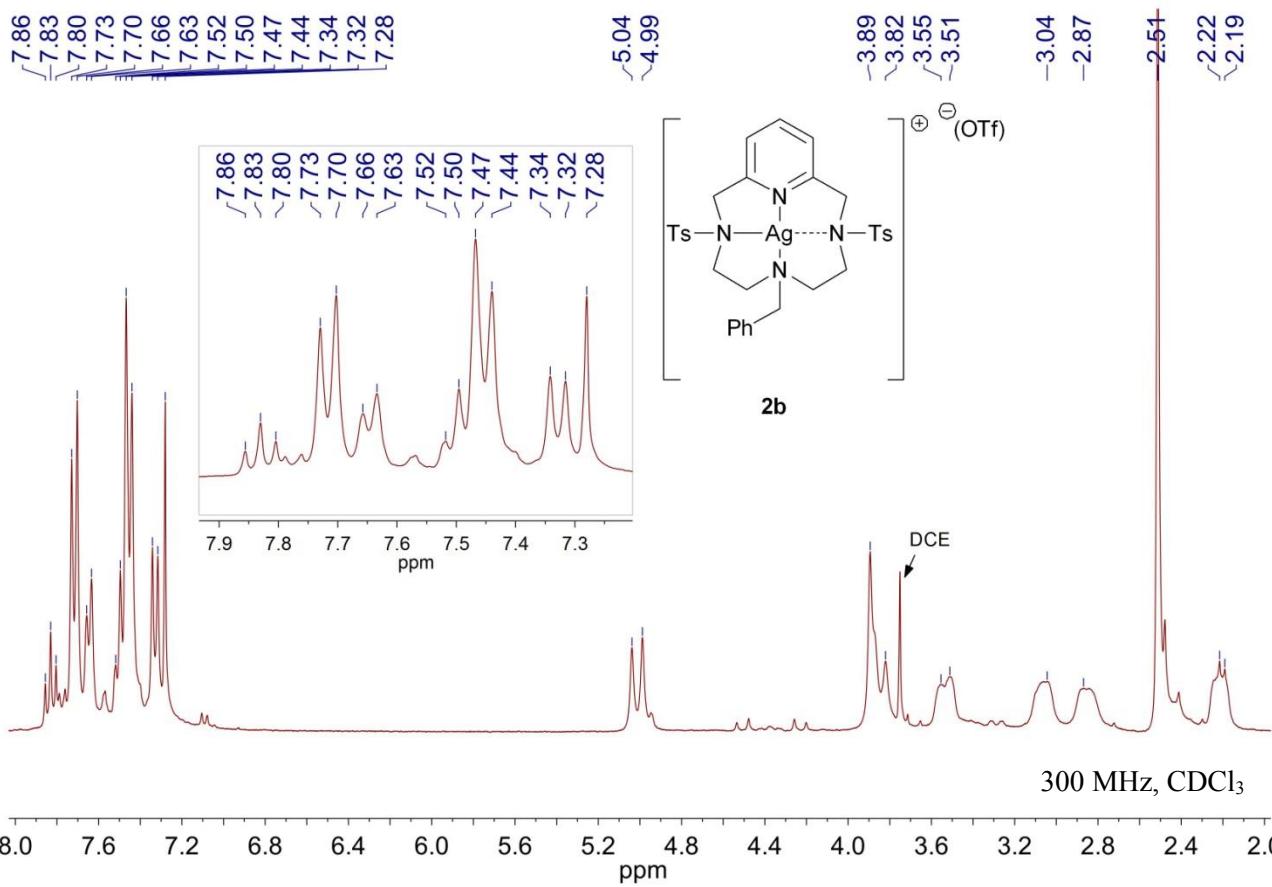
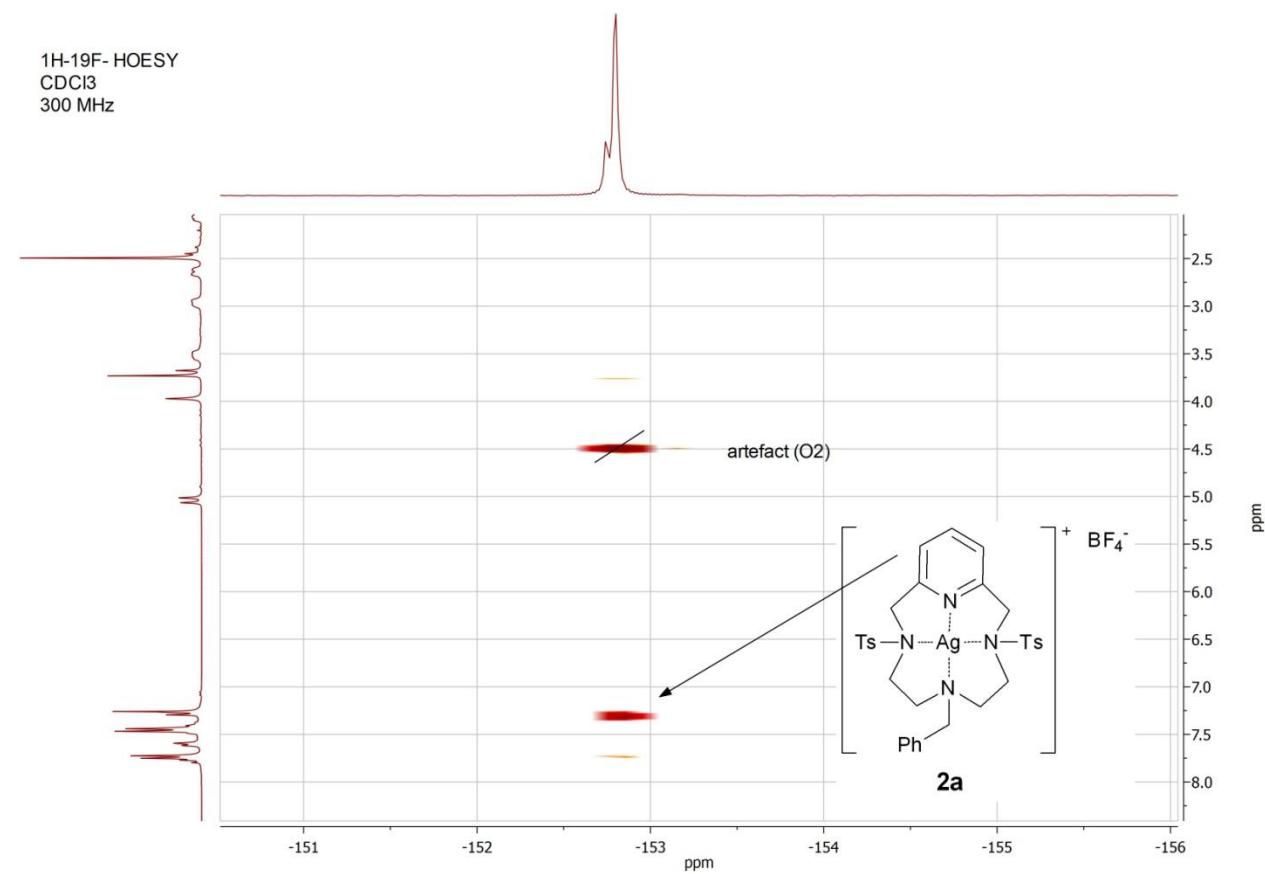
¹ H and ¹³ C NMR spectra of 1,7-ditosyl-4-benzyl-1,4,7-triazaheptane.	p. S2
¹ H and ¹³ C NMR of ligand 1 .	p. S3
¹ H and ¹³ C NMR and HOESY spectra of complex 2a .	p. S4
¹ H and ¹³ C NMR spectra of complex 2b .	p. S5
¹ H and ¹³ C spectra of complex 2c .	p. S6
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¹ H NMR spectrum of reaction crude of 3a in methanol (Table 1 entry 1).	p. S11
¹ H and ¹³ C NMR spectra of isochromenes 4 a-l .	p. S11
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¹ H NMR spectra of reaction crudes of stability experiments on isochromene 4a .	p. S26
¹ H NMR spectrum of isochromene 4m .	p. S27

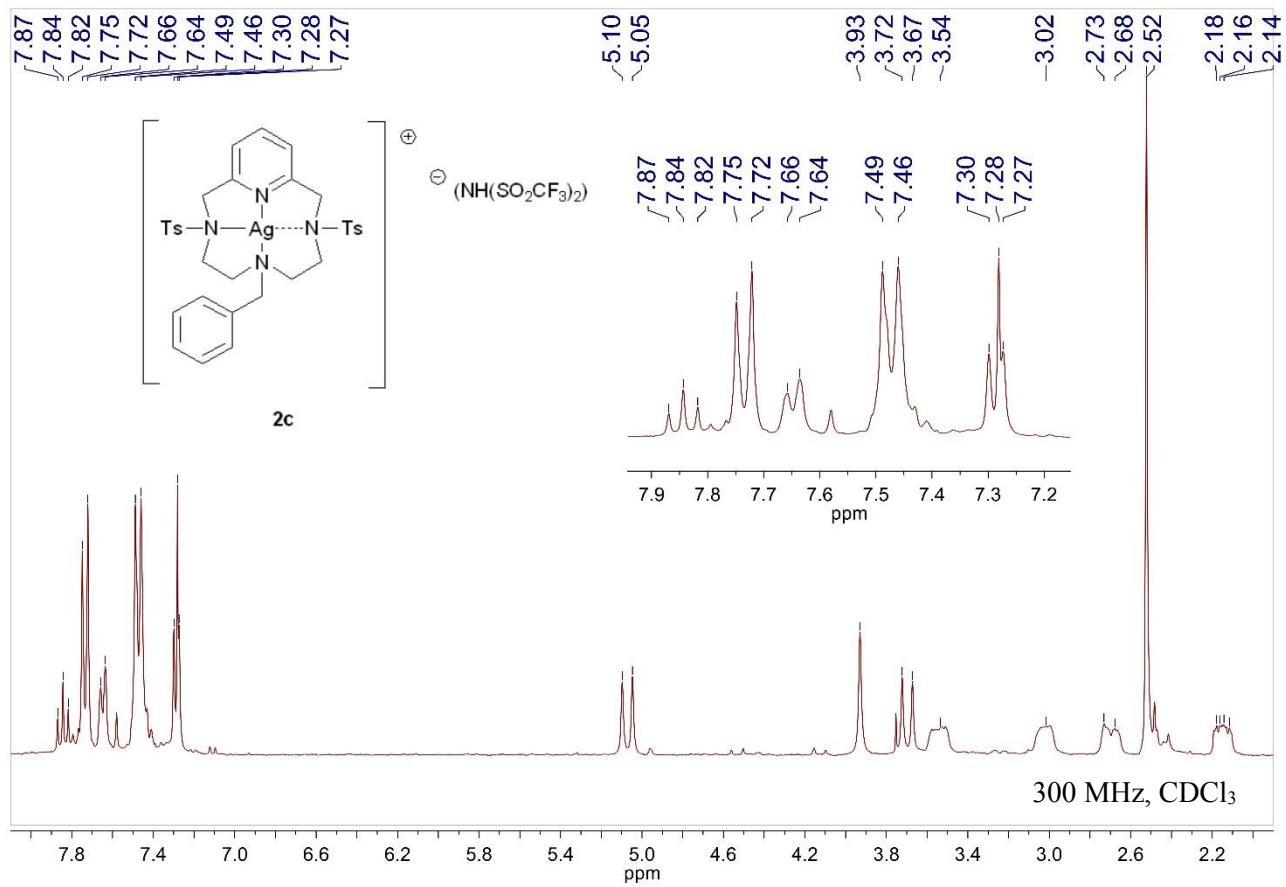
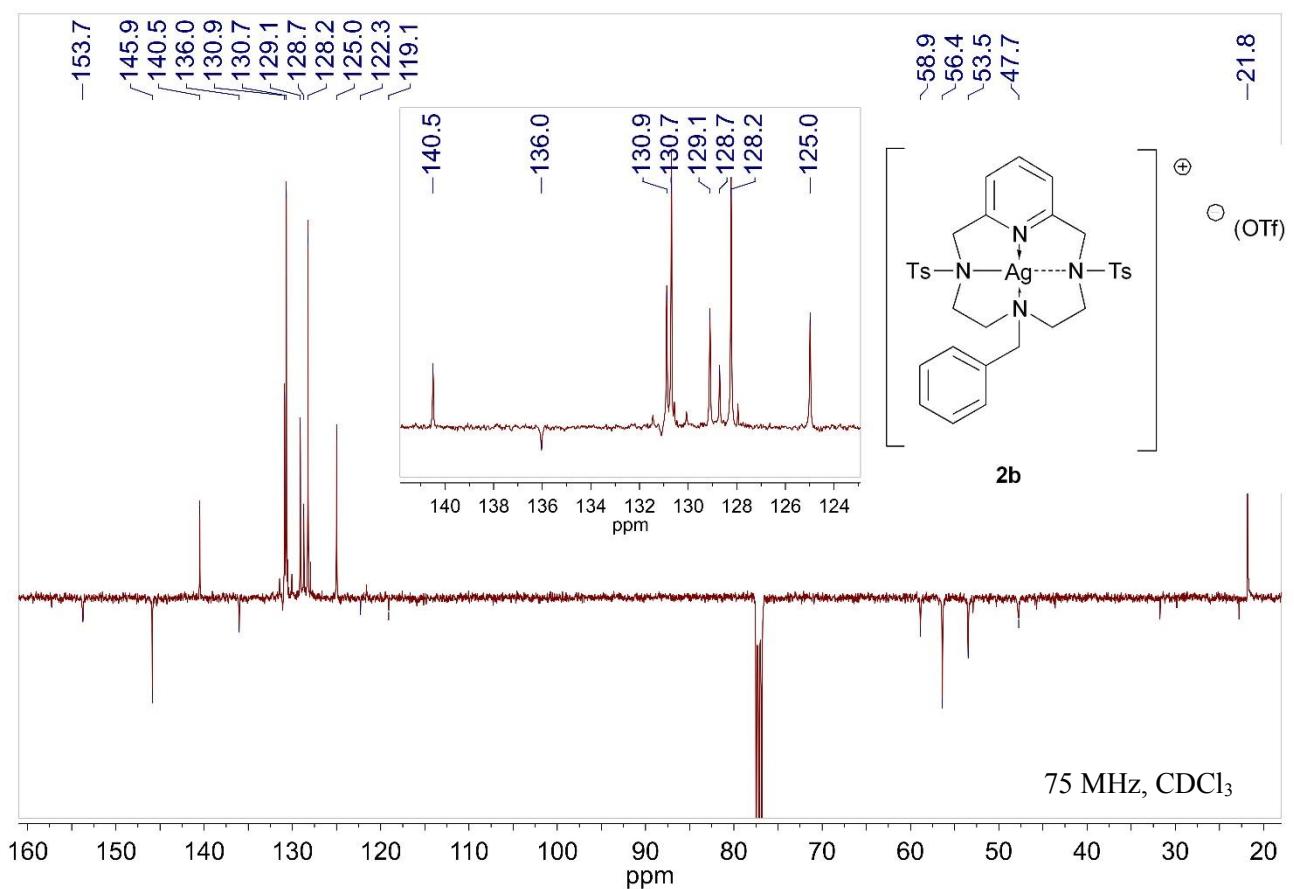


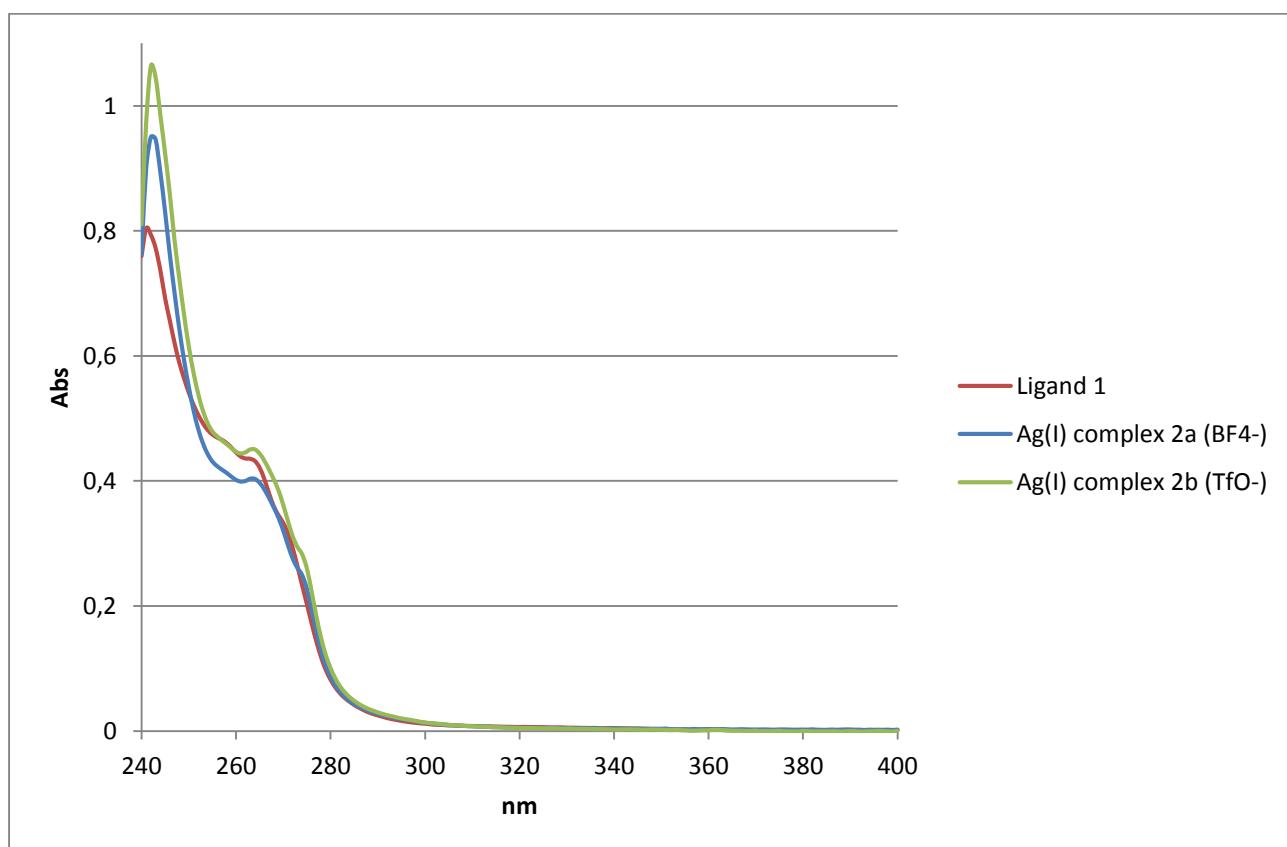
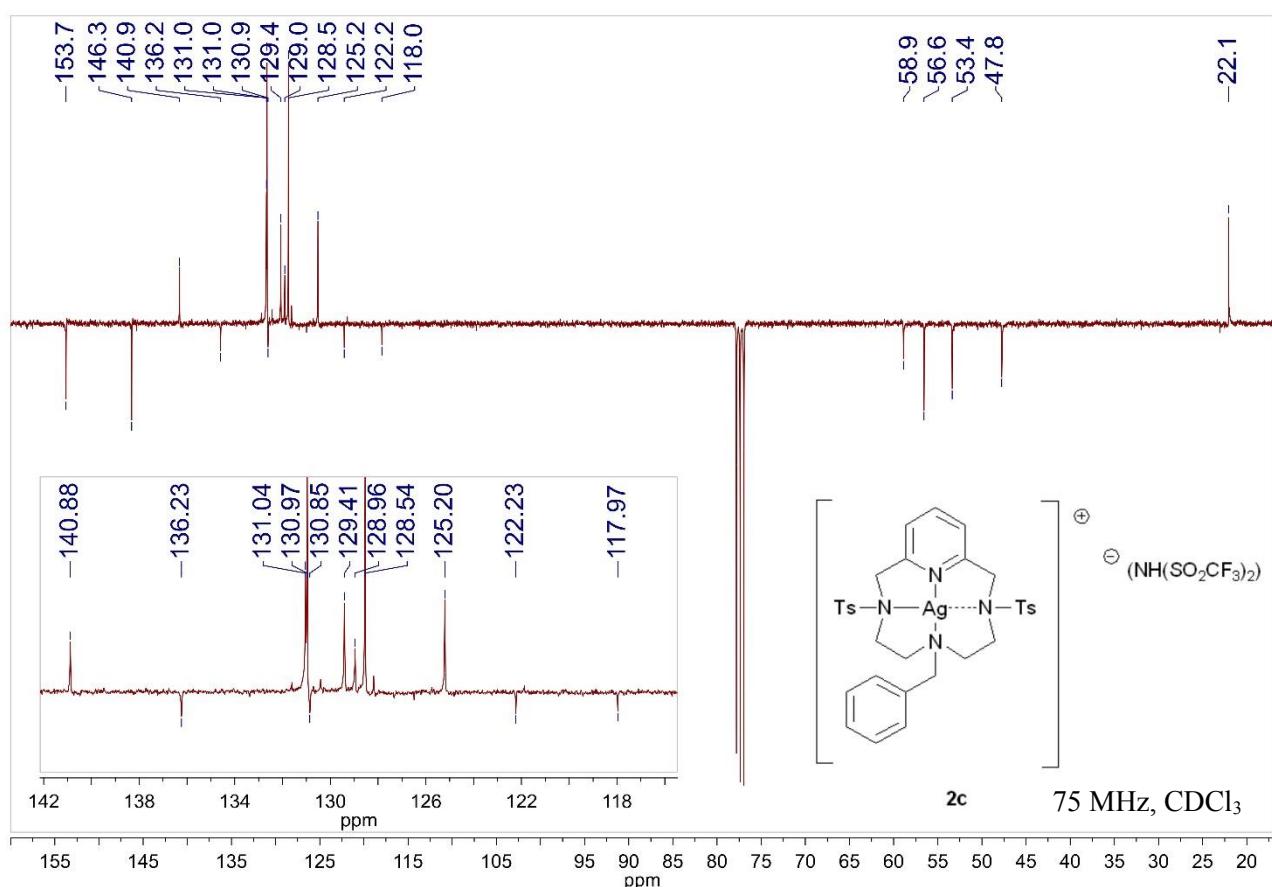




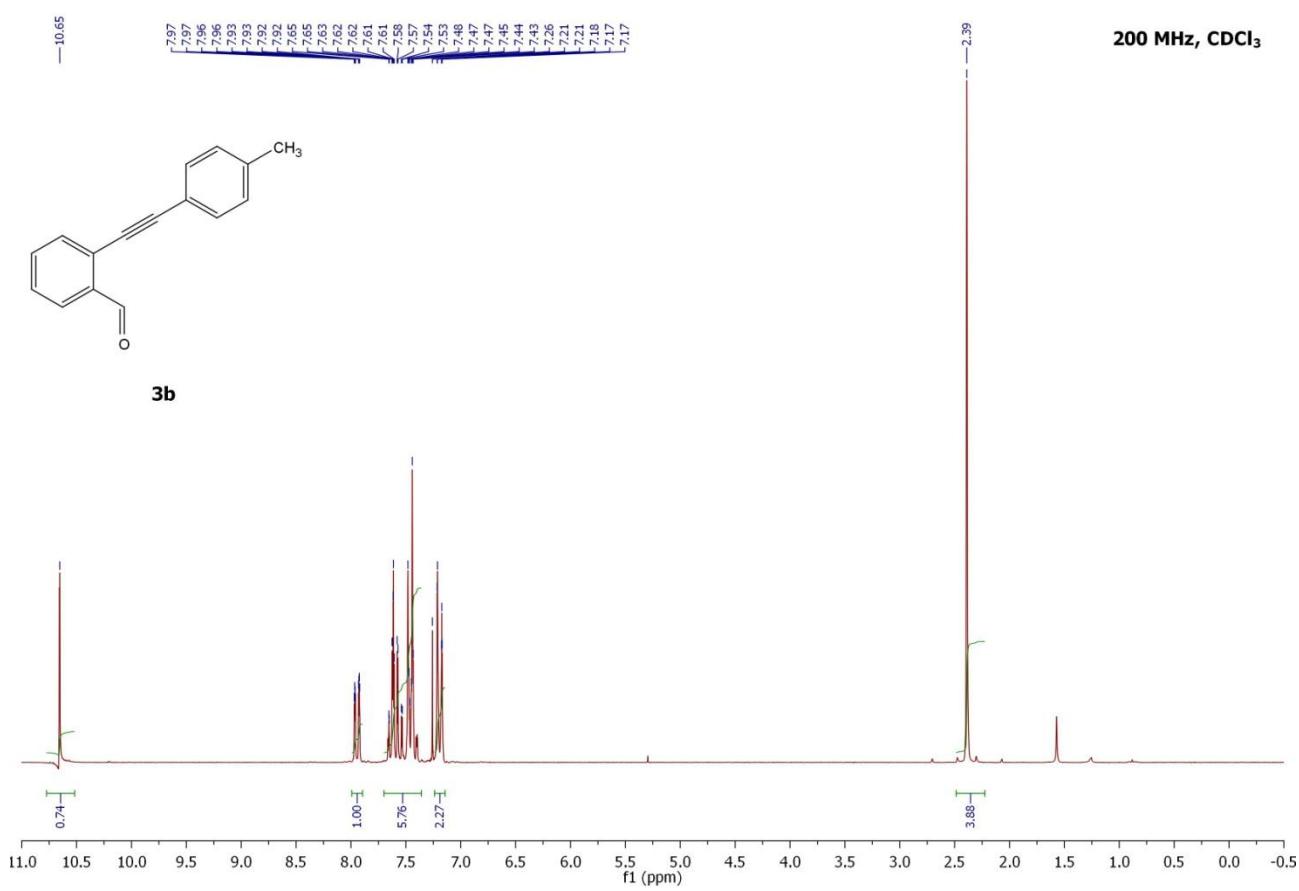
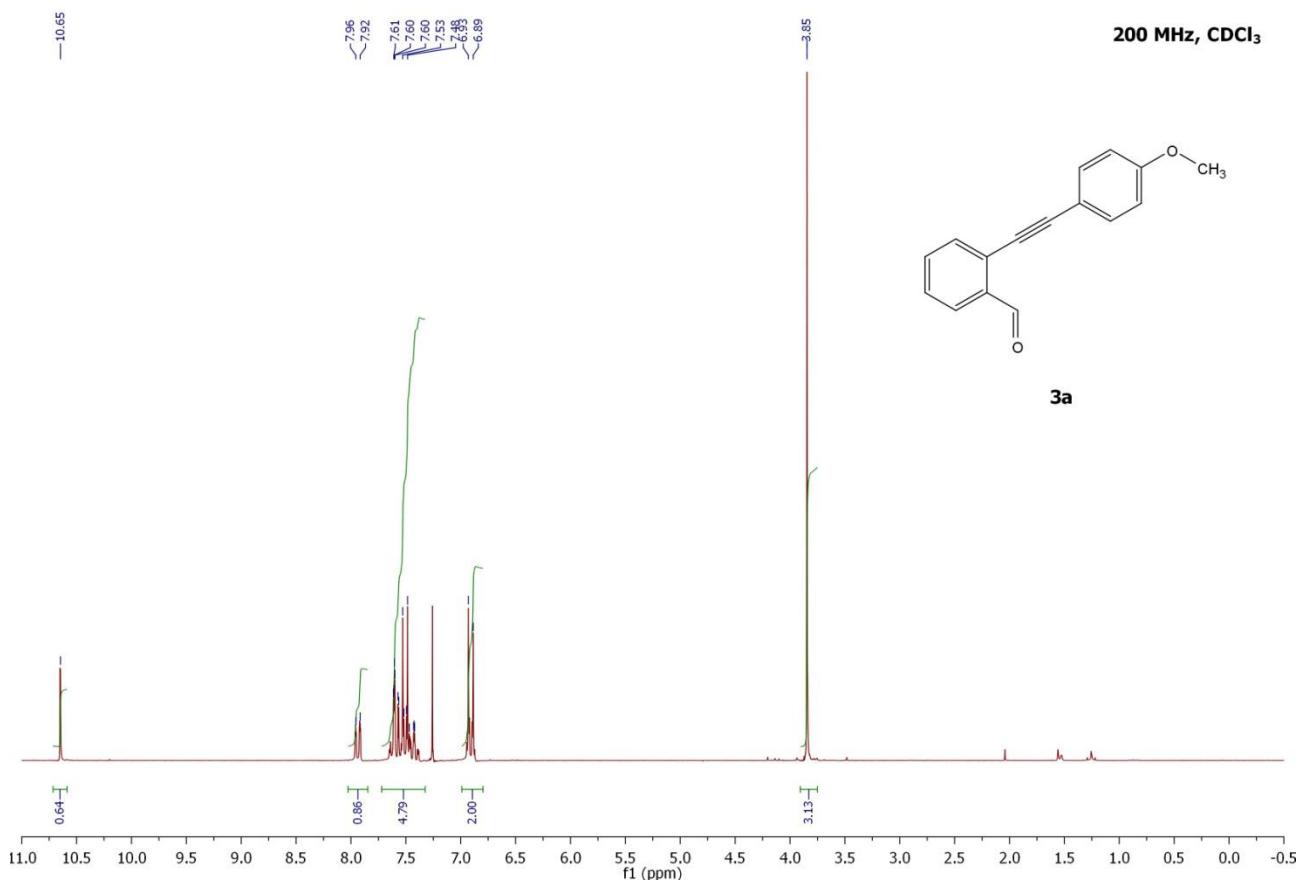
1H-19F- HOESY
CDCl₃
300 MHz

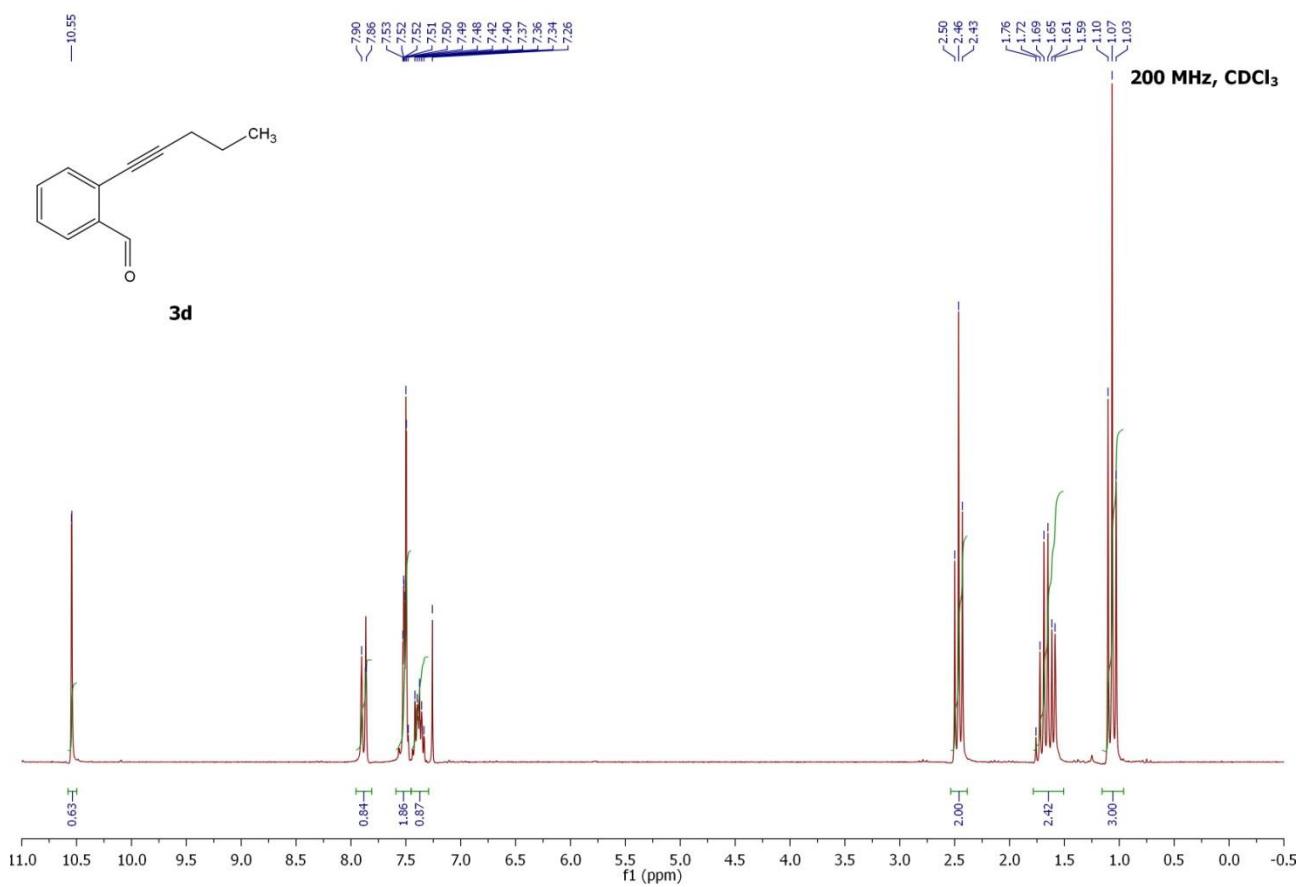
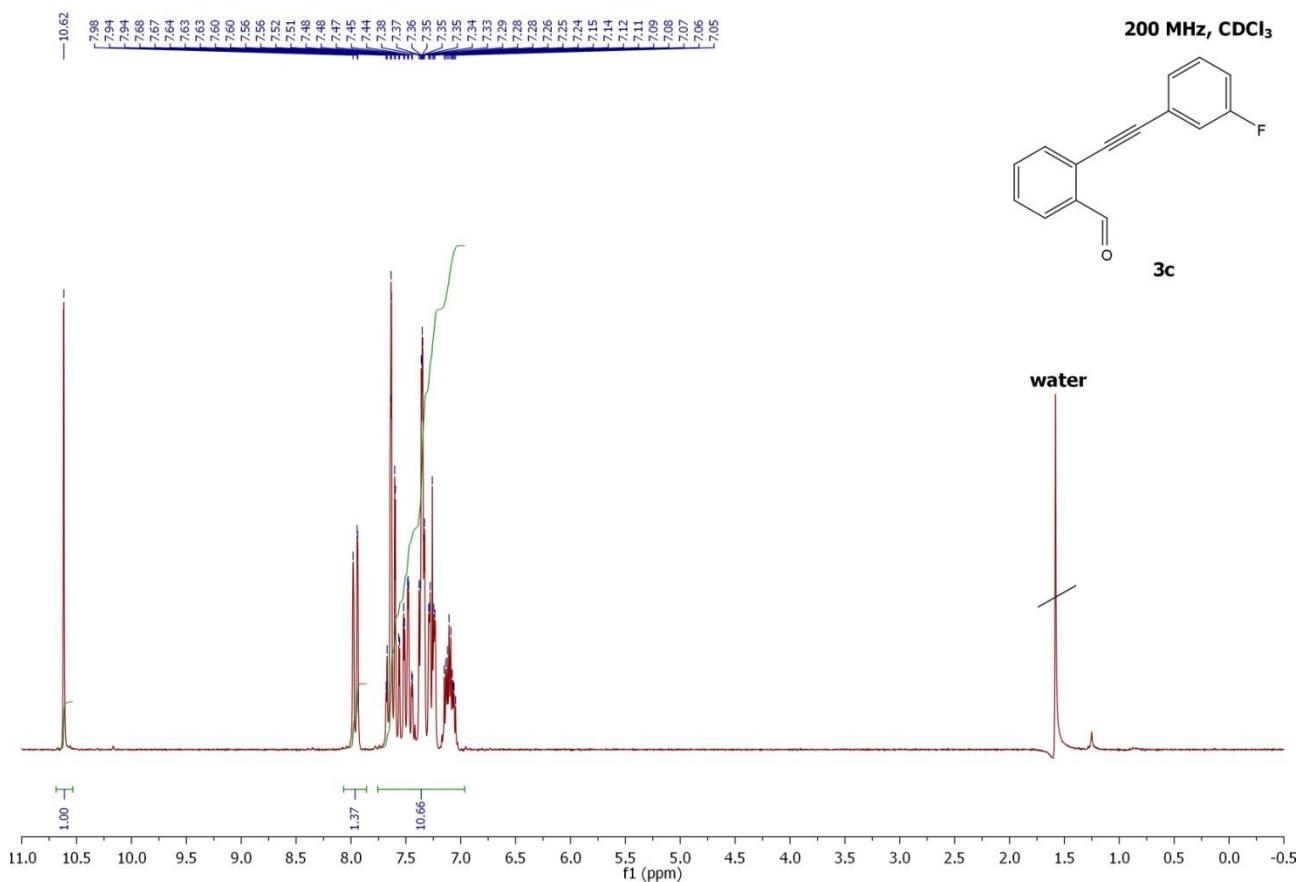


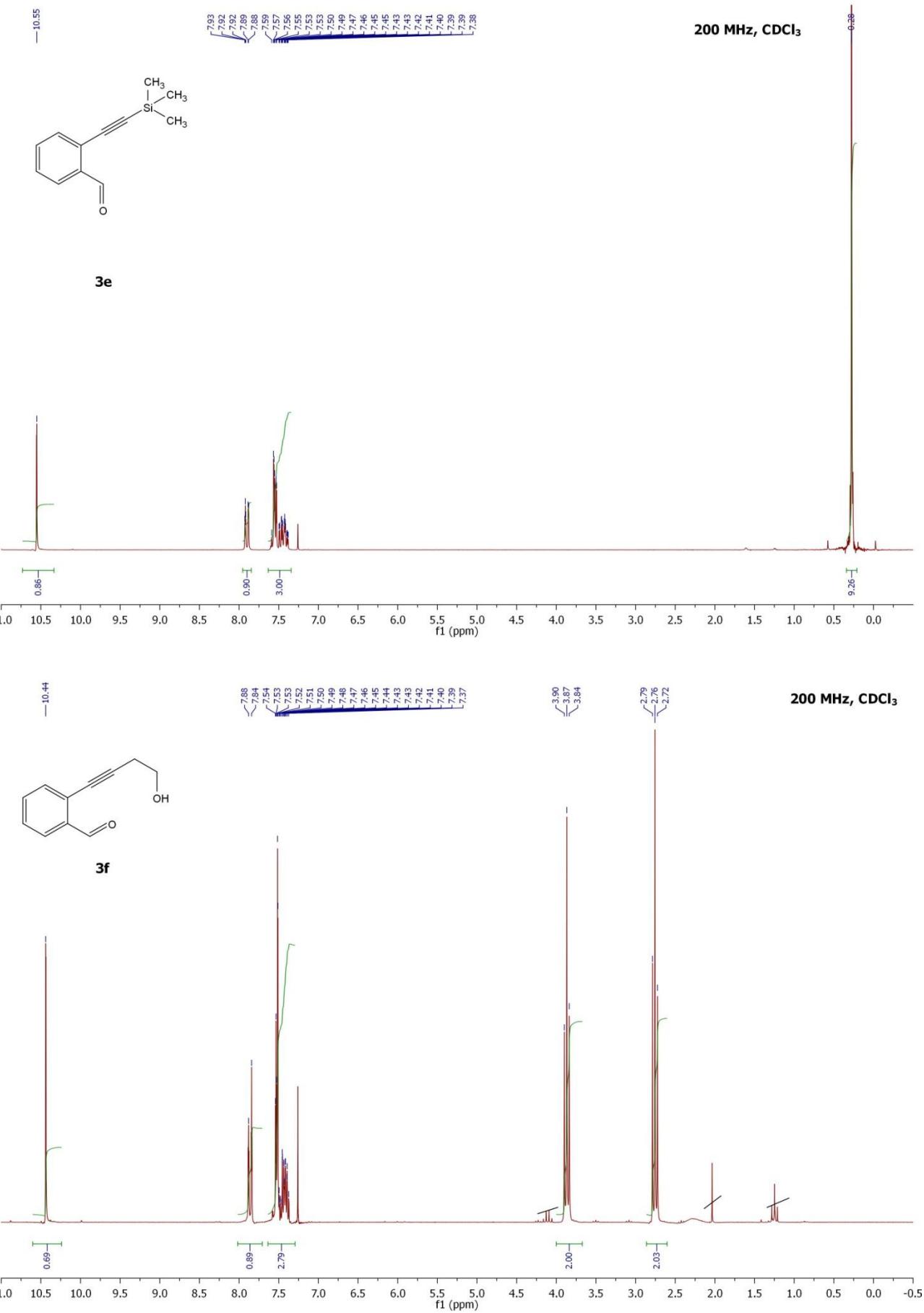


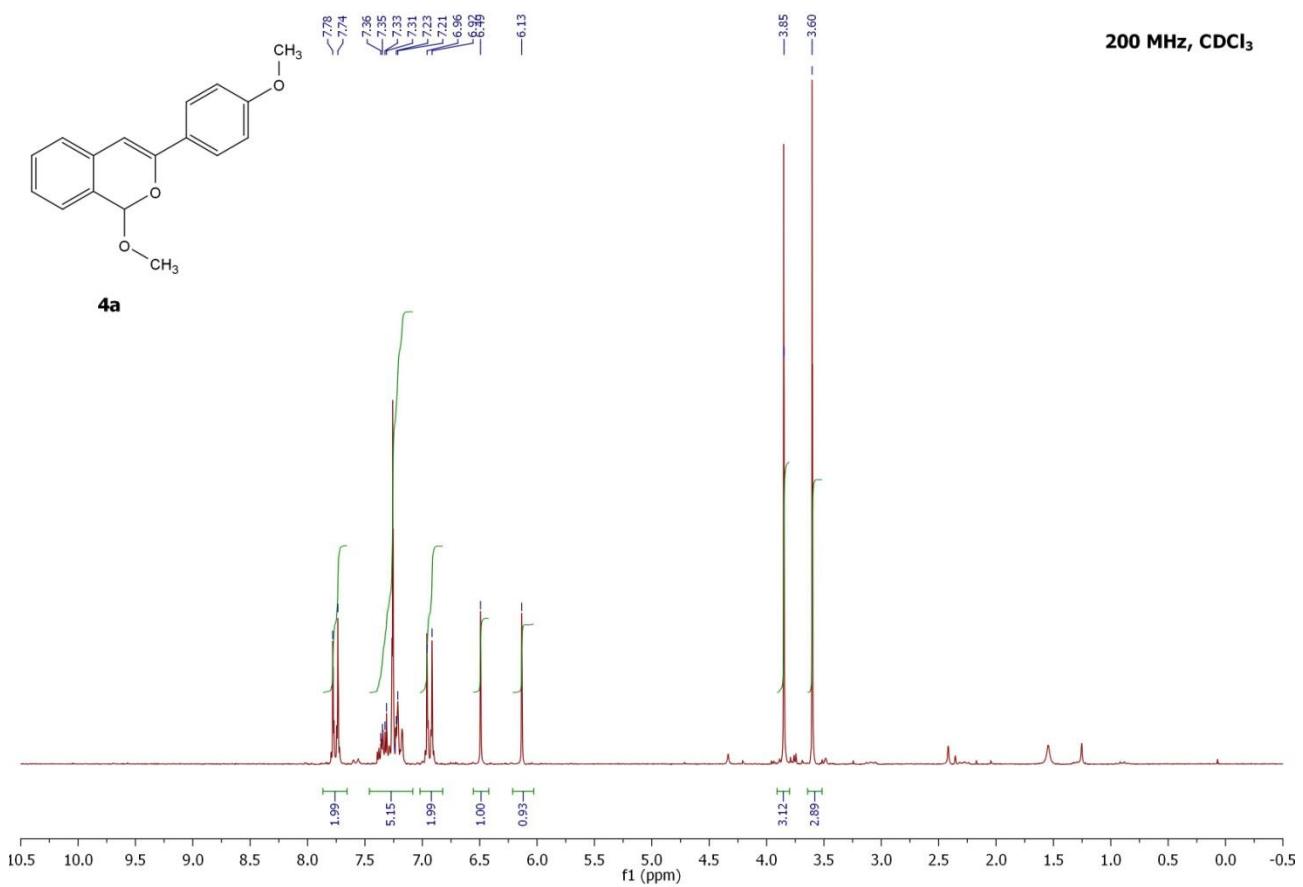
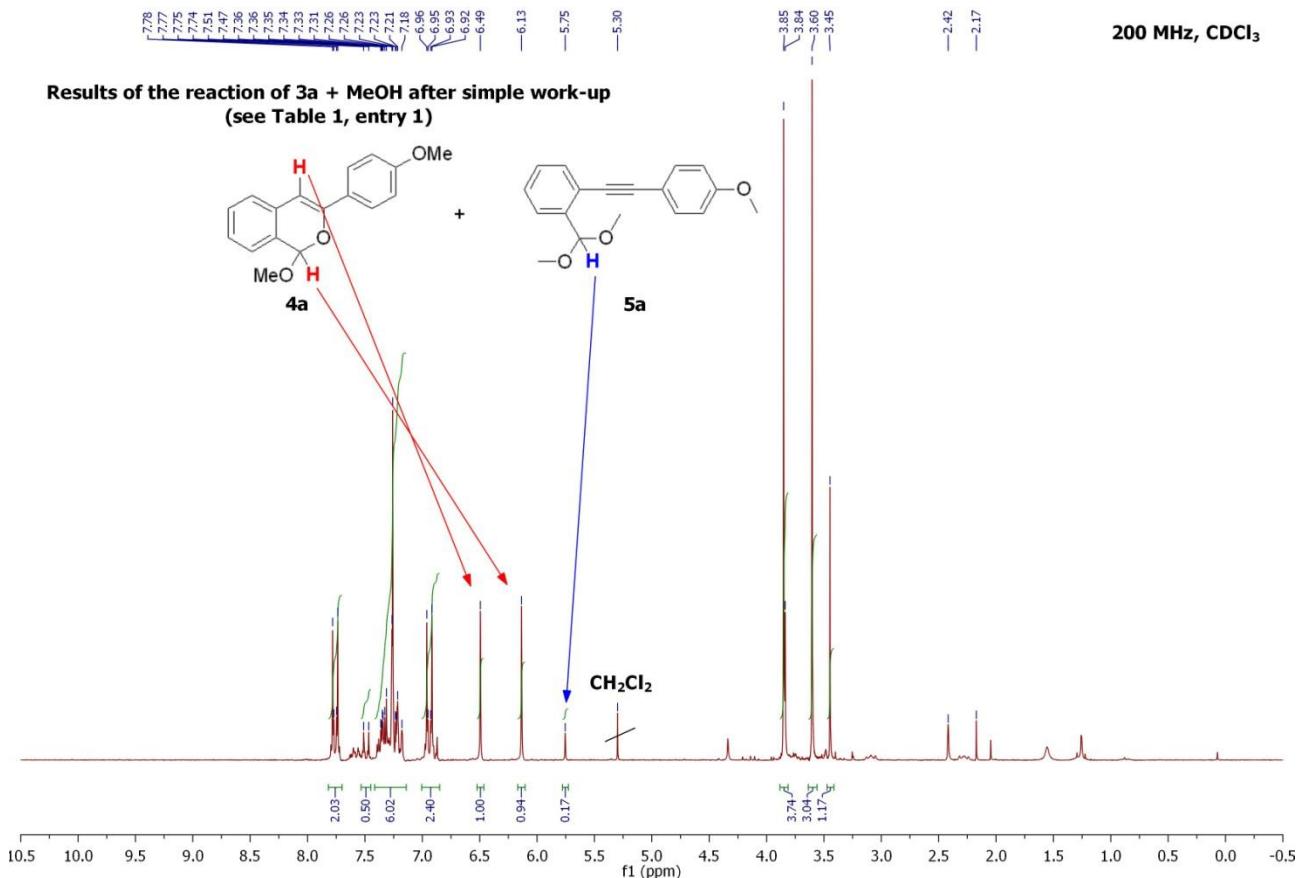


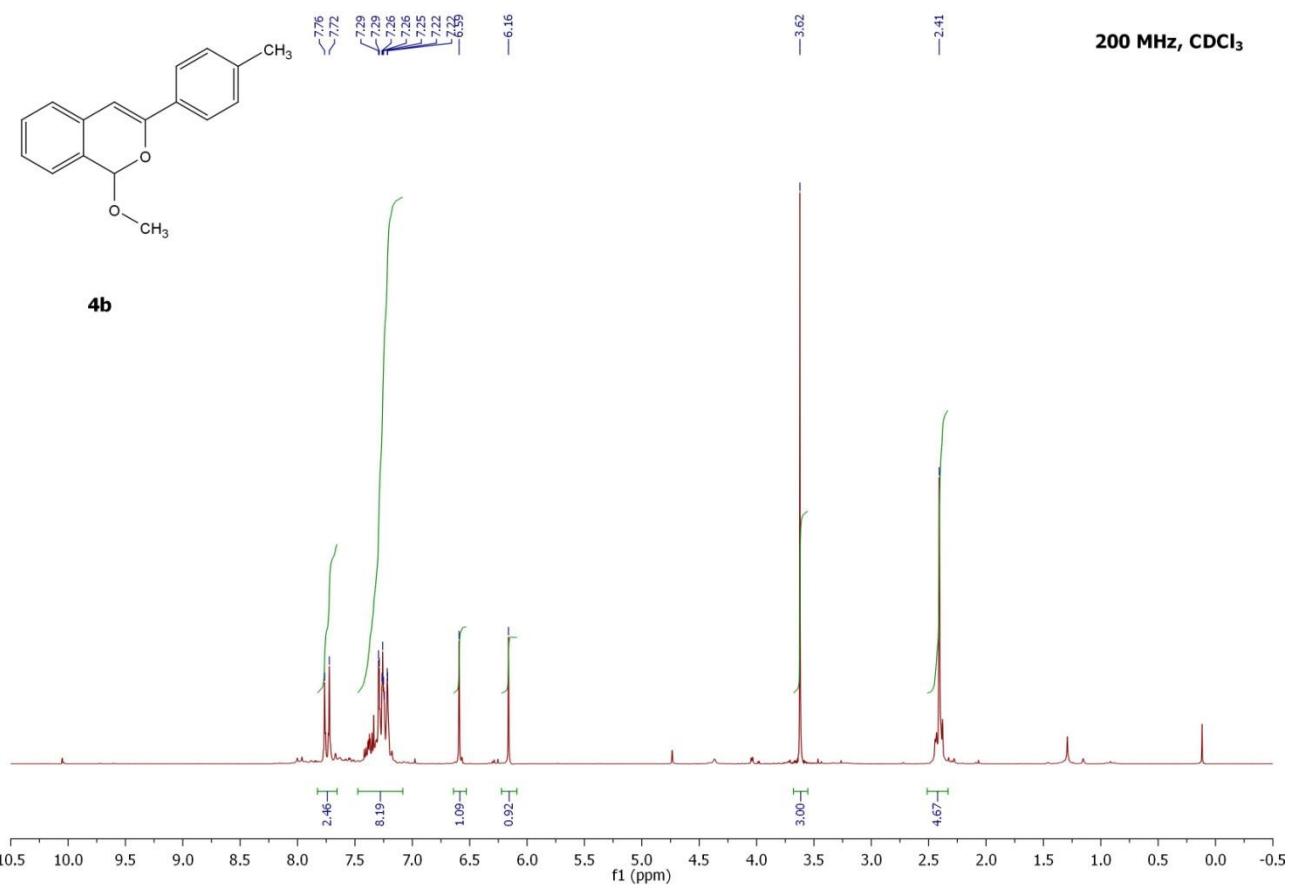
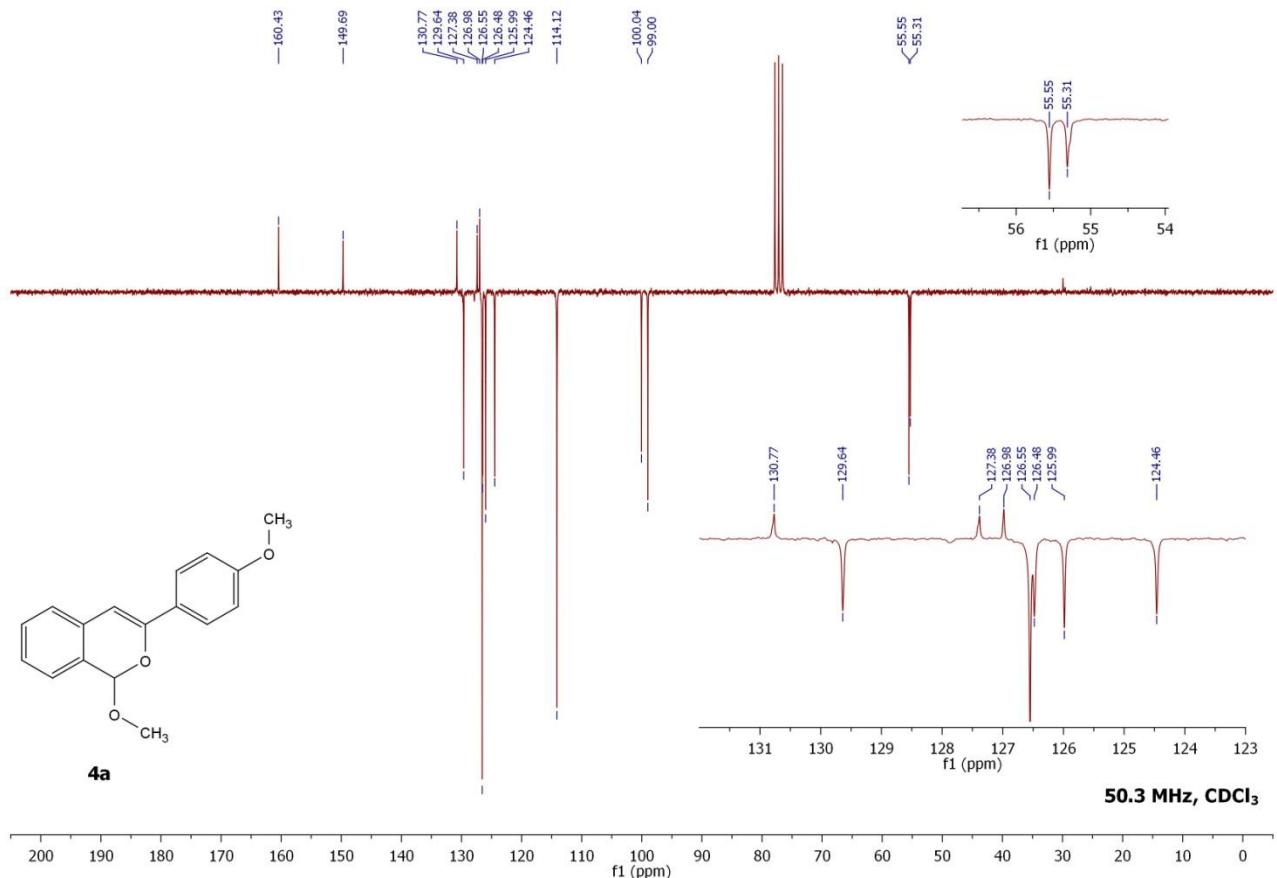
Superimposed UV spectra of ligand **1** and Ag complexes **2a** and **2b** (10^{-5} M solutions in CHCl_3).

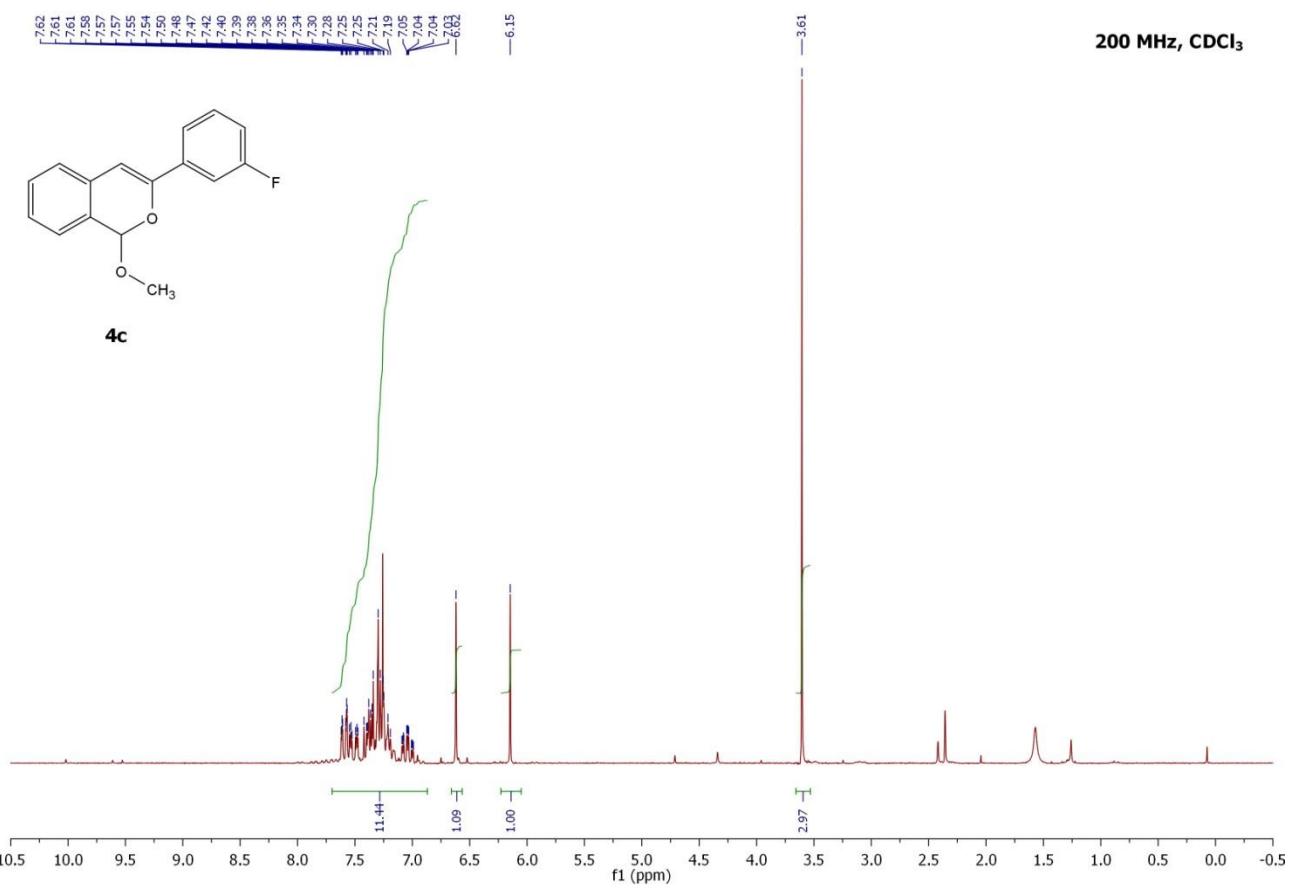
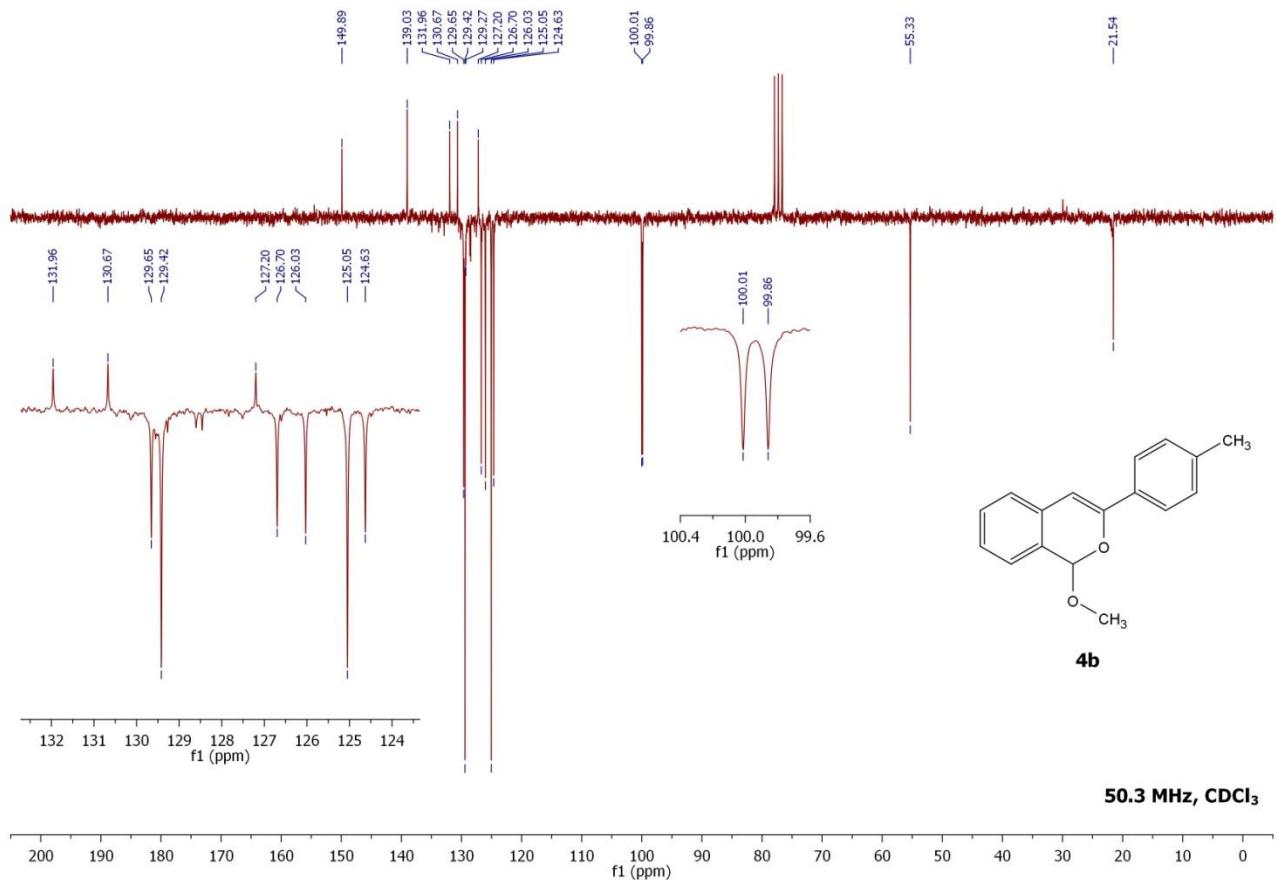


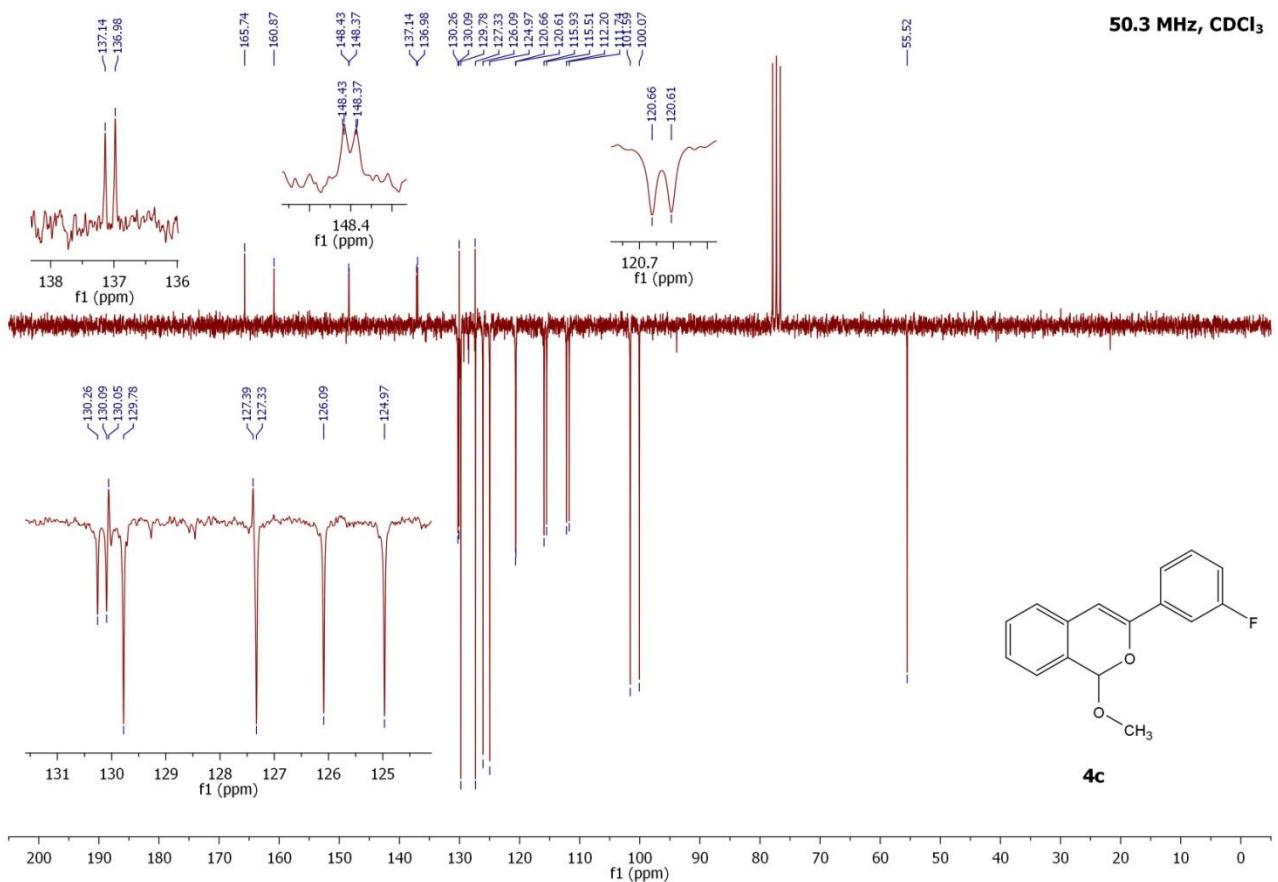




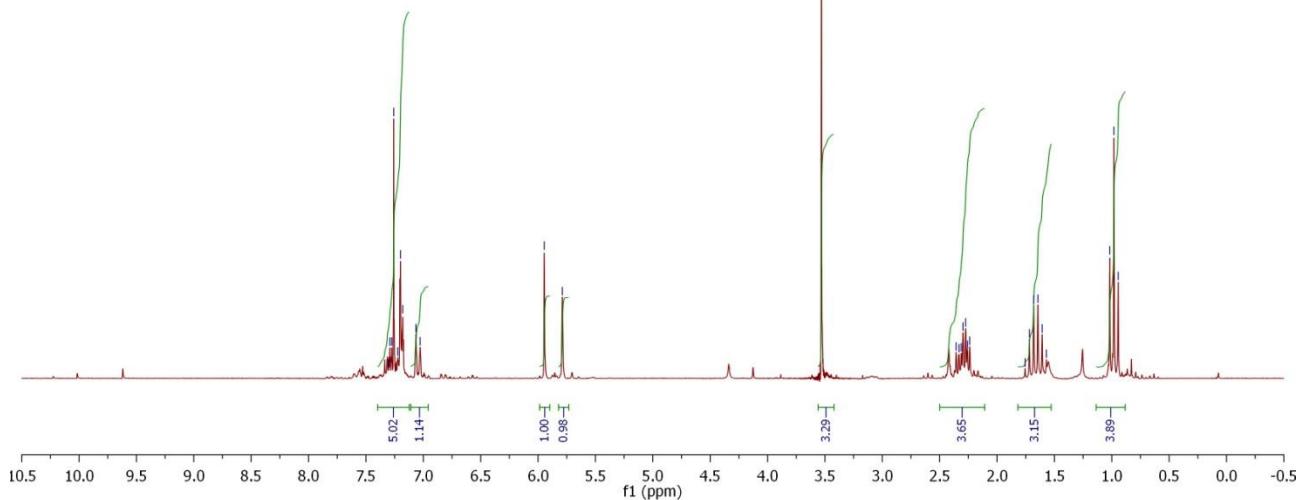


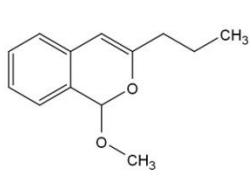




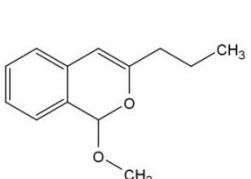
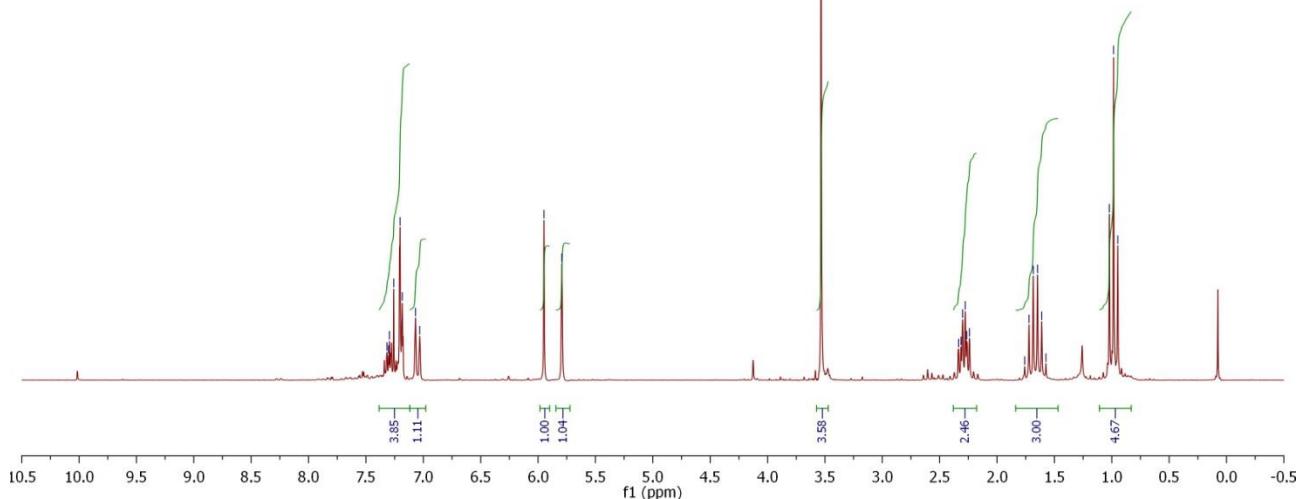


After simple work-up

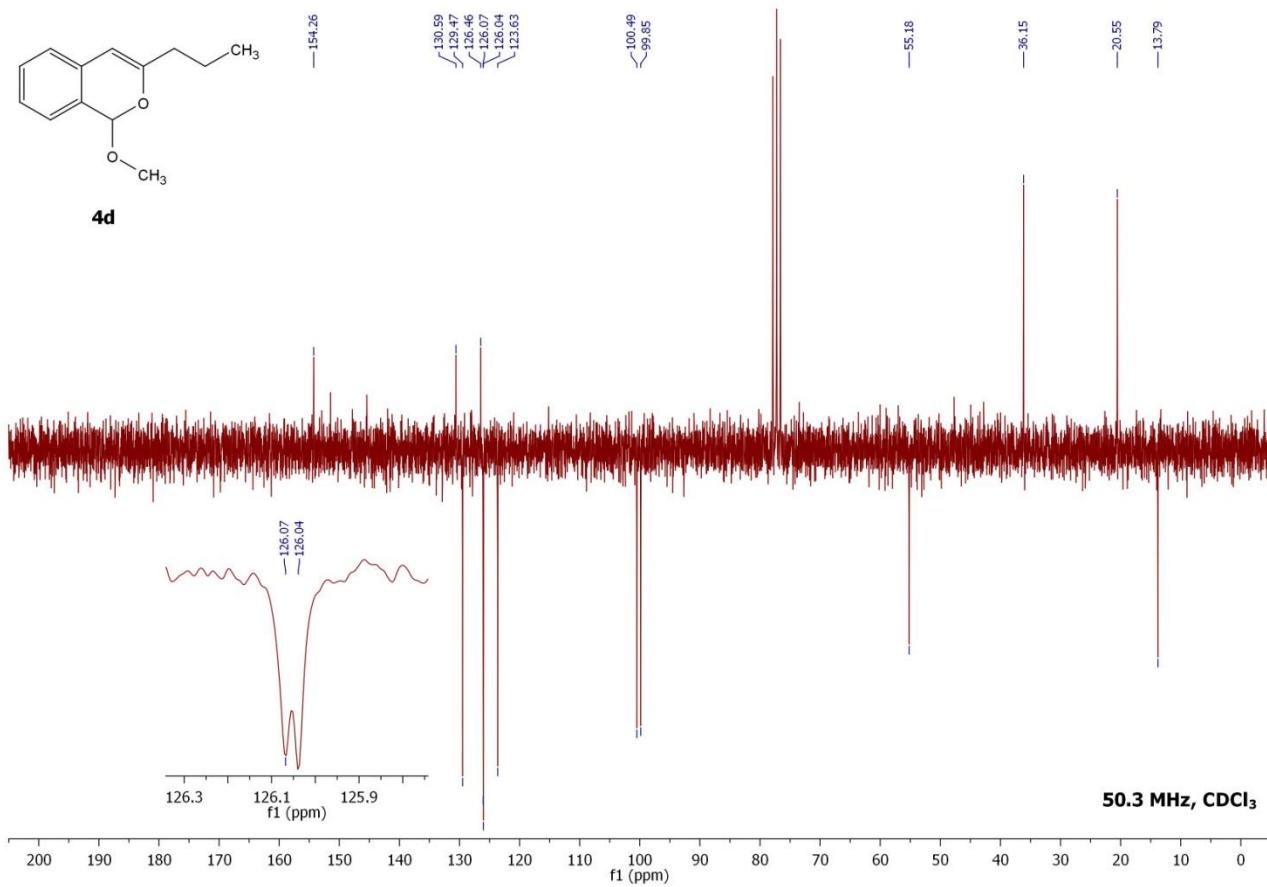


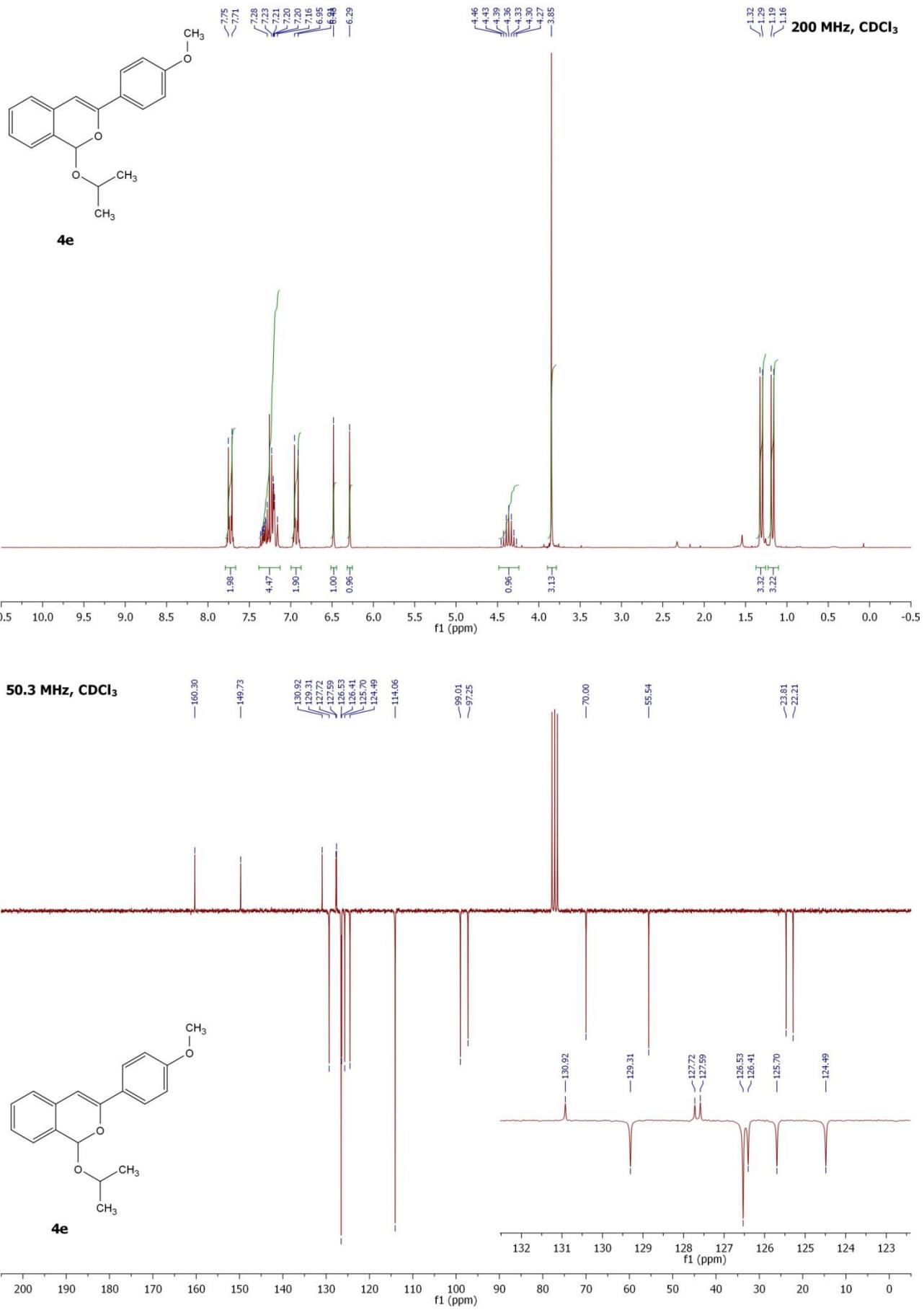


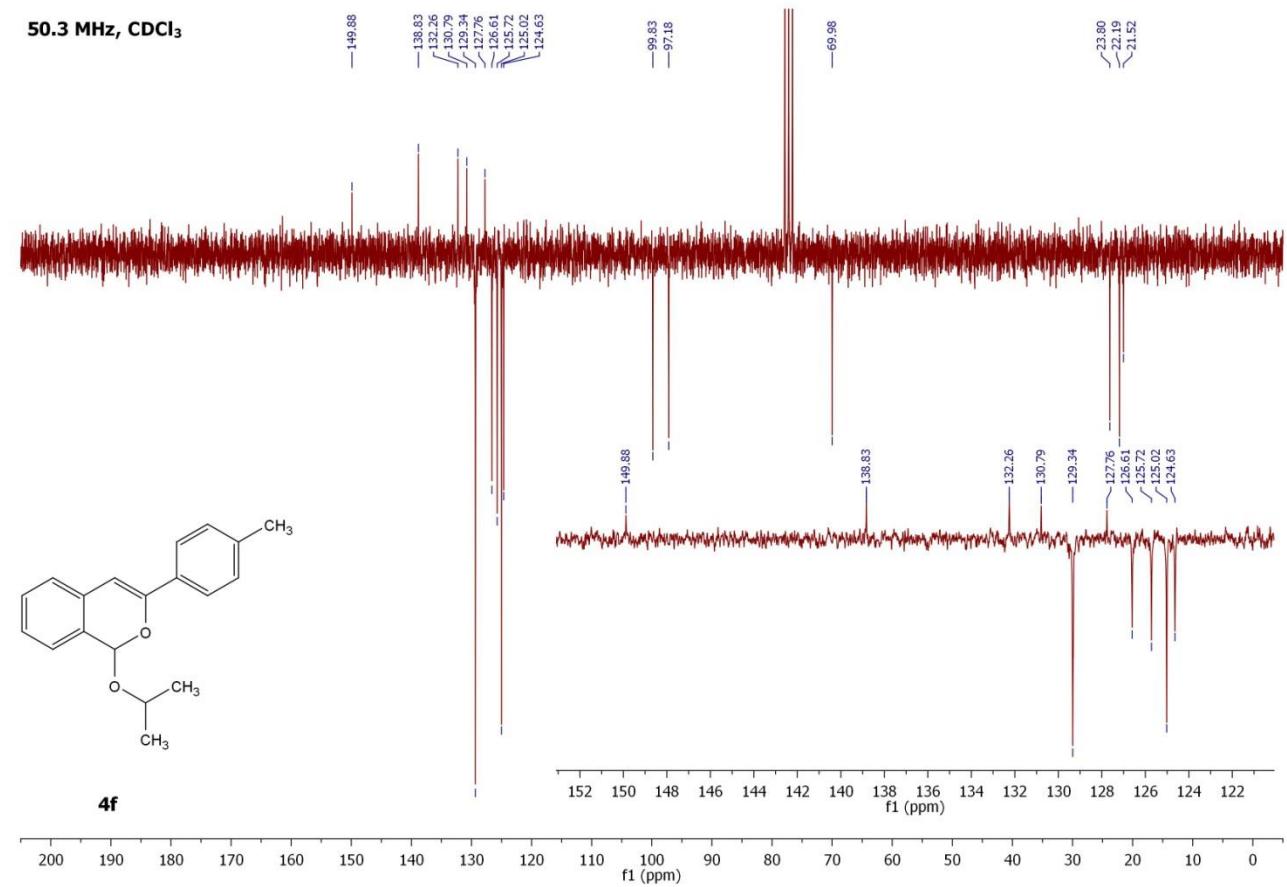
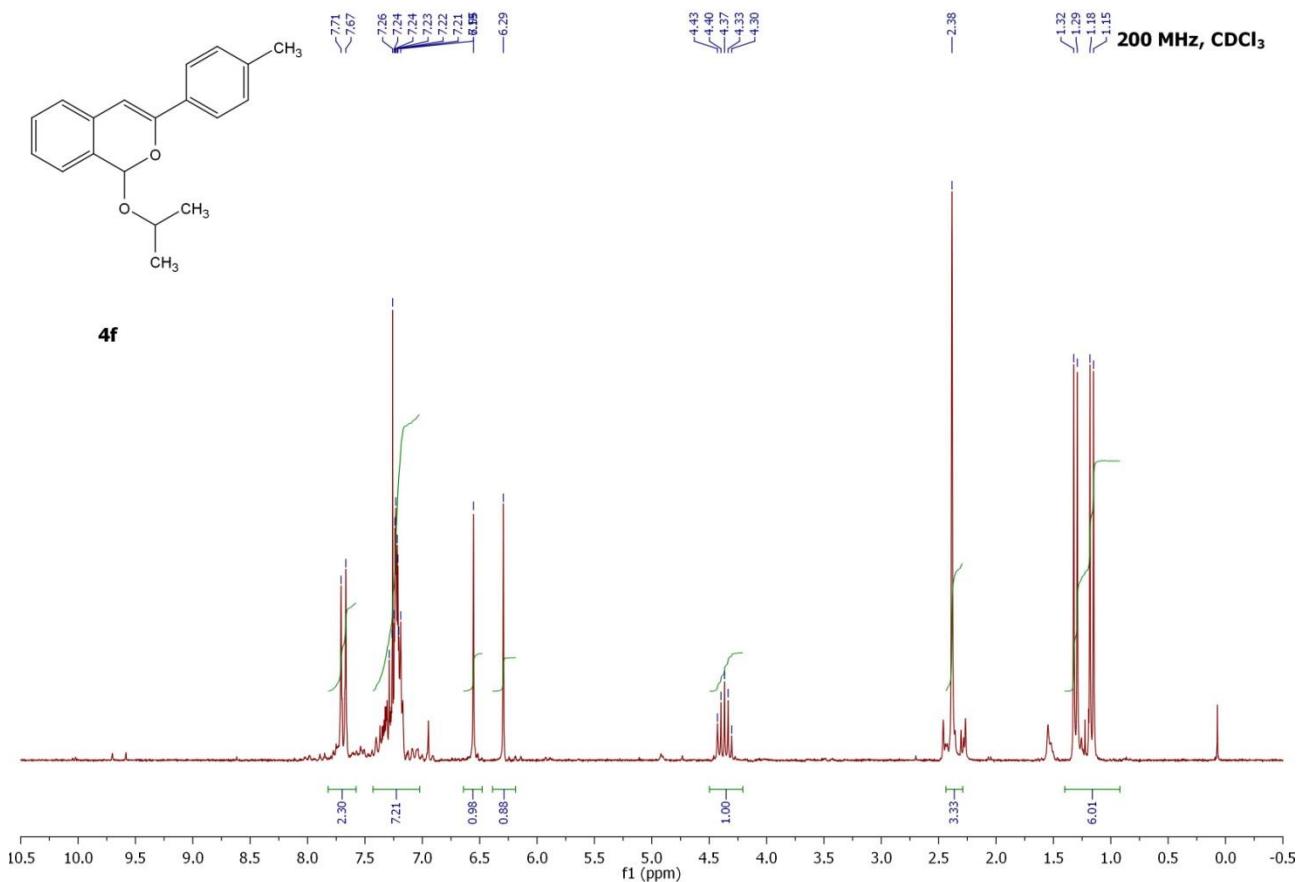
After column chromatography

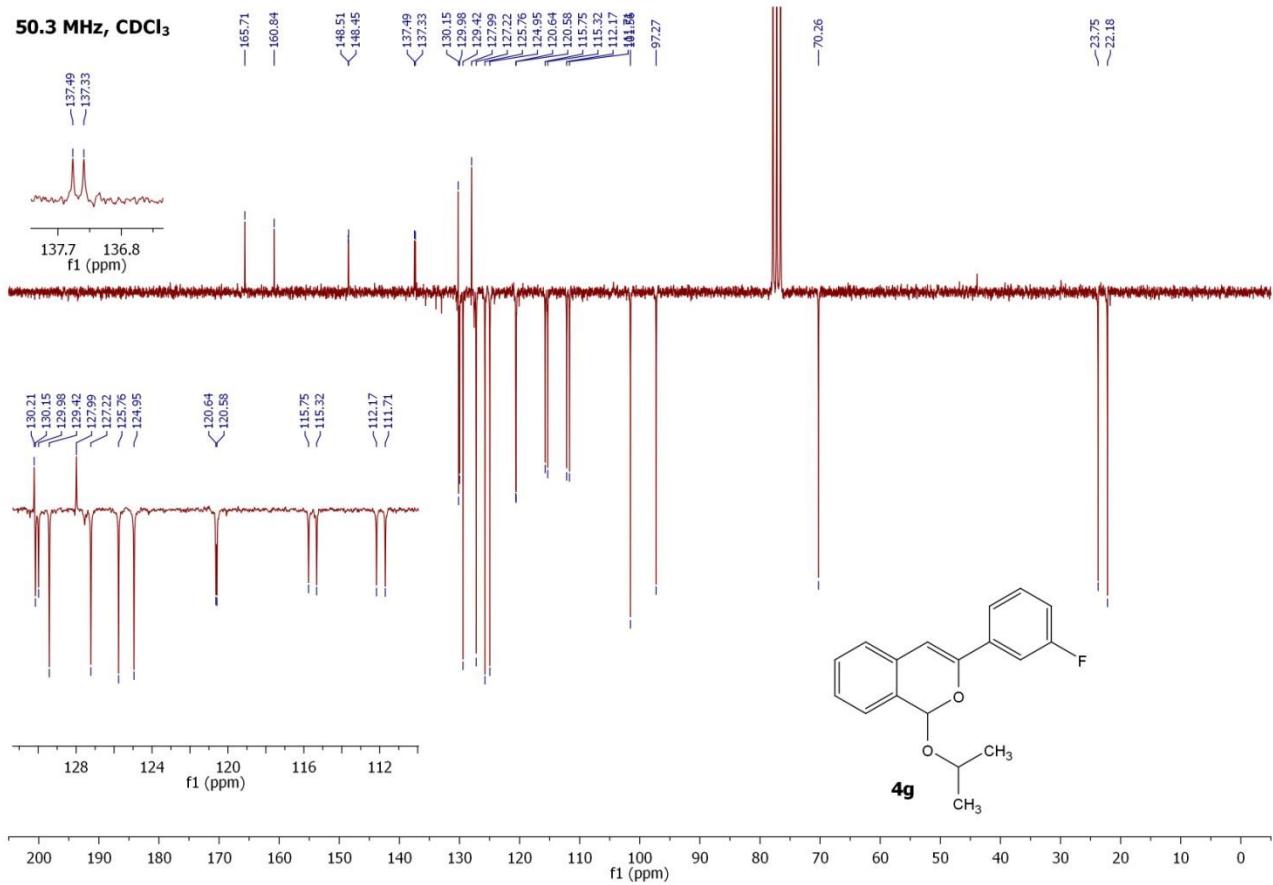
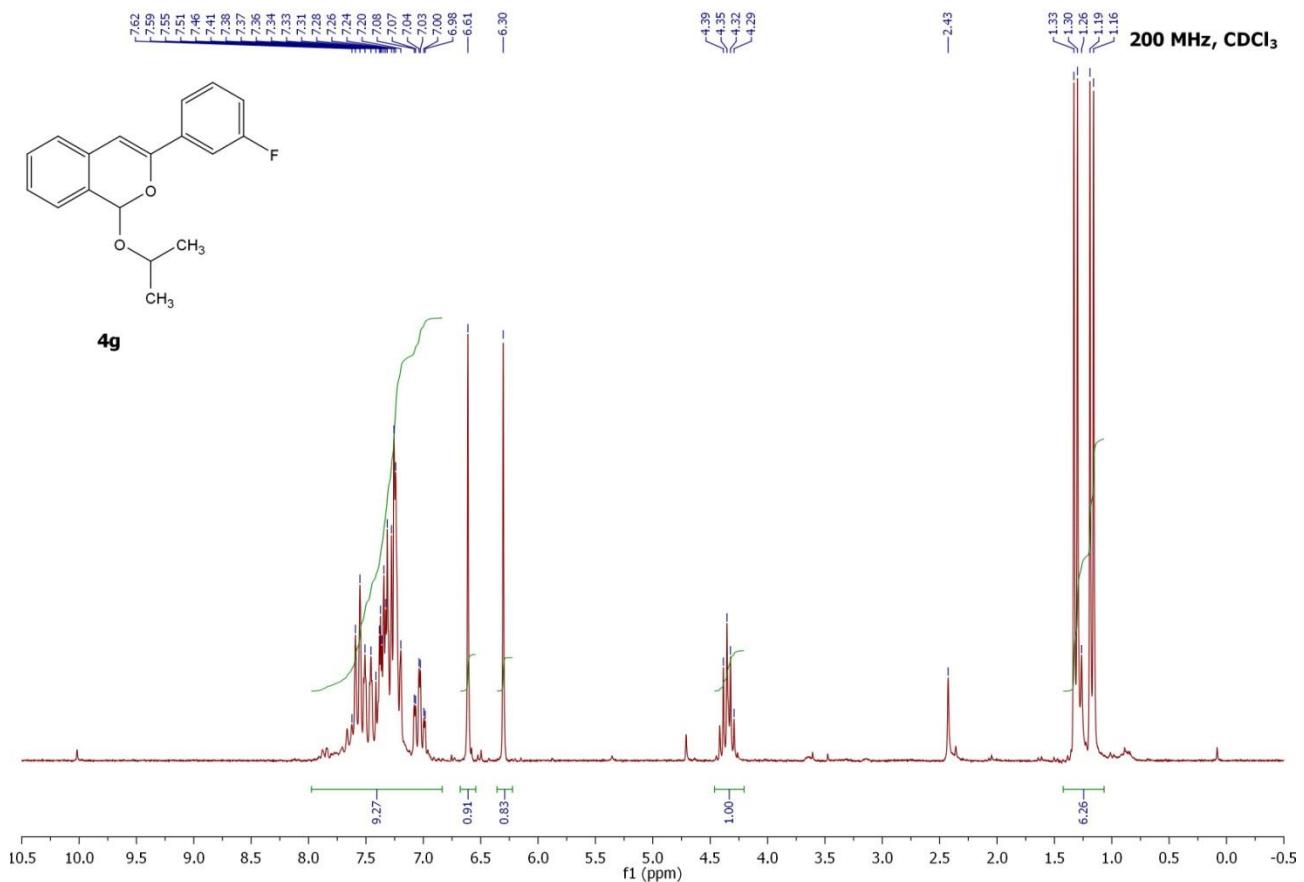


δ (ppm)

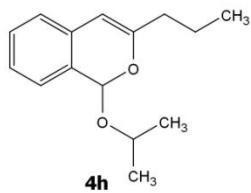




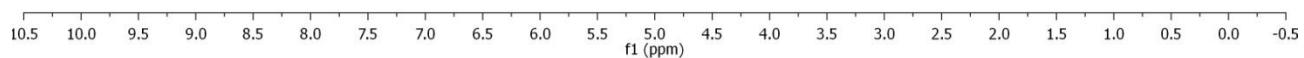




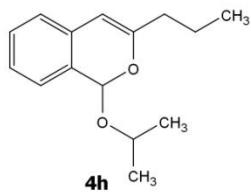
200 MHz, CDCl₃



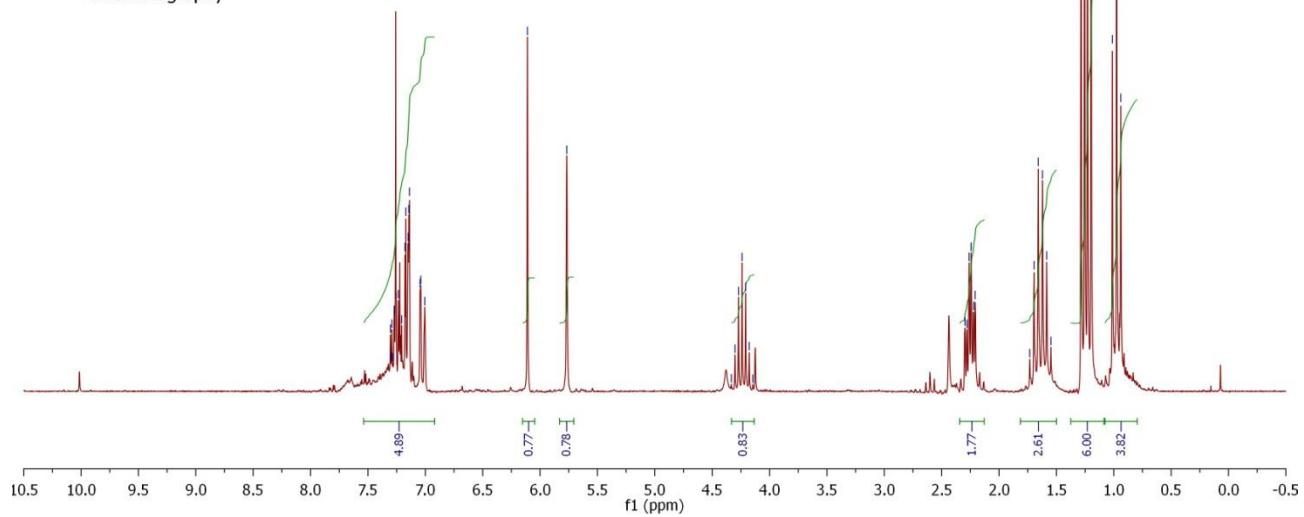
After simple work-up



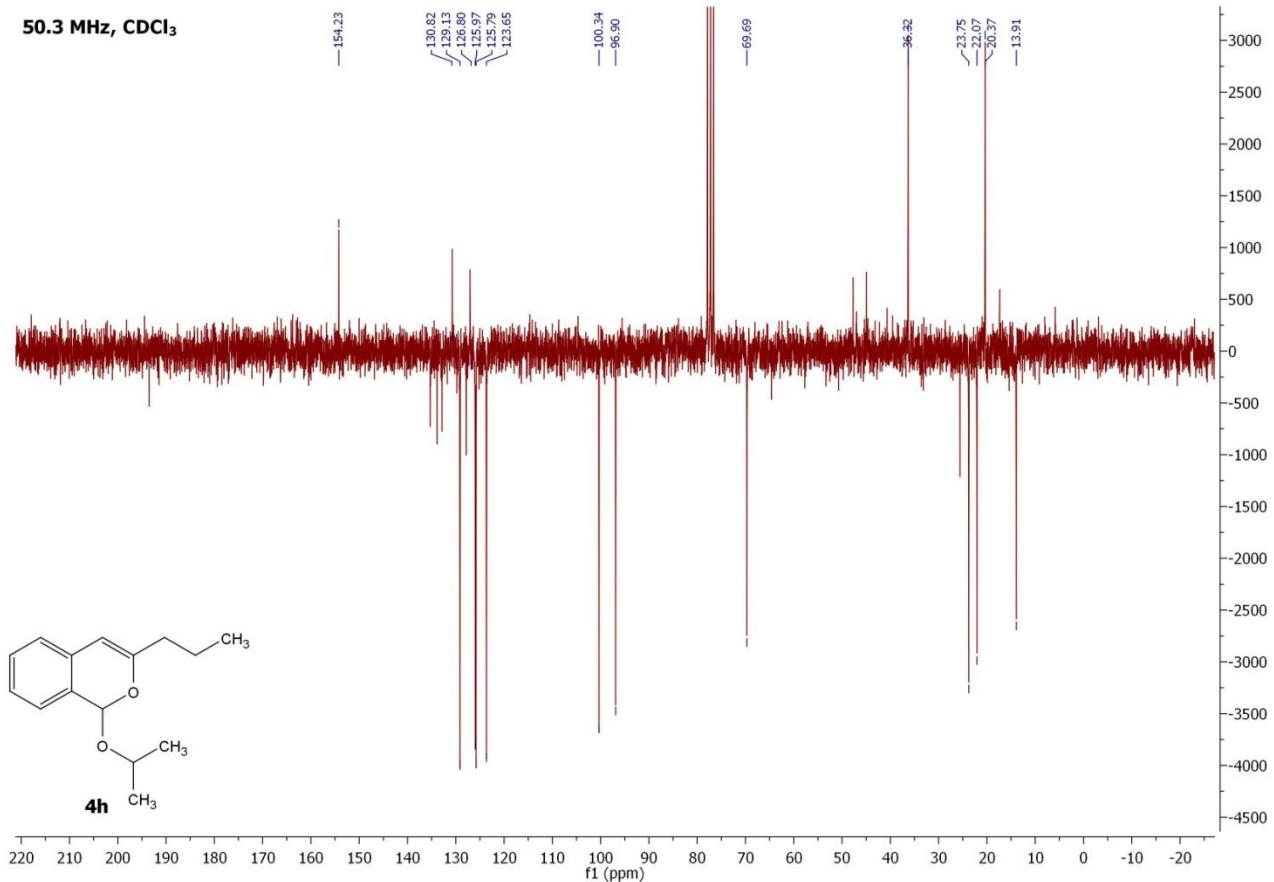
200 MHz, CDCl₃



After column chromatography



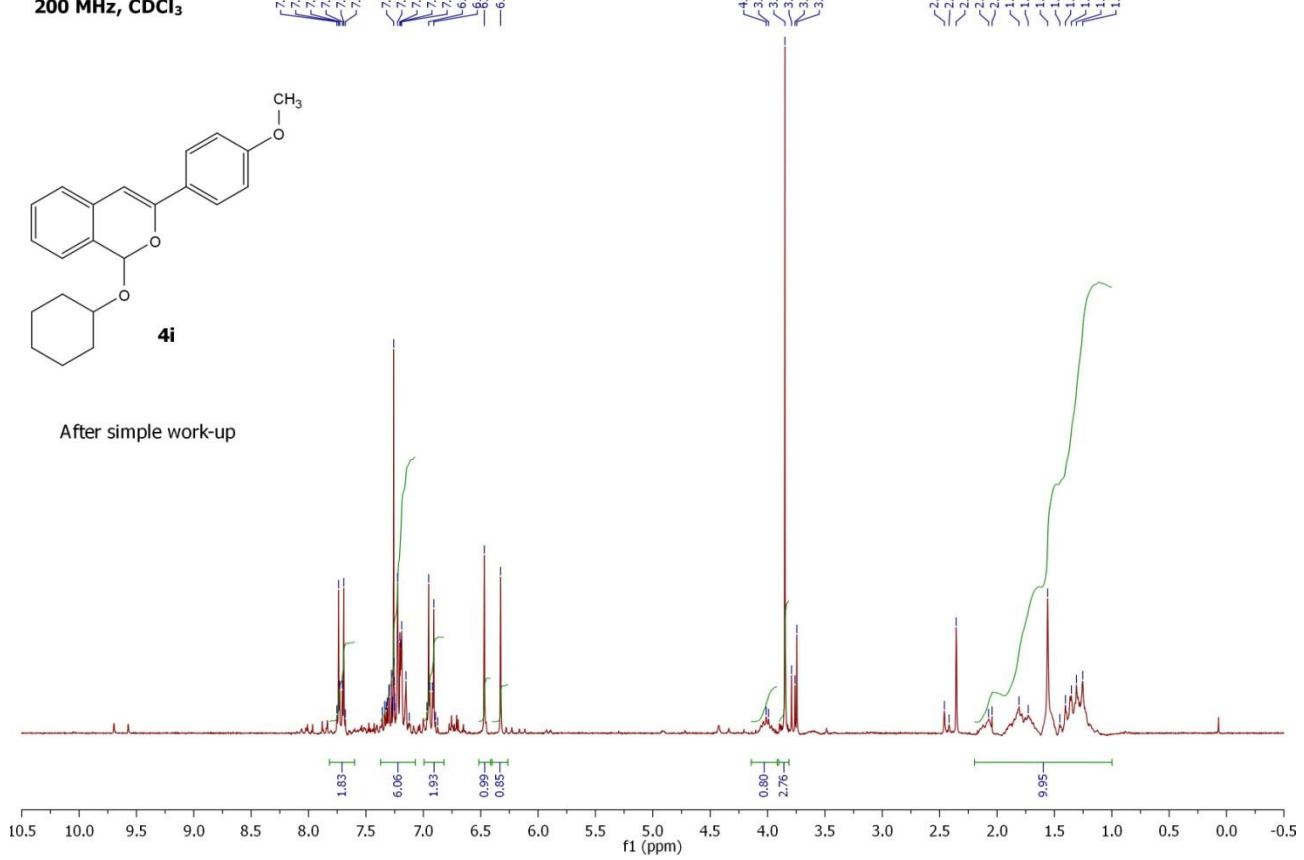
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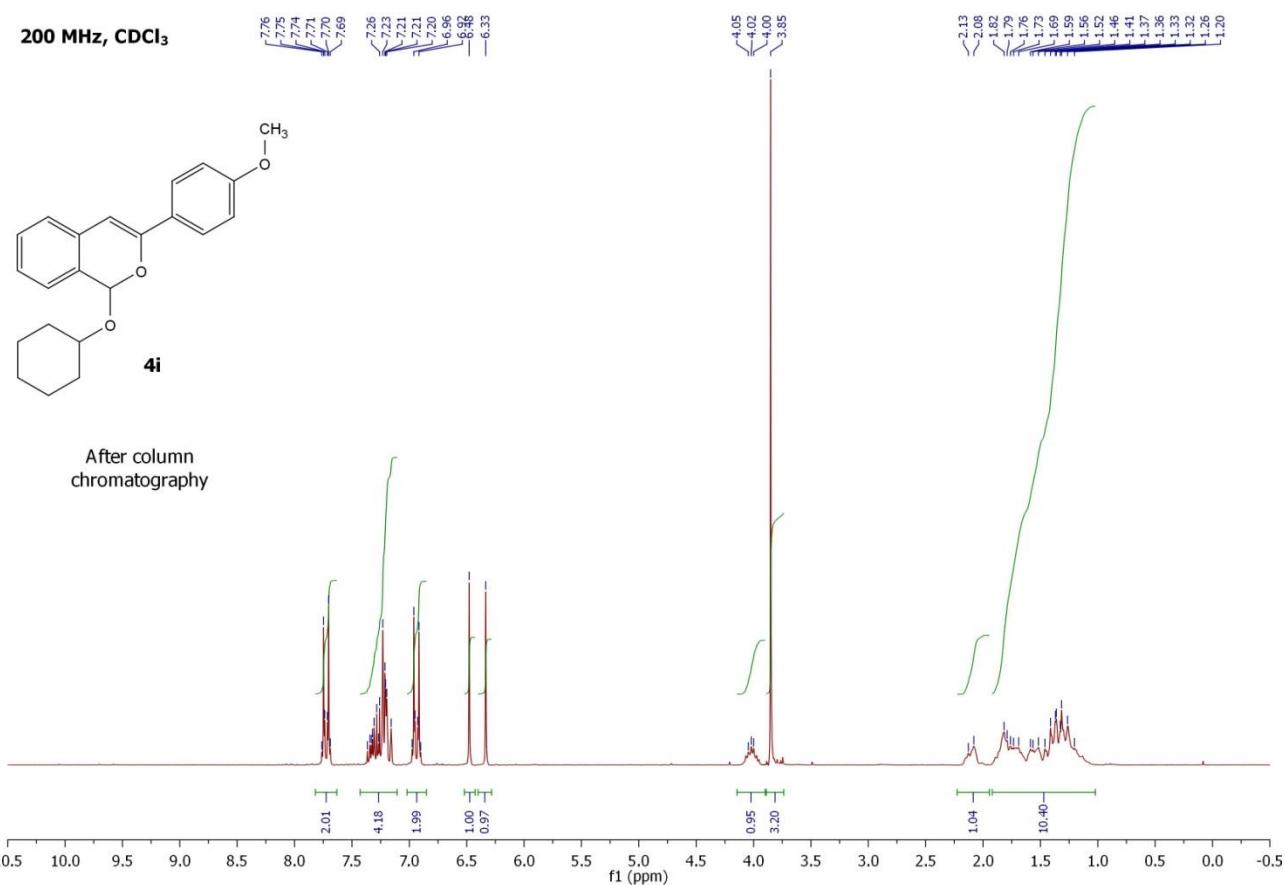
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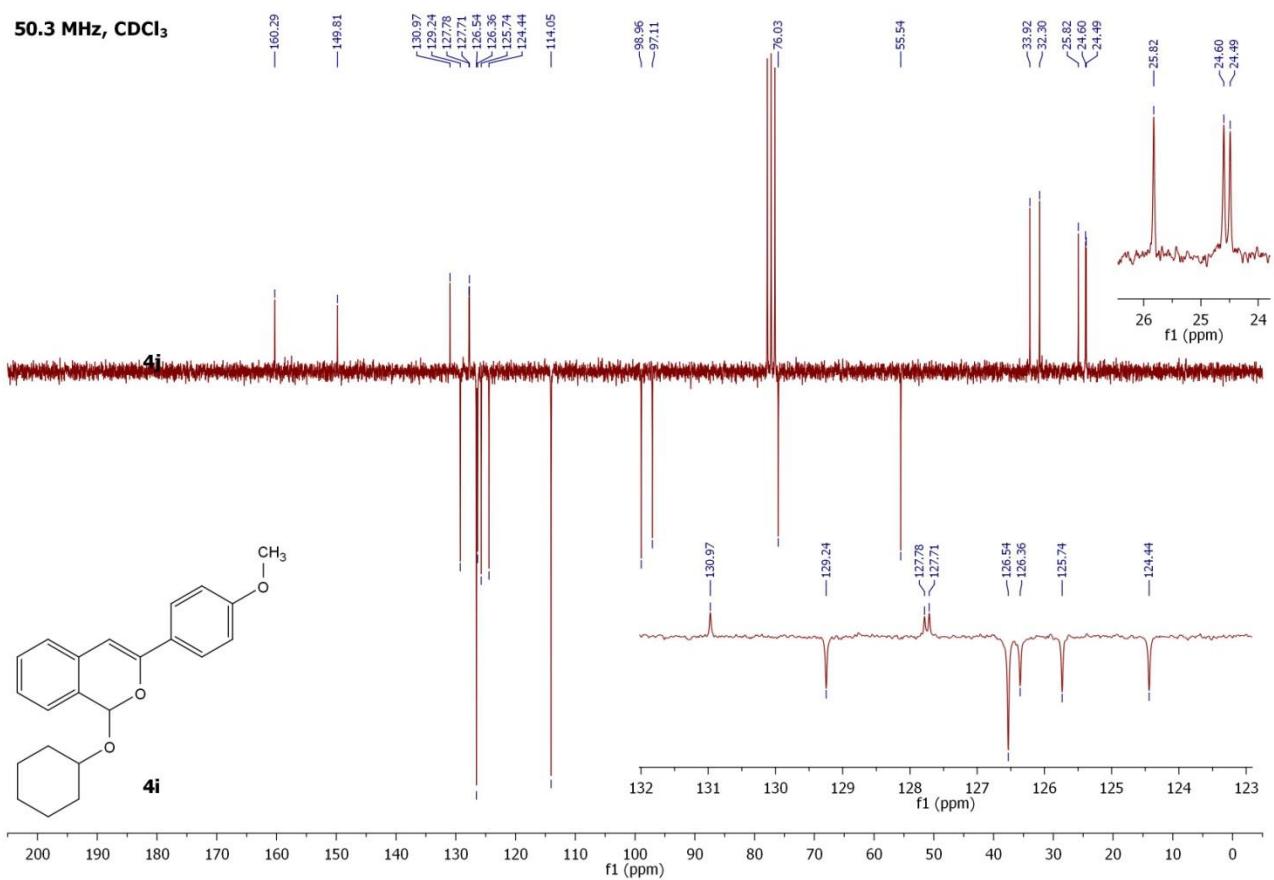
After simple work-up

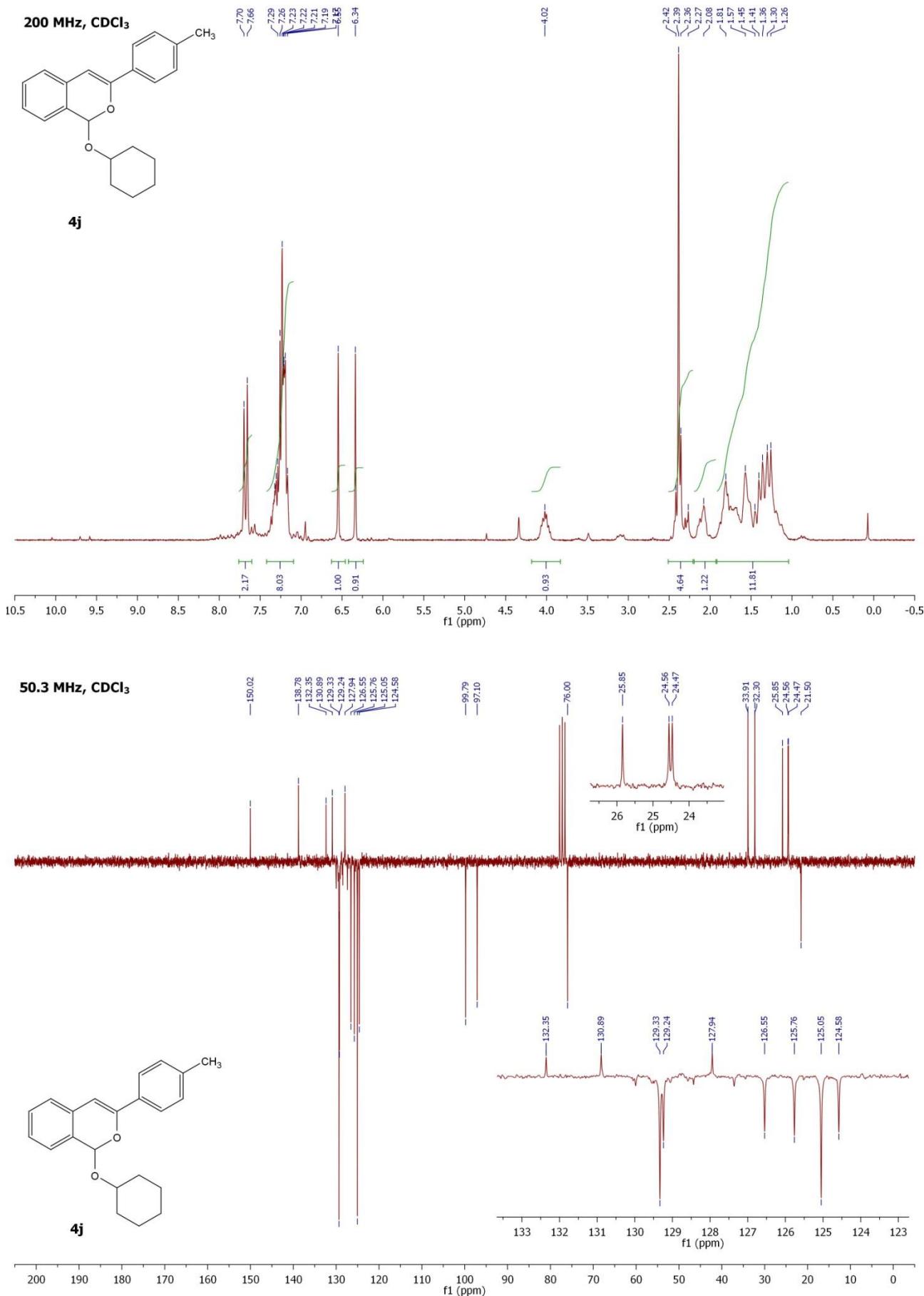


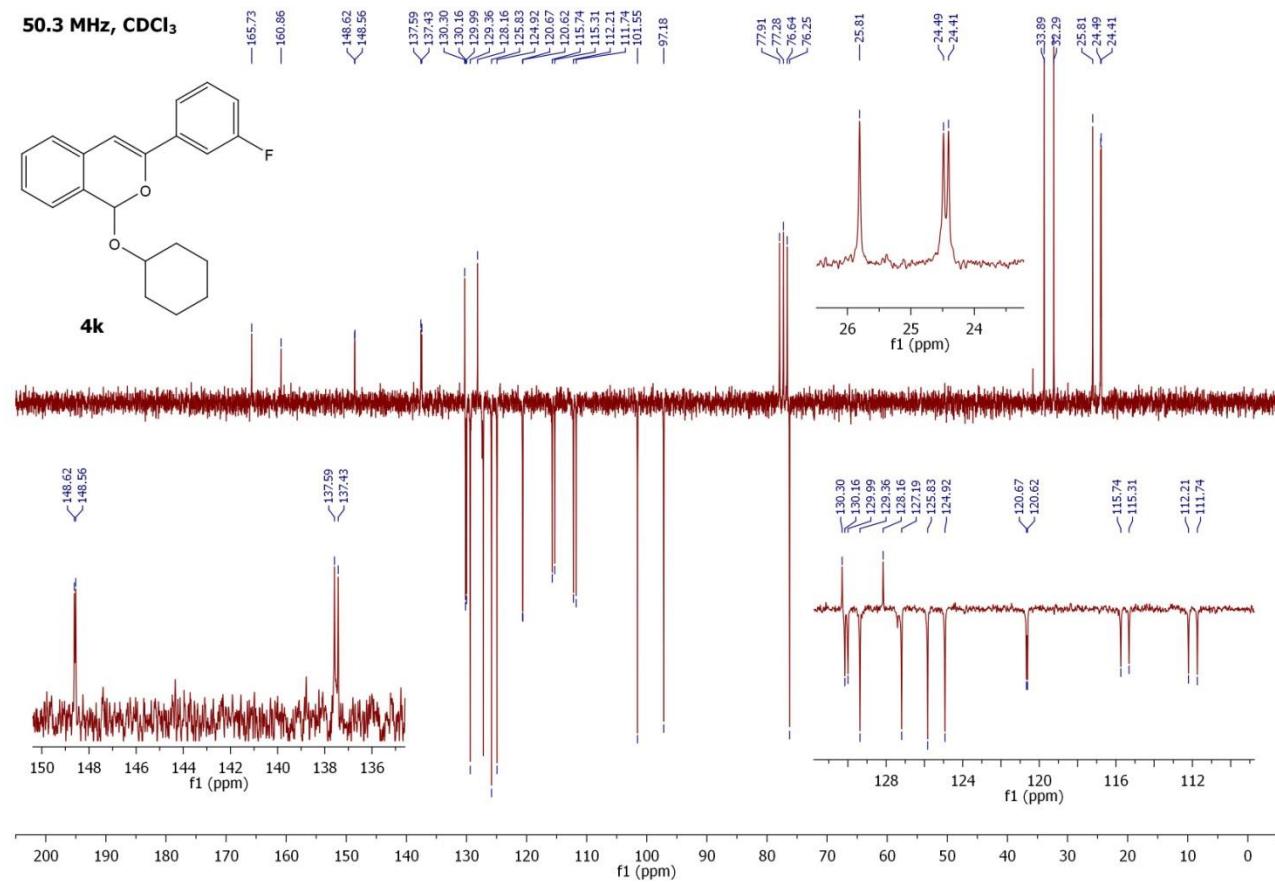
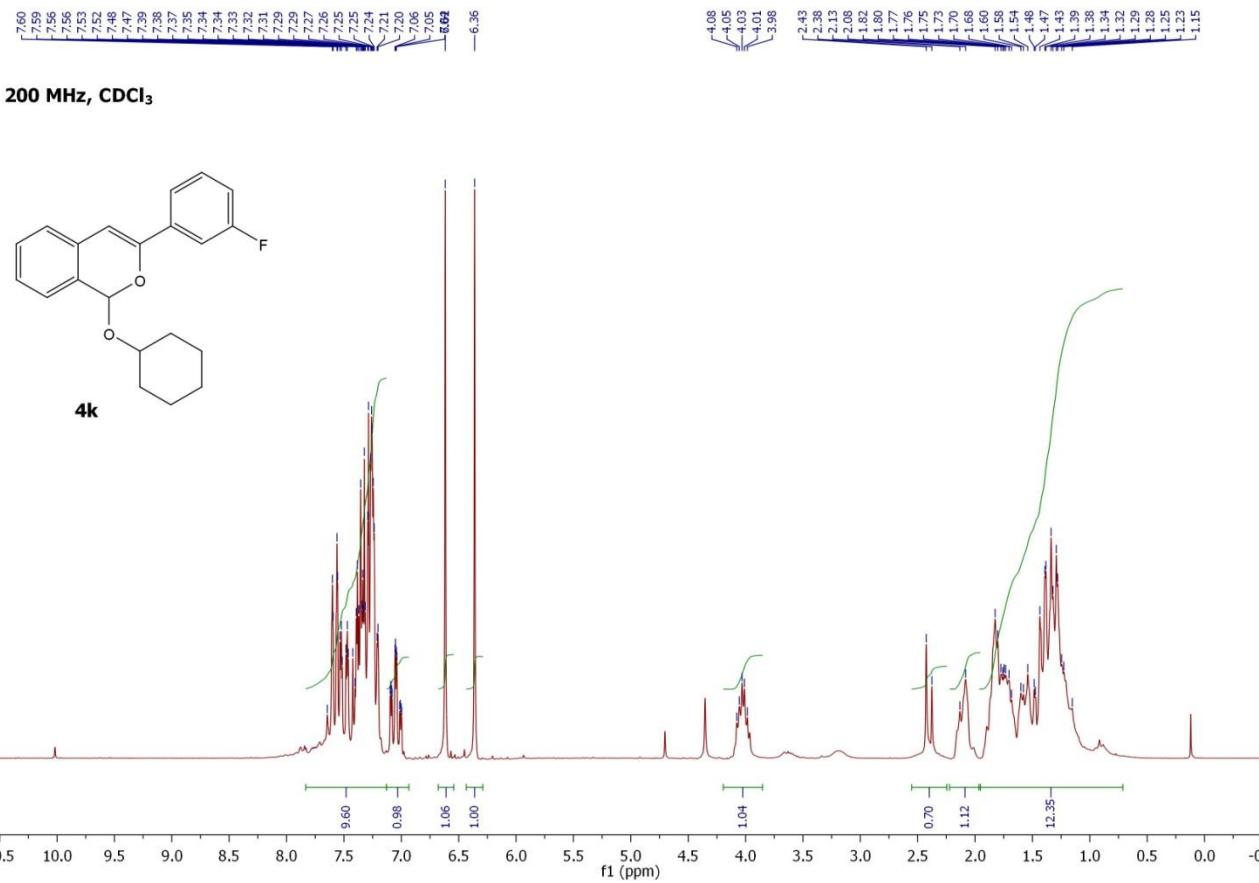
200 MHz, CDCl₃



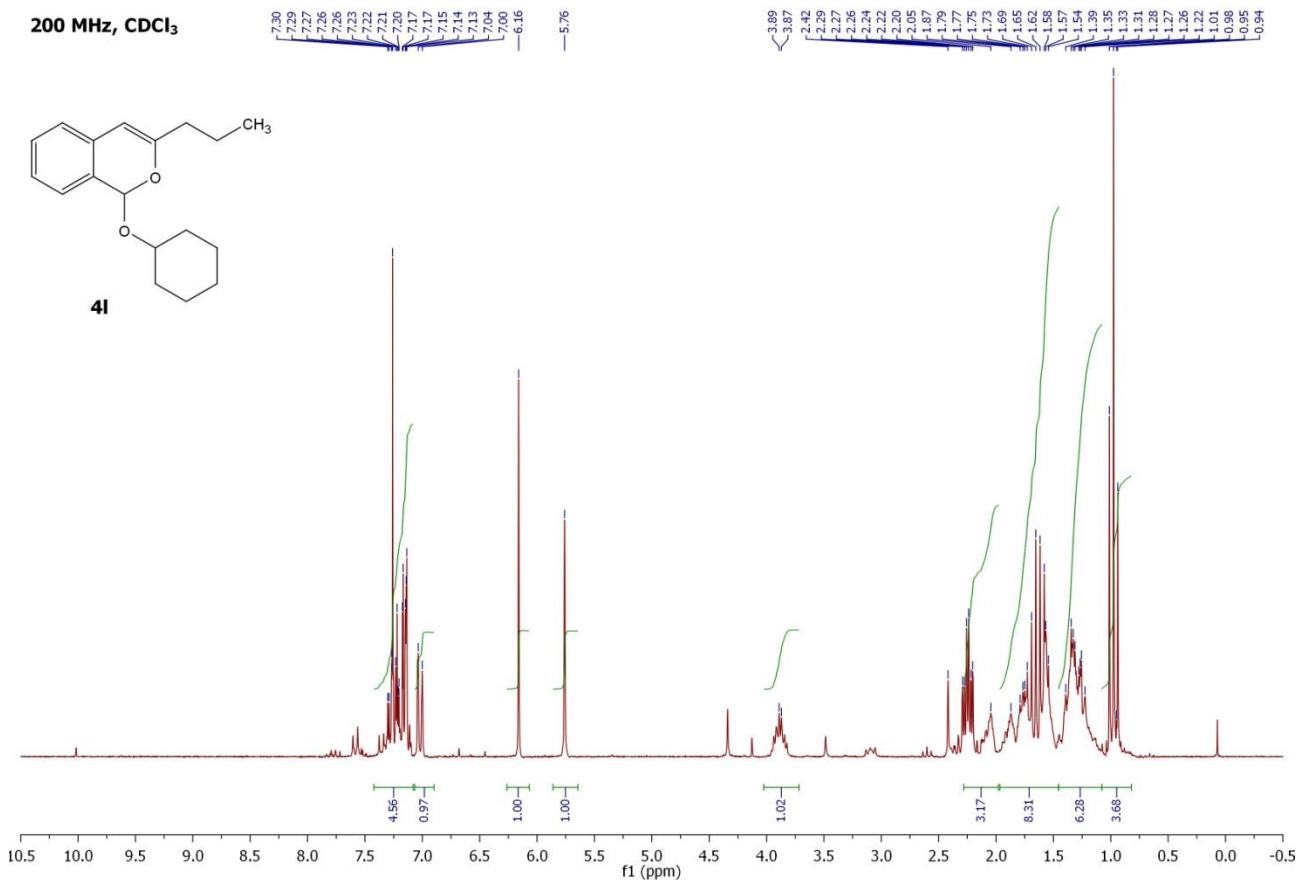
50.3 MHz, CDCl₃



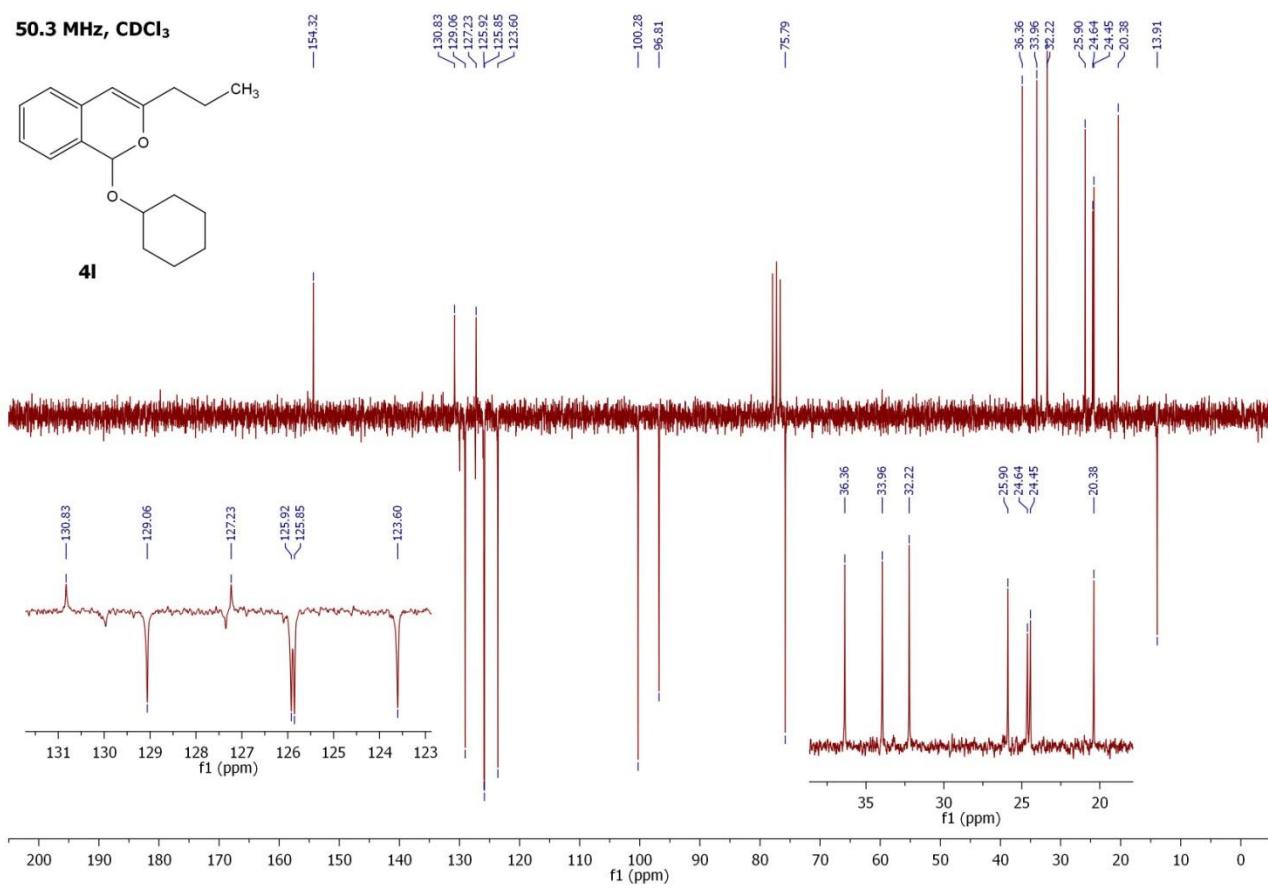


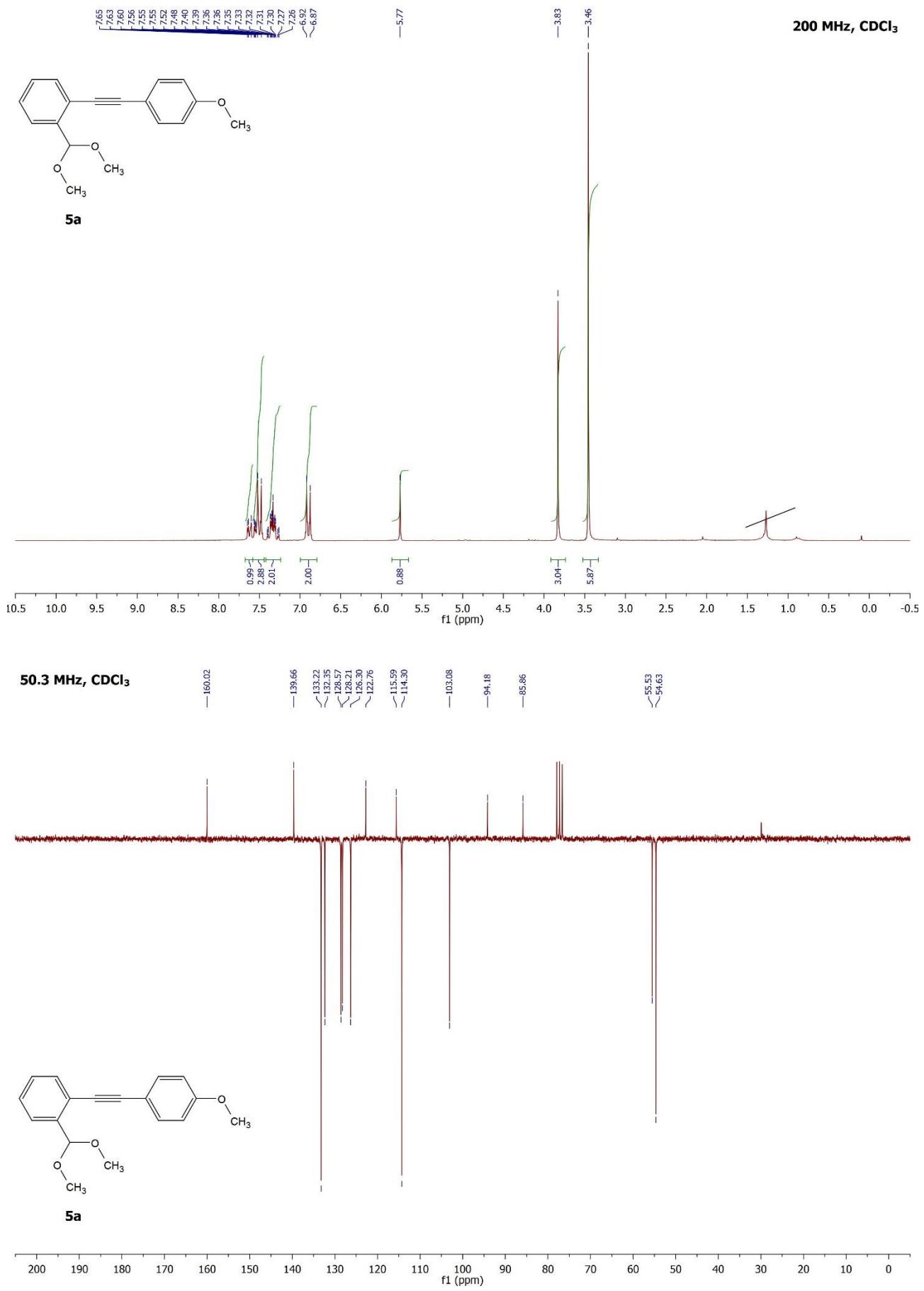


200 MHz, CDCl₃



50.3 MHz, CDCl₃

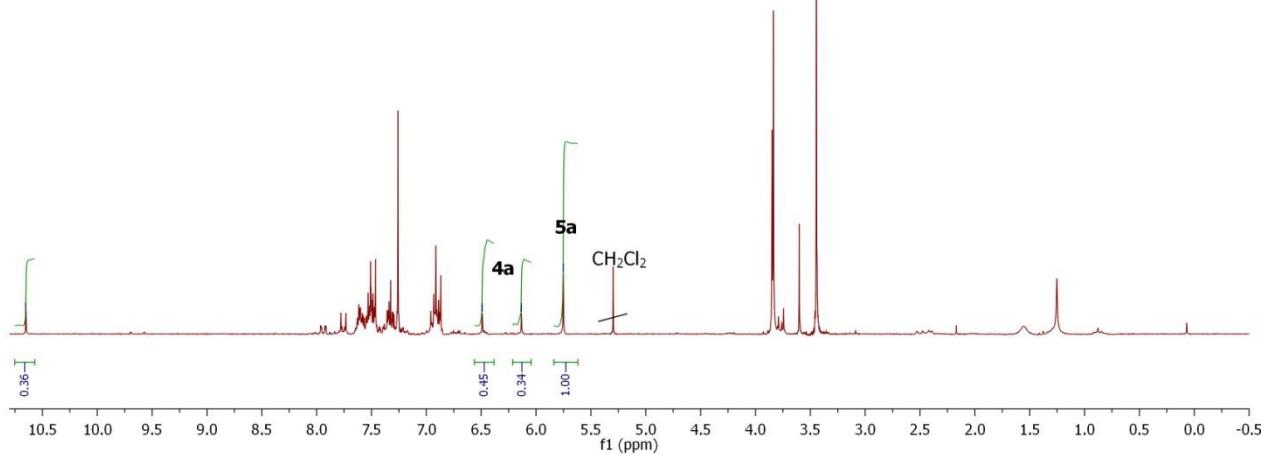
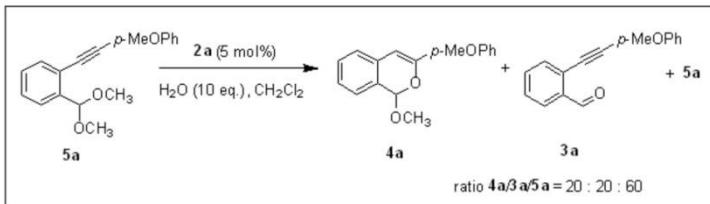




—10.65

—6.49
—6.13
—5.75

Reaction crude of acetal 5a in CH₂Cl₂ with 10 equiv of water and catalyst 2a



—10.65
—9.69
—9.57

—8.07
—8.03
—7.88
—7.54
—7.26
—7.00
—6.95
—6.75
—6.71
—6.47
—6.45
—6.23
—6.11
—5.91
—5.89

—4.72

200 MHz, CDCl₃

Stability experiments:

Result of the treatment of 4a under acidic conditions

