

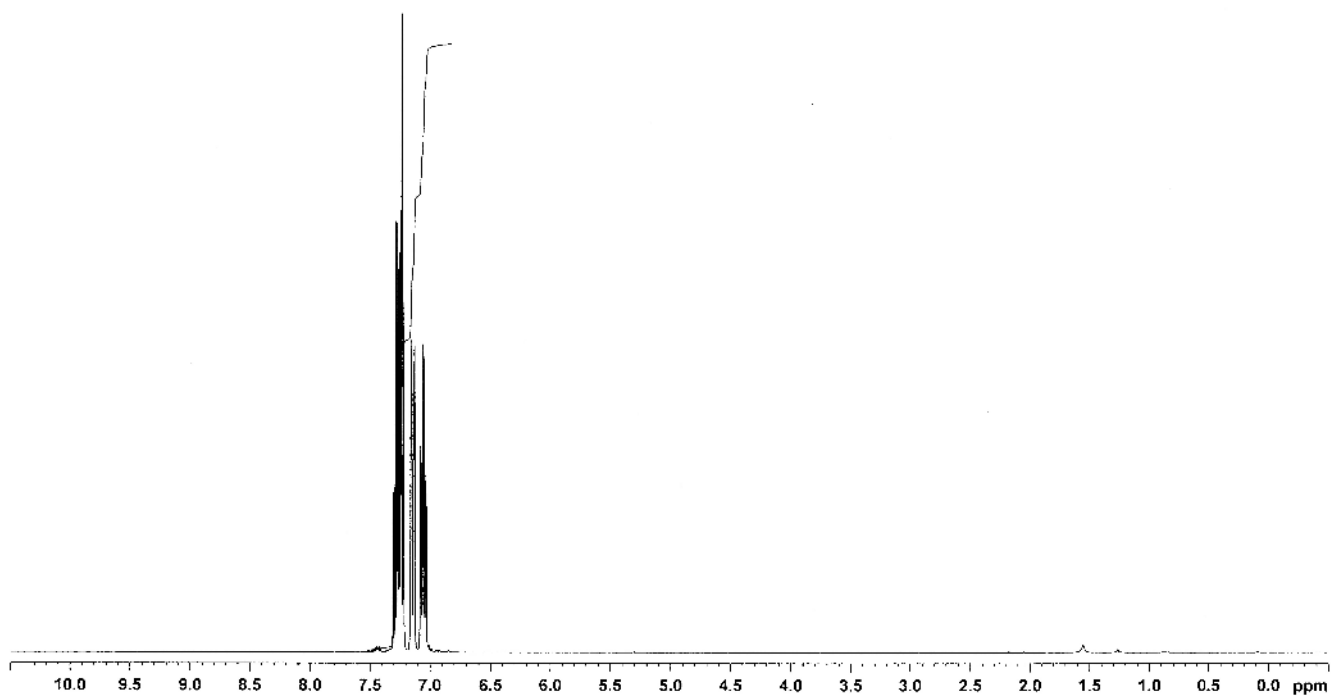
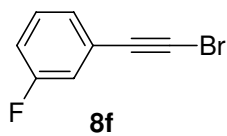
Supporting Information-2

Ruthenium-Catalyzed [2+2] Cycloadditions Between Bicyclic Alkenes and Alkynyl Halides

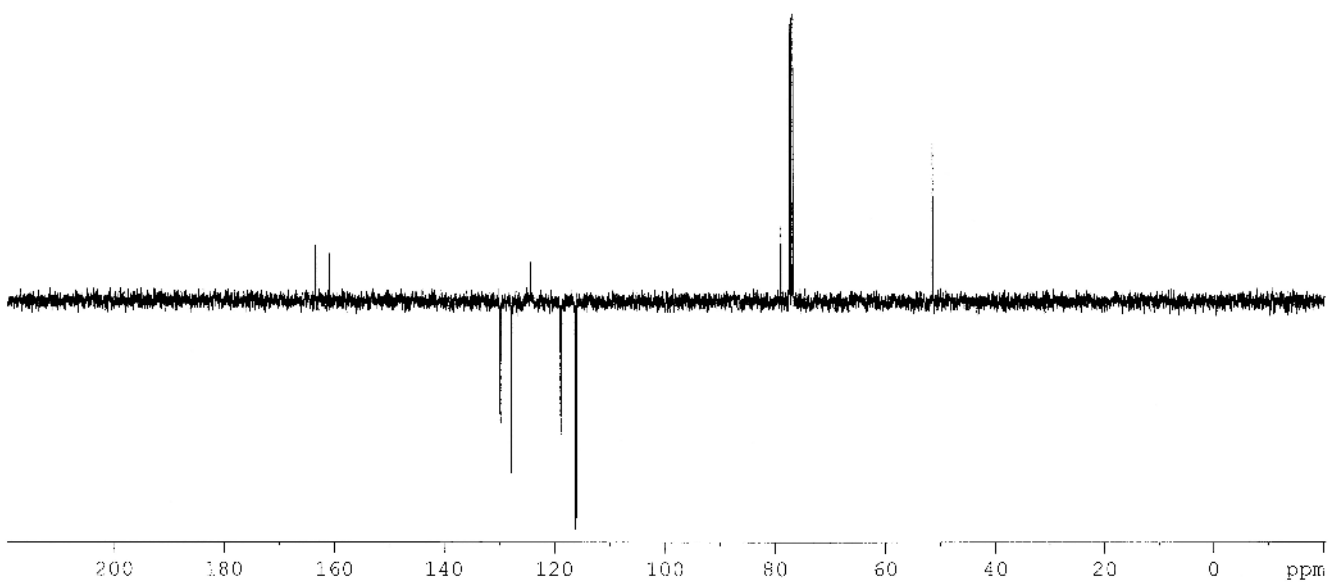
*Karine Villeneuve, Nicole Riddell, Robert W. Jordan, Gavin Tsui and William Tam**

Guelph-Waterloo Centre for Graduate Work in Chemistry and Biochemistry,
Department of Chemistry, University of Guelph, Guelph, Ontario, Canada N1G 2W1

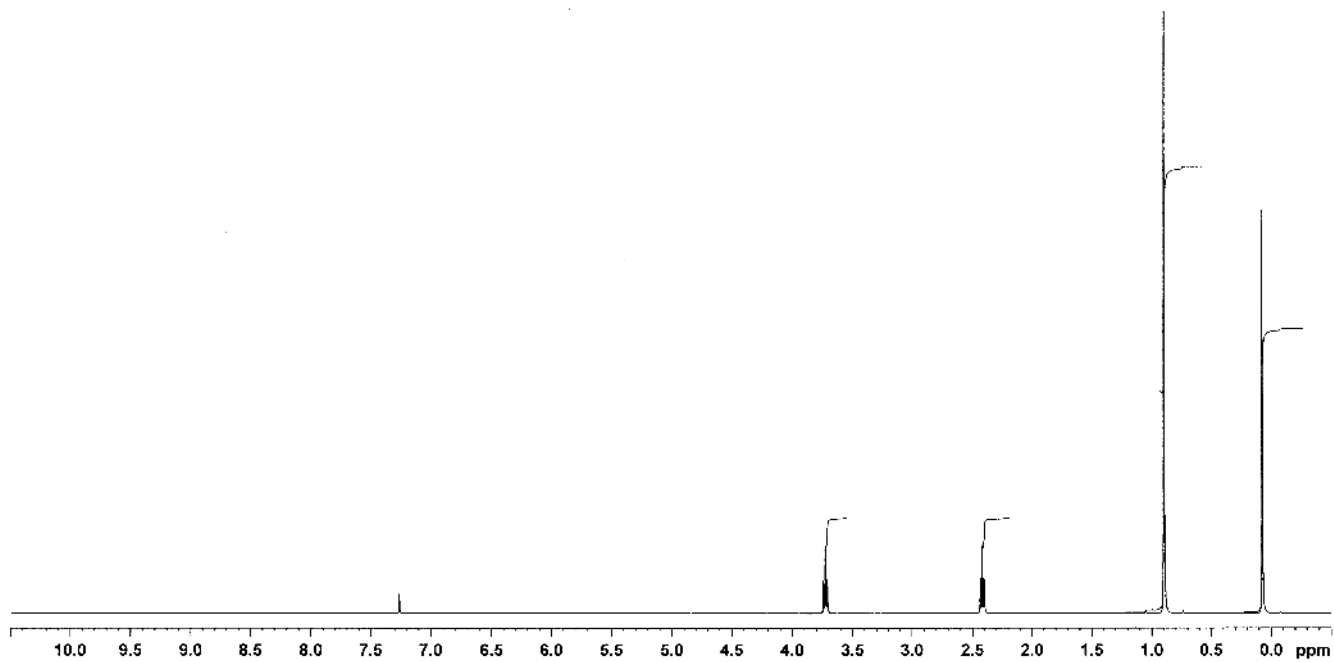
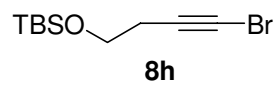
Part III: ^1H and ^{13}C NMR Spectra of New Compounds



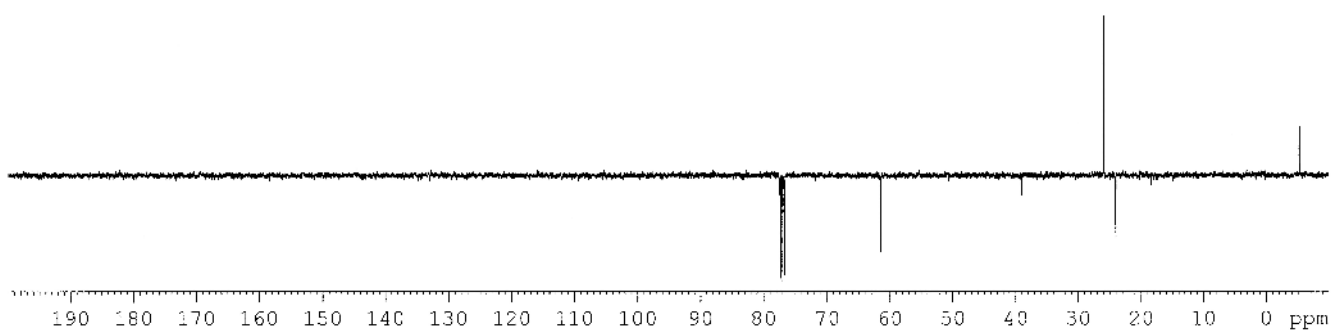
(400 MHz ¹H NMR spectrum)



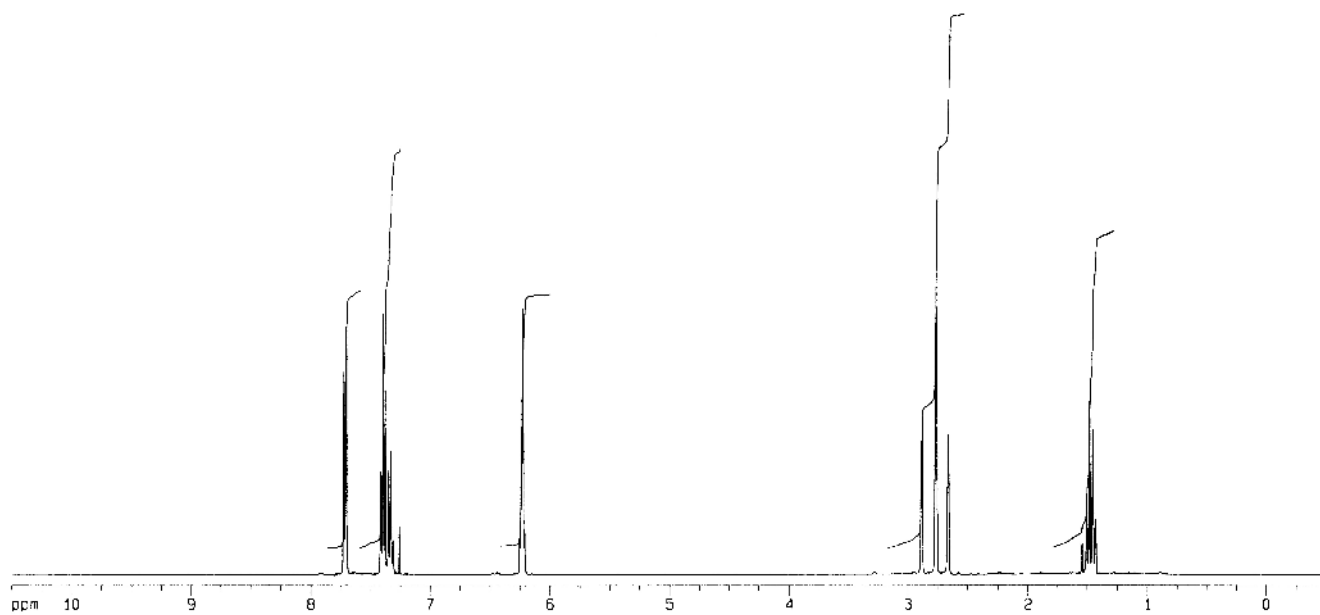
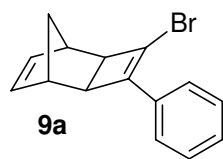
(100 MHz ¹³C-APT NMR spectrum)



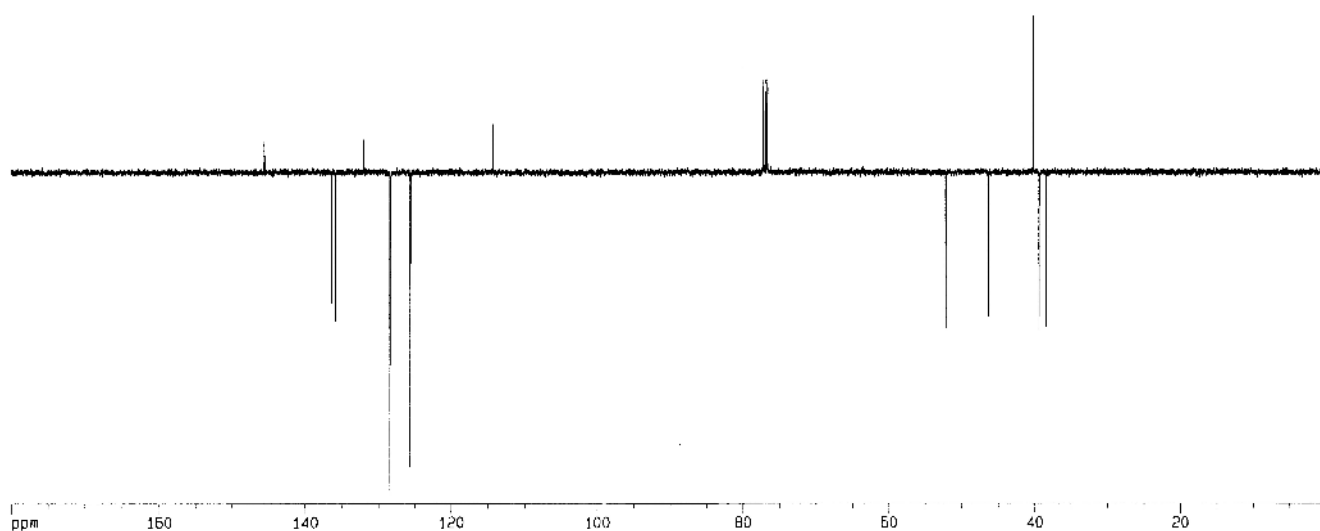
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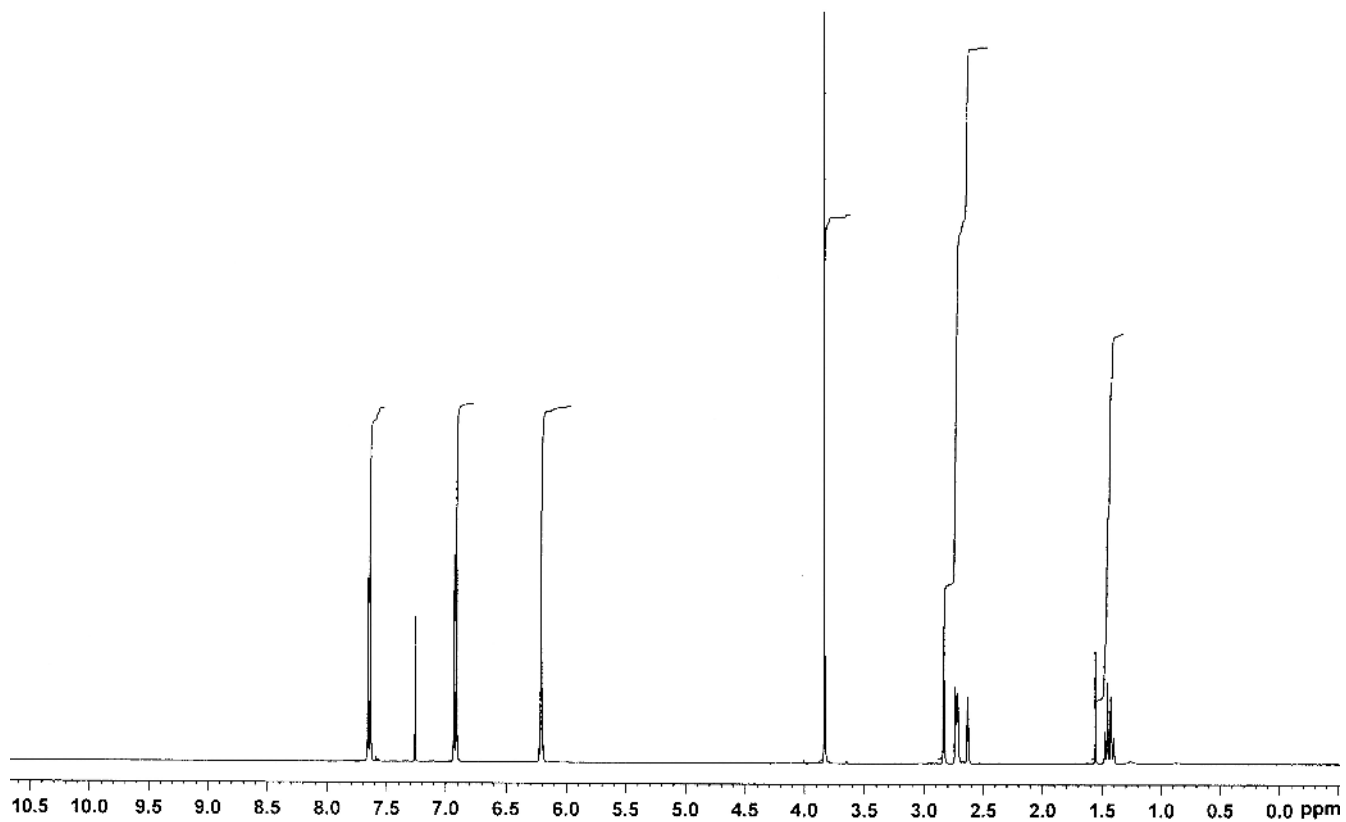
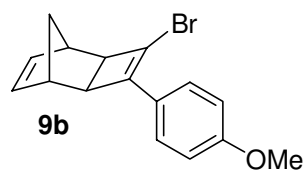
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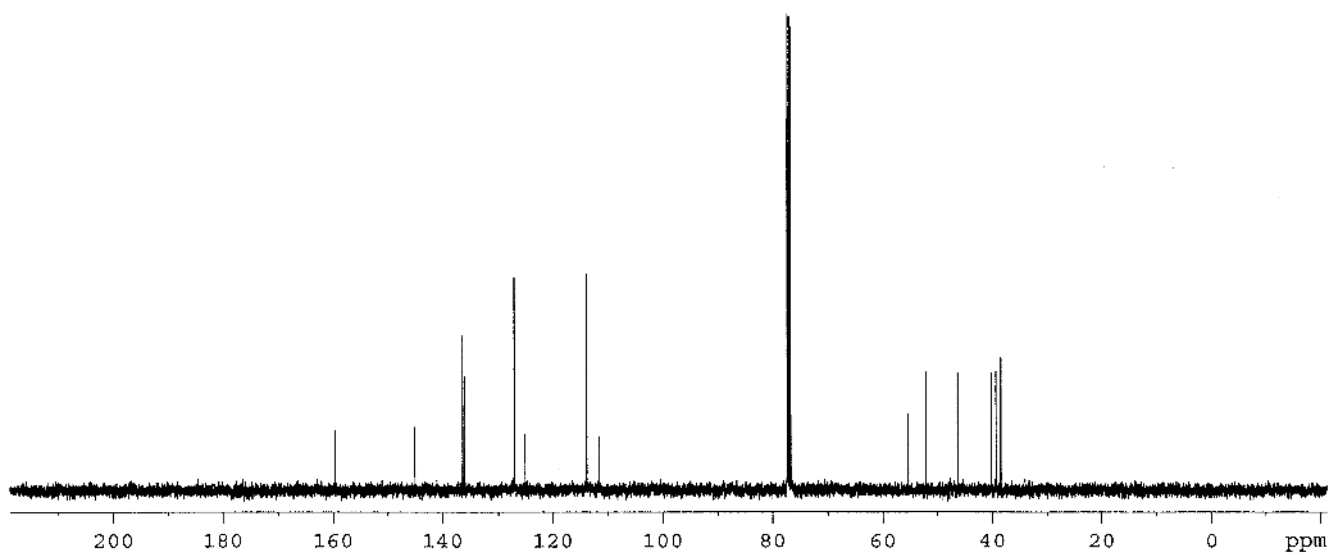
(400 MHz ¹H NMR spectrum)



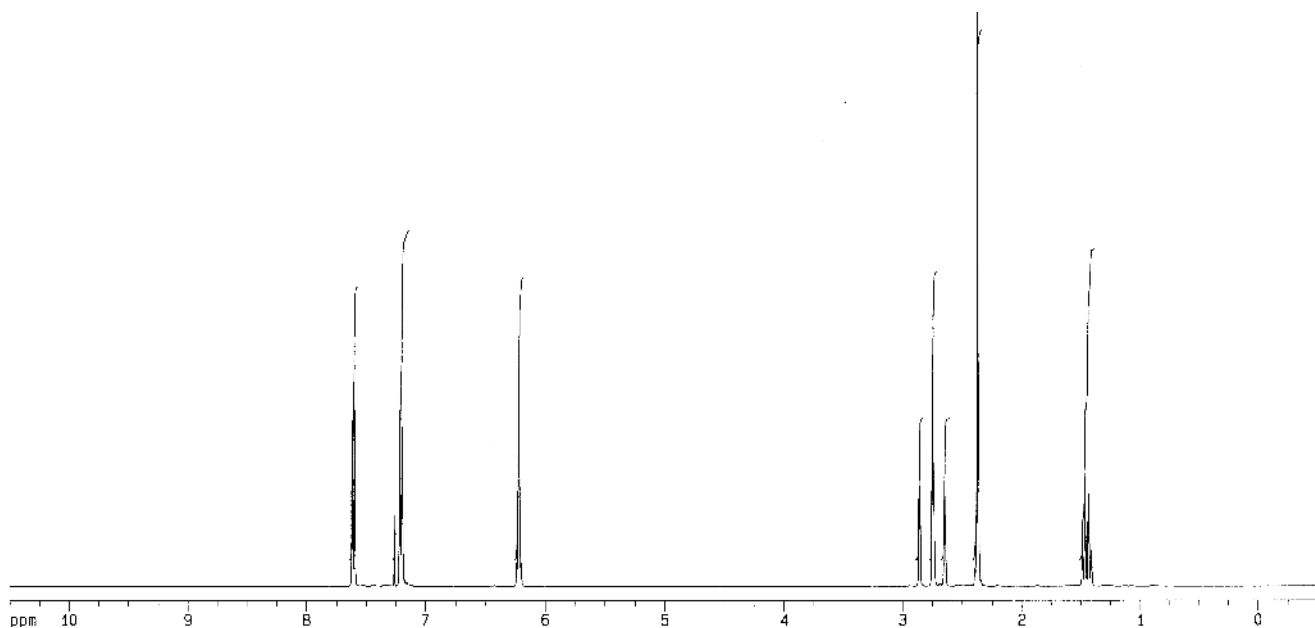
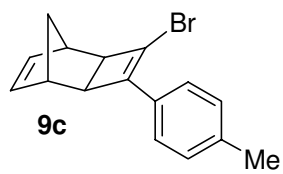
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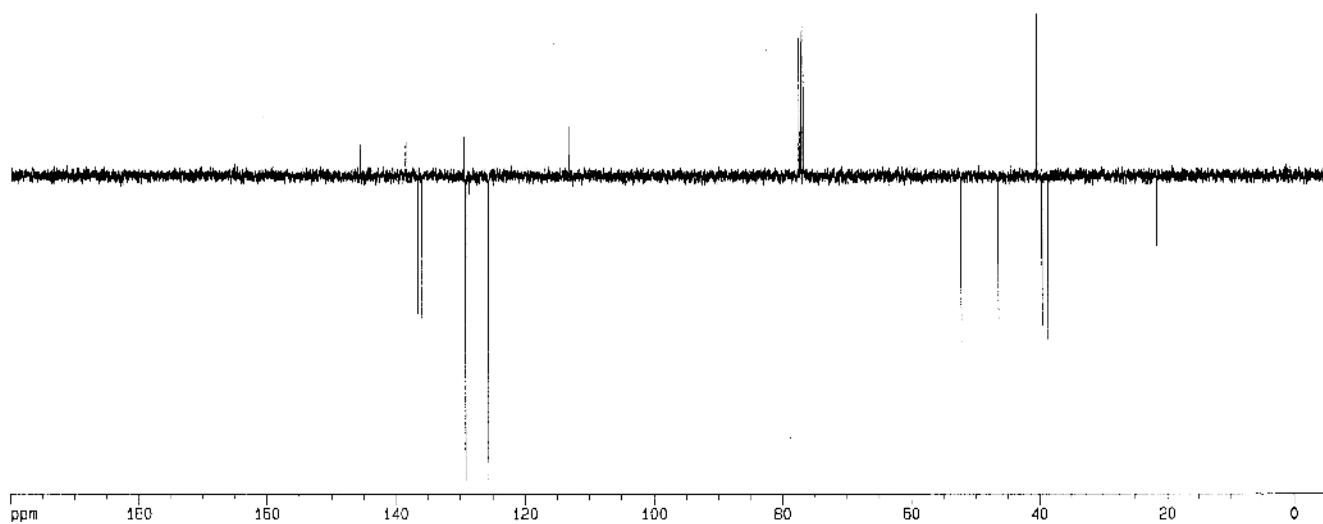
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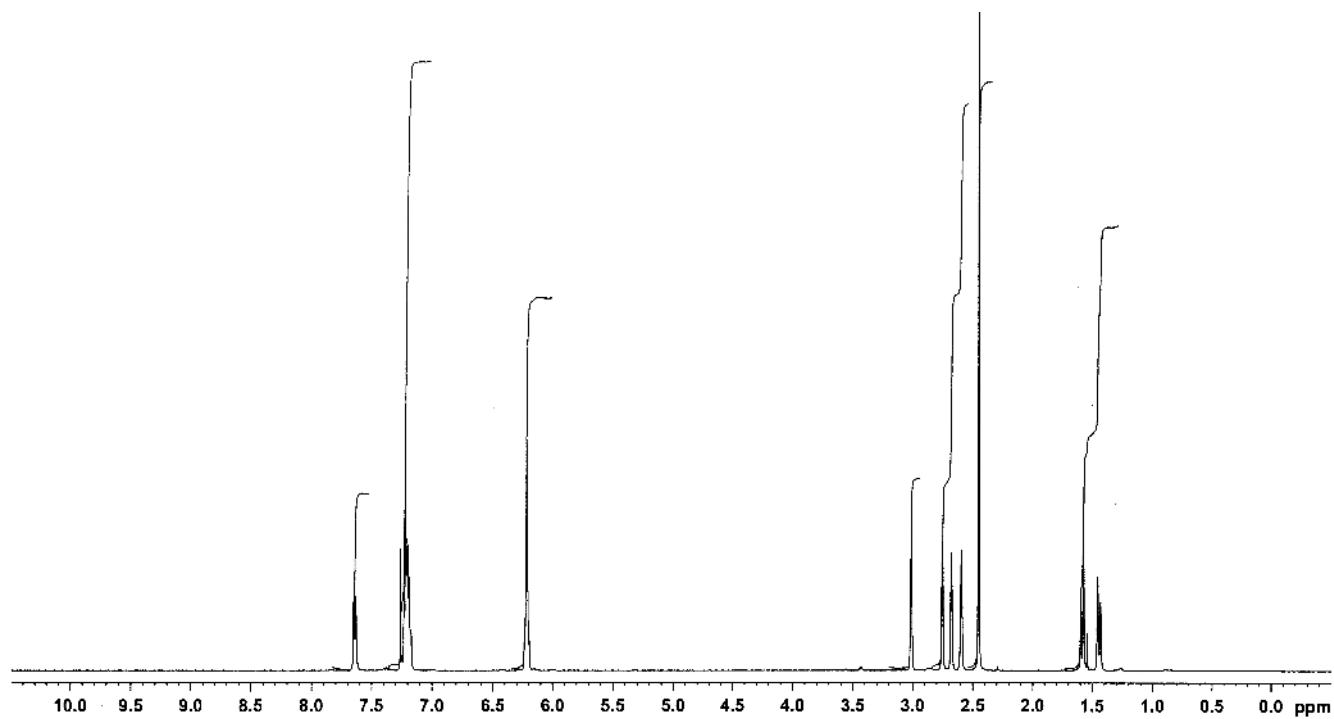
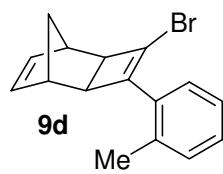
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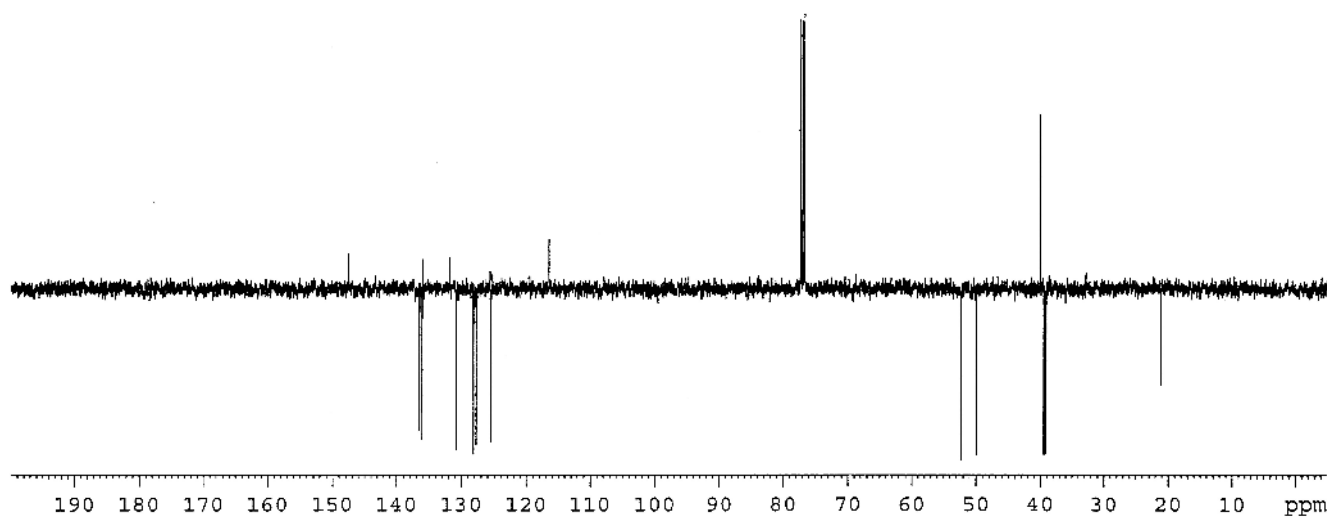
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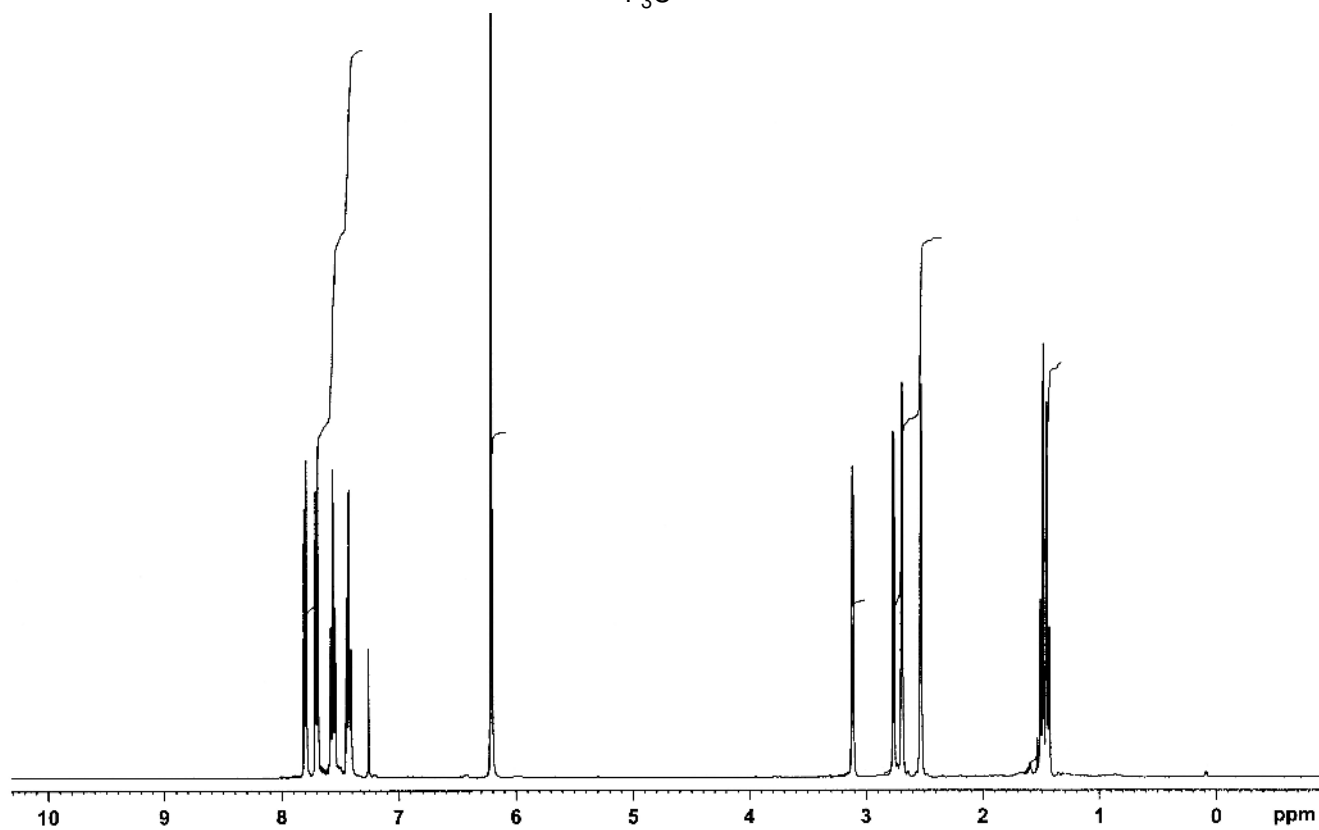
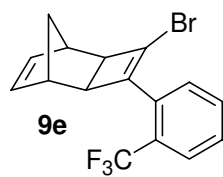
(100 MHz ^{13}C -APT NMR spectrum)



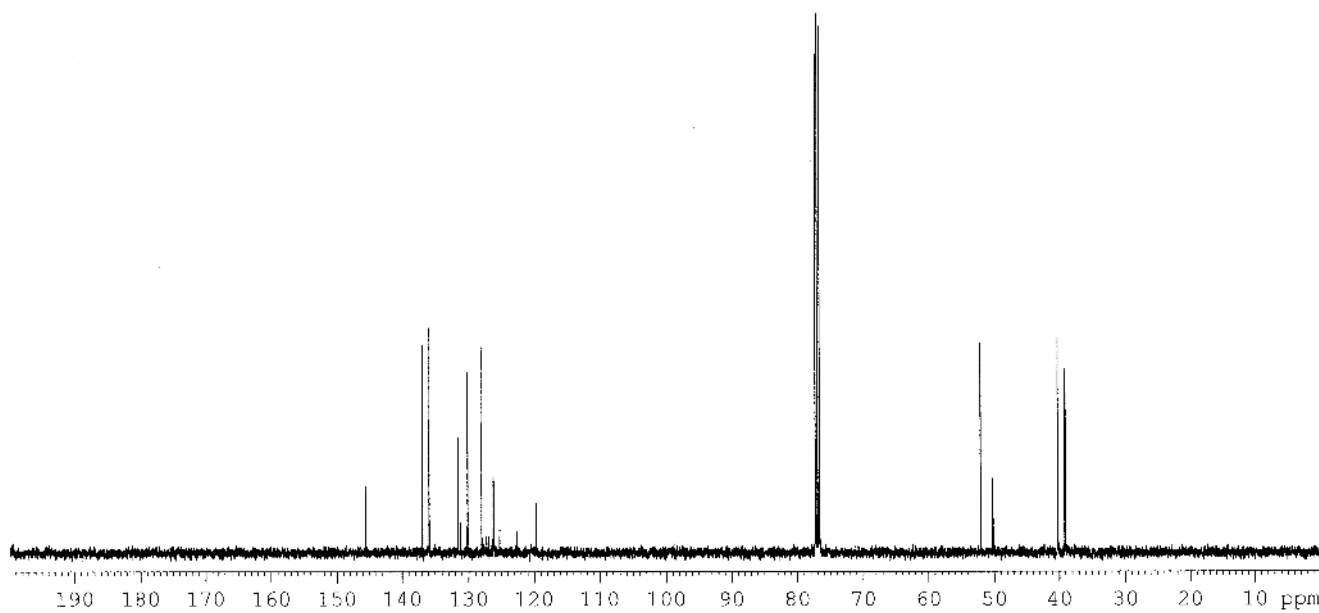
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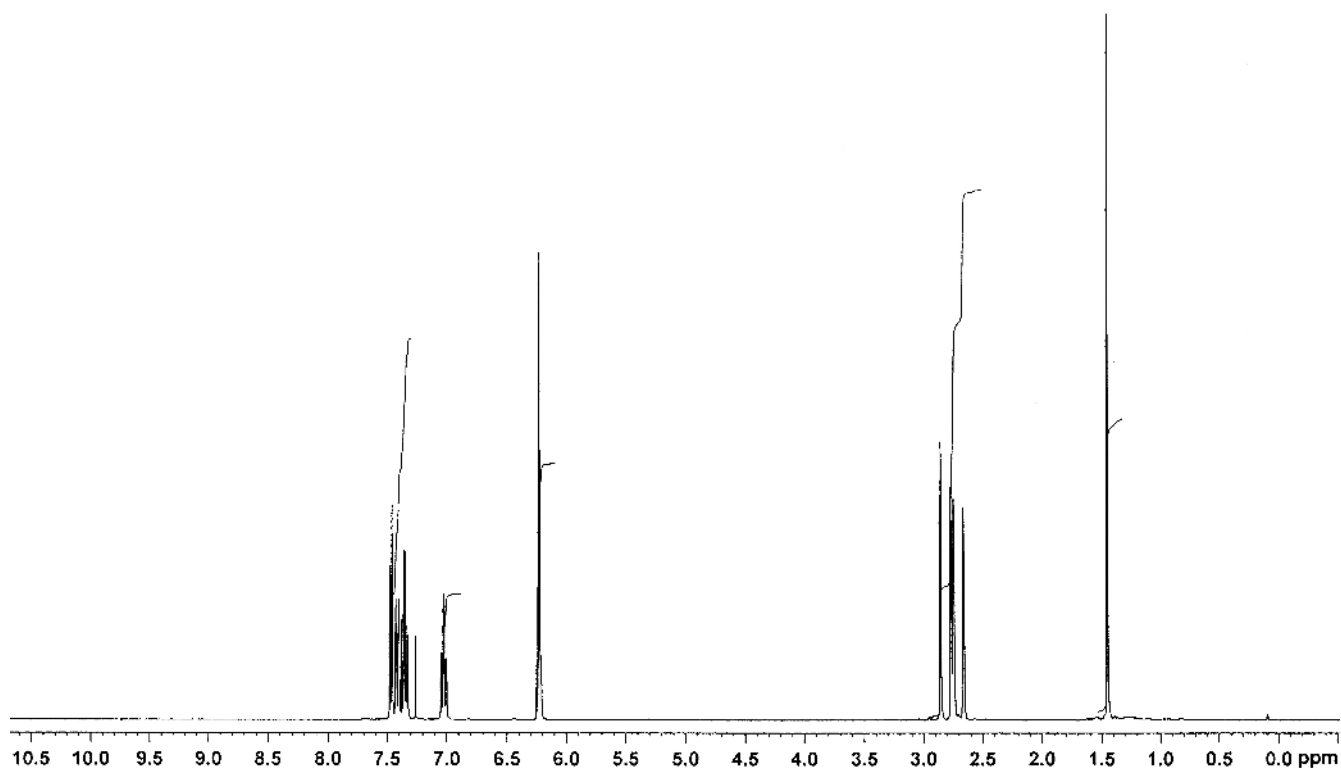
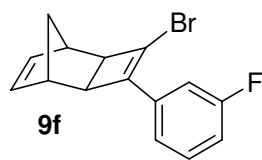
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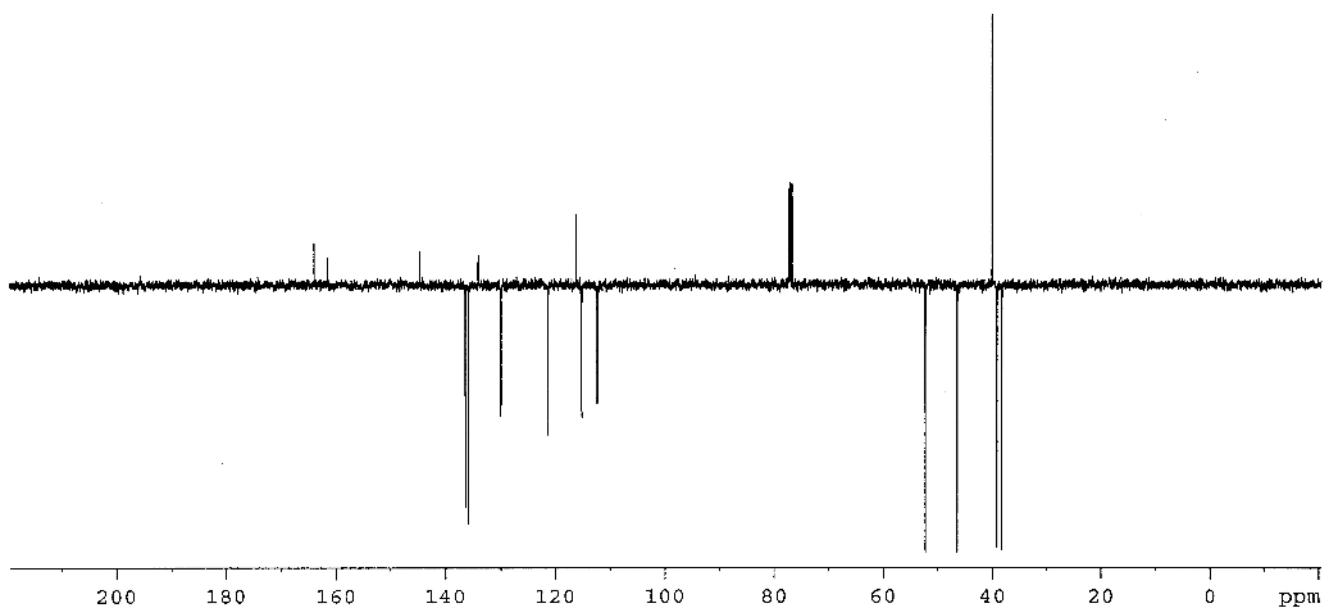
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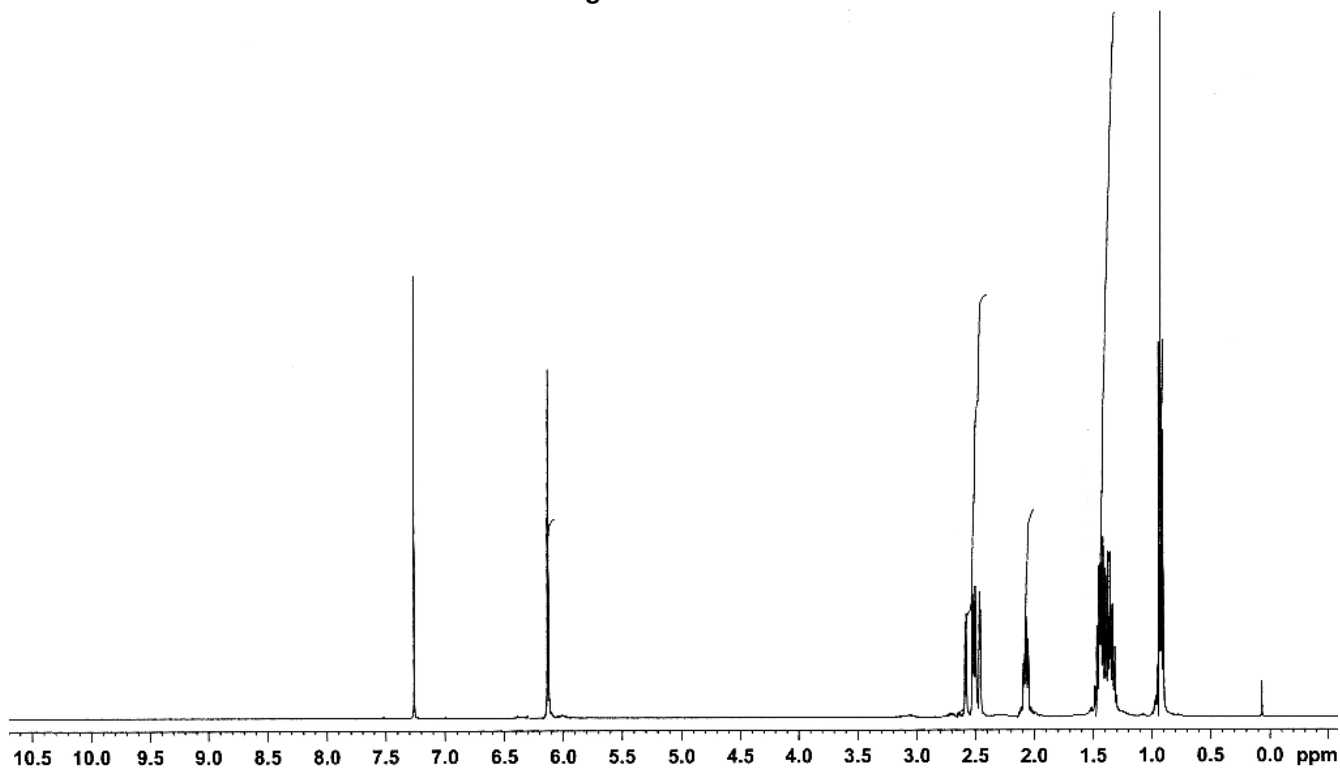
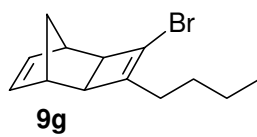
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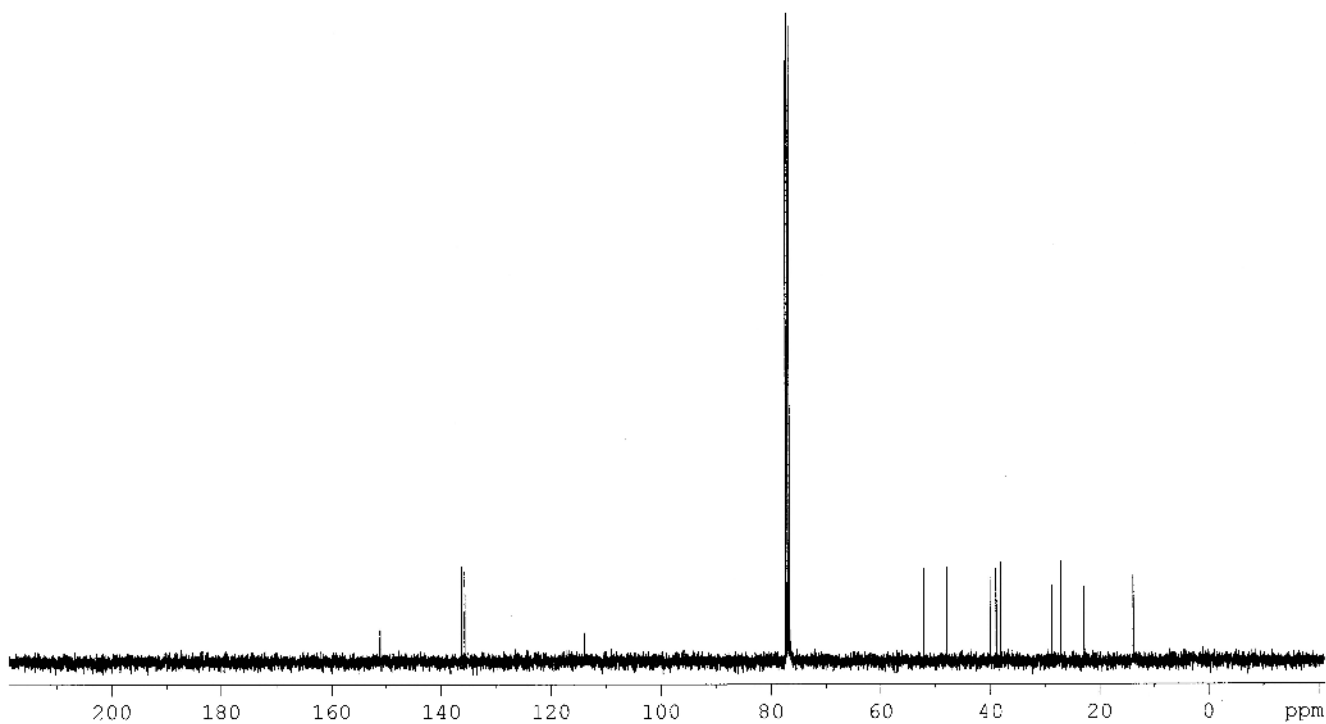
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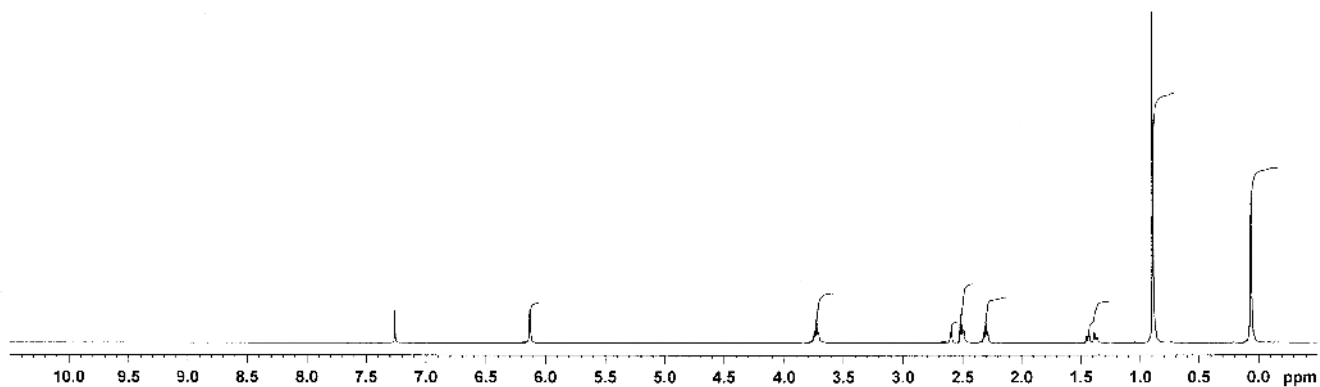
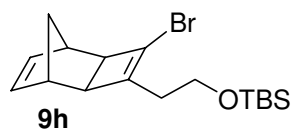
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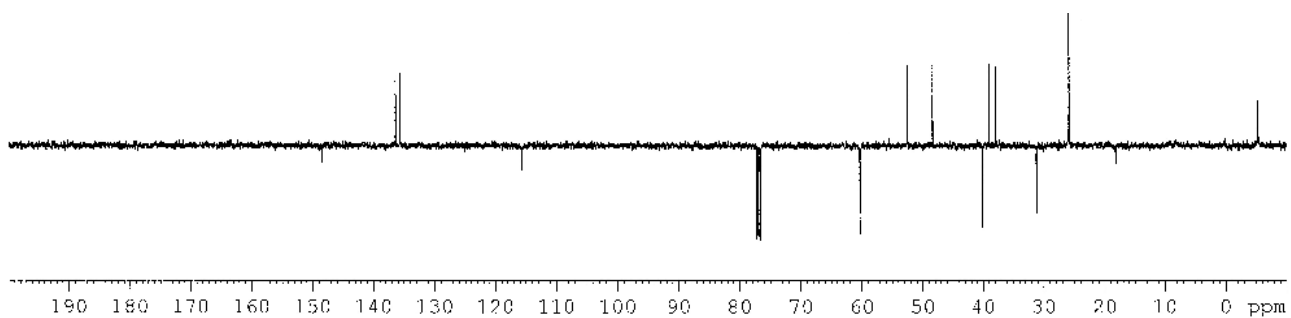
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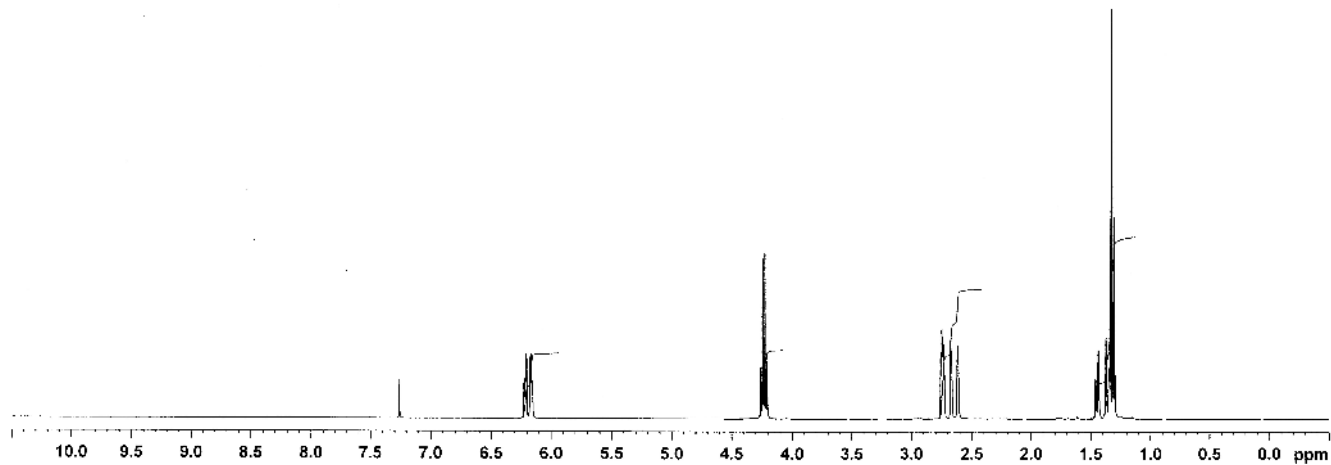
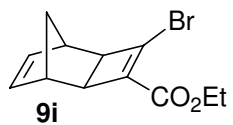
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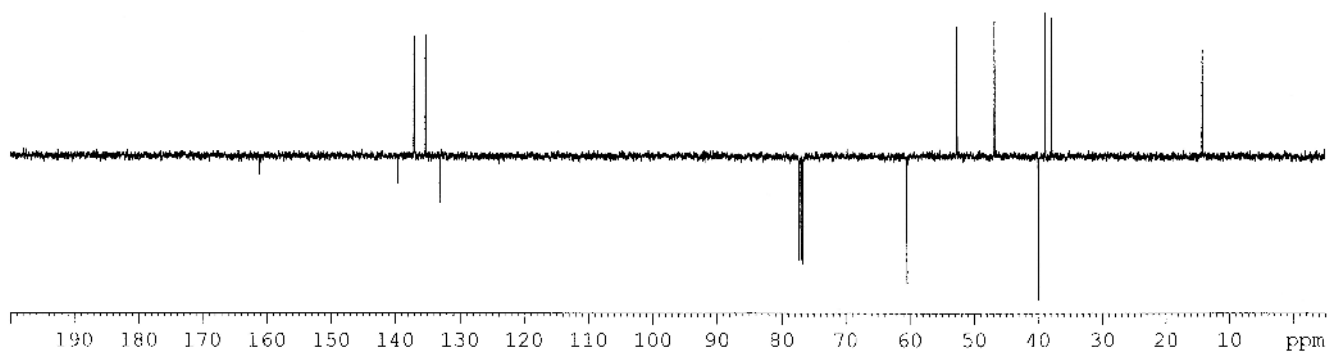
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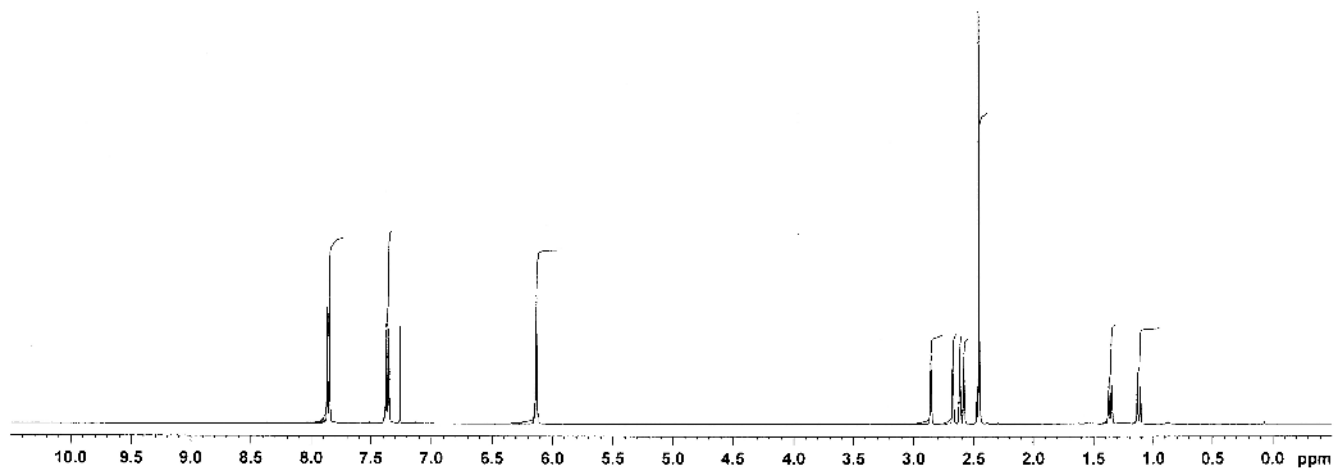
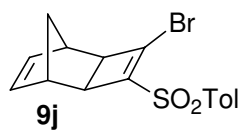
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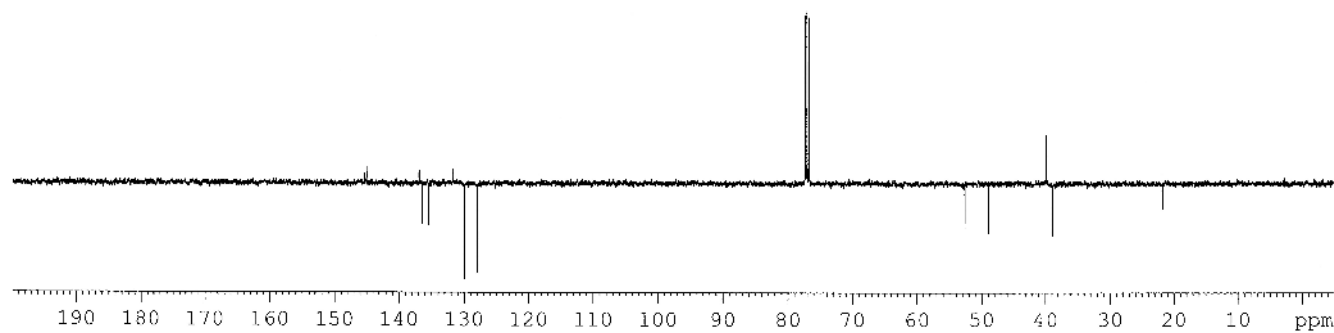
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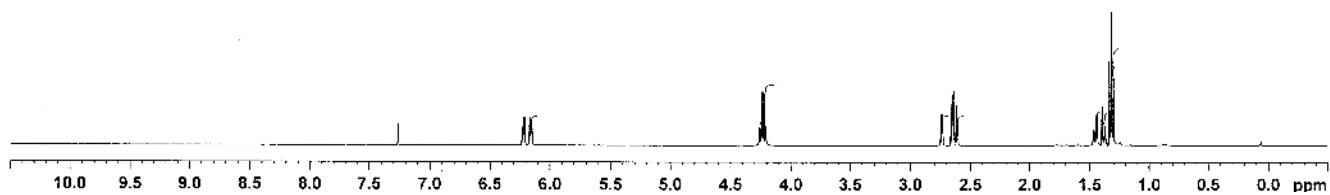
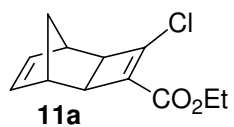
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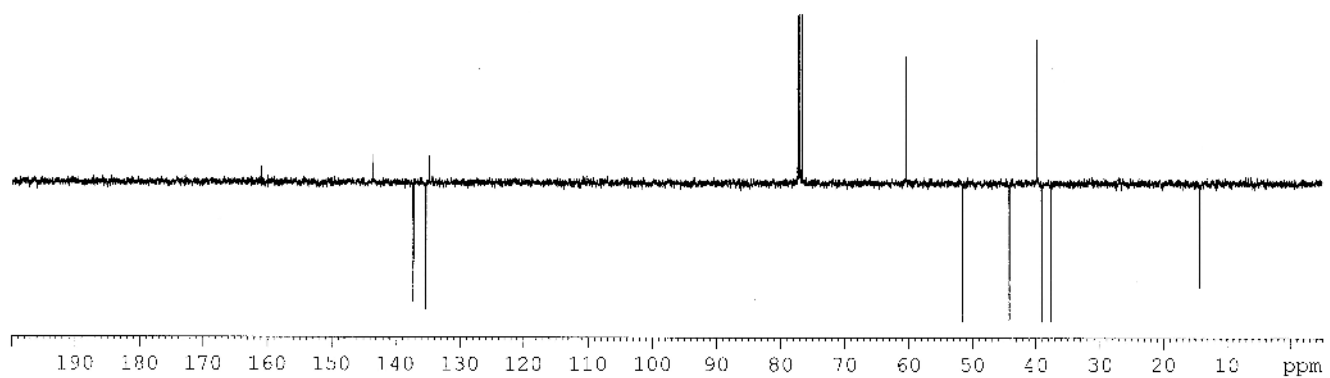
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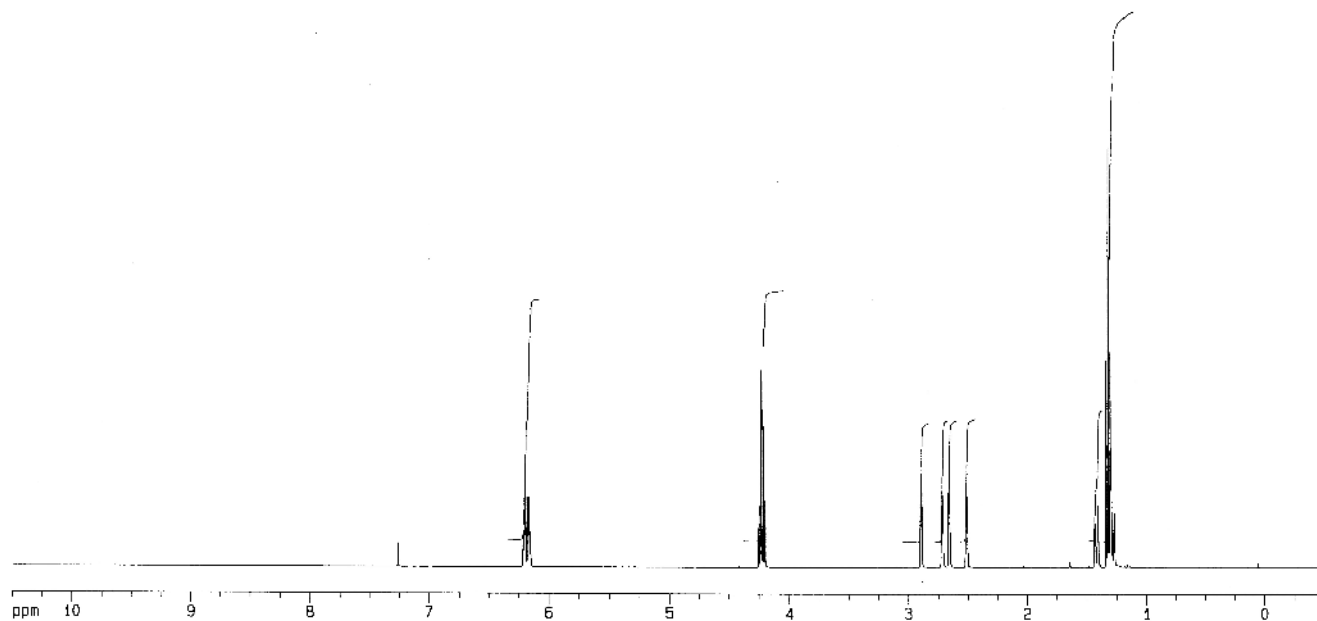
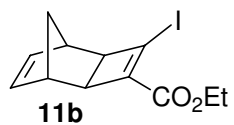
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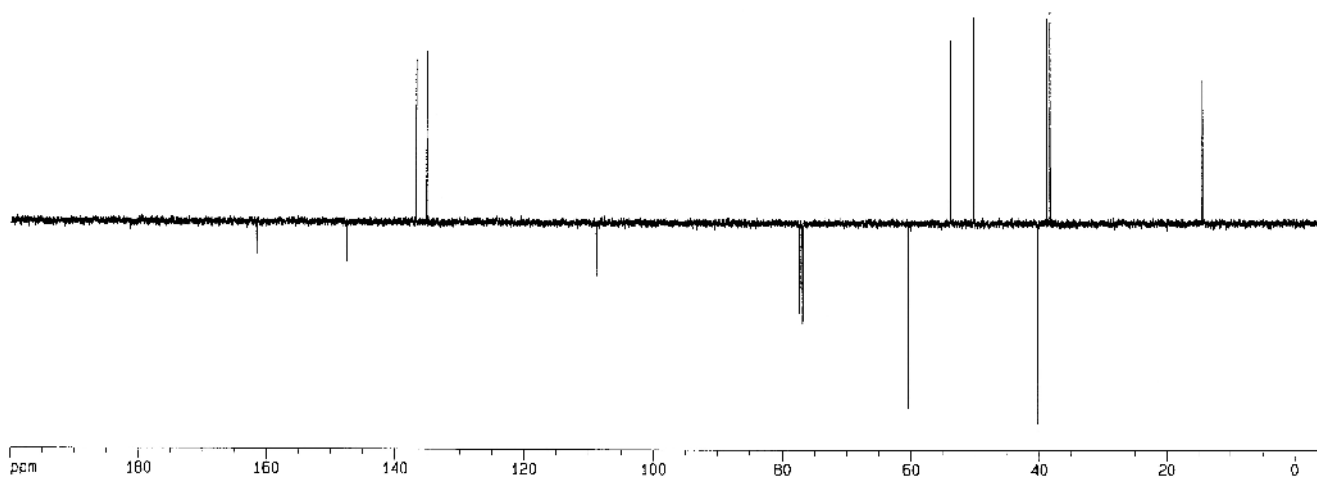
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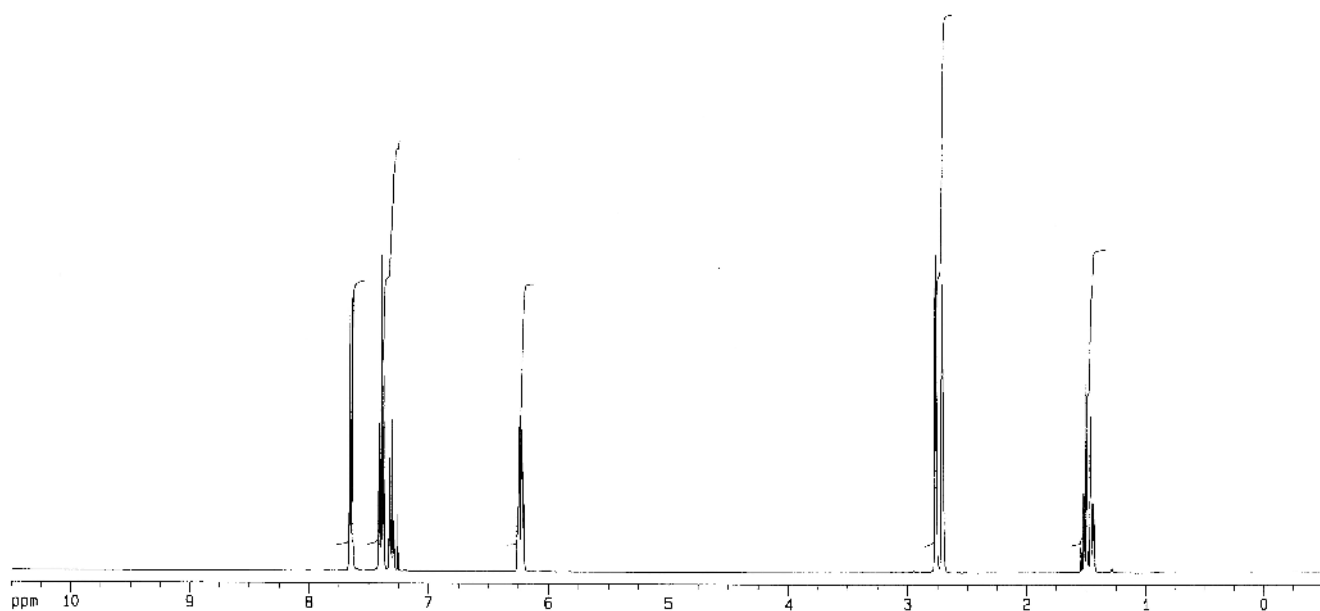
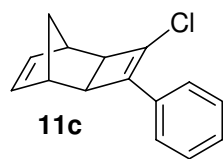
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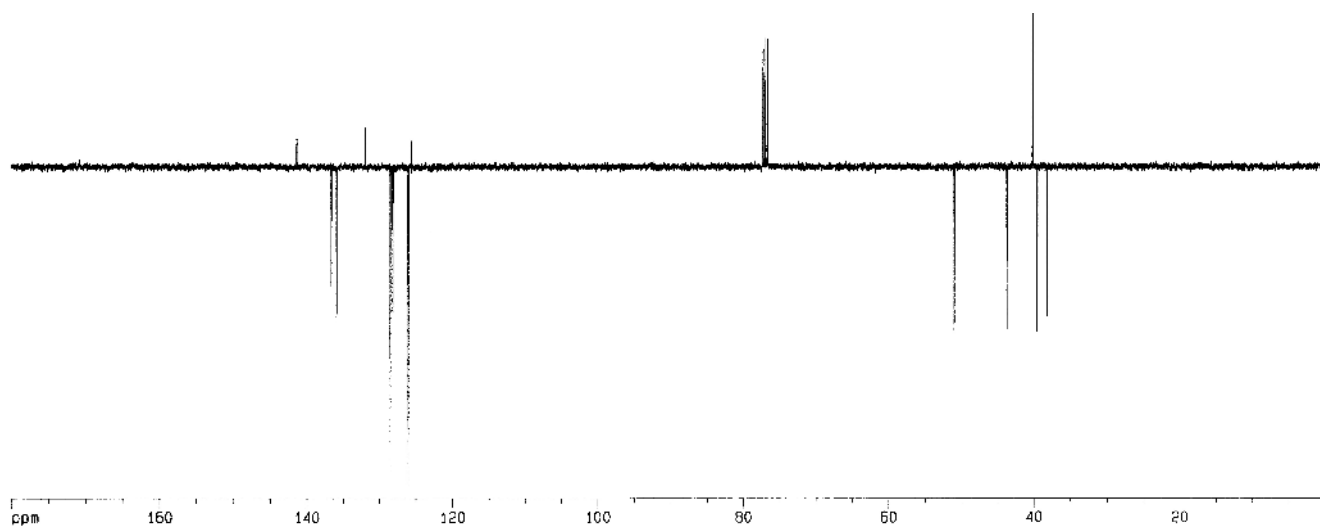
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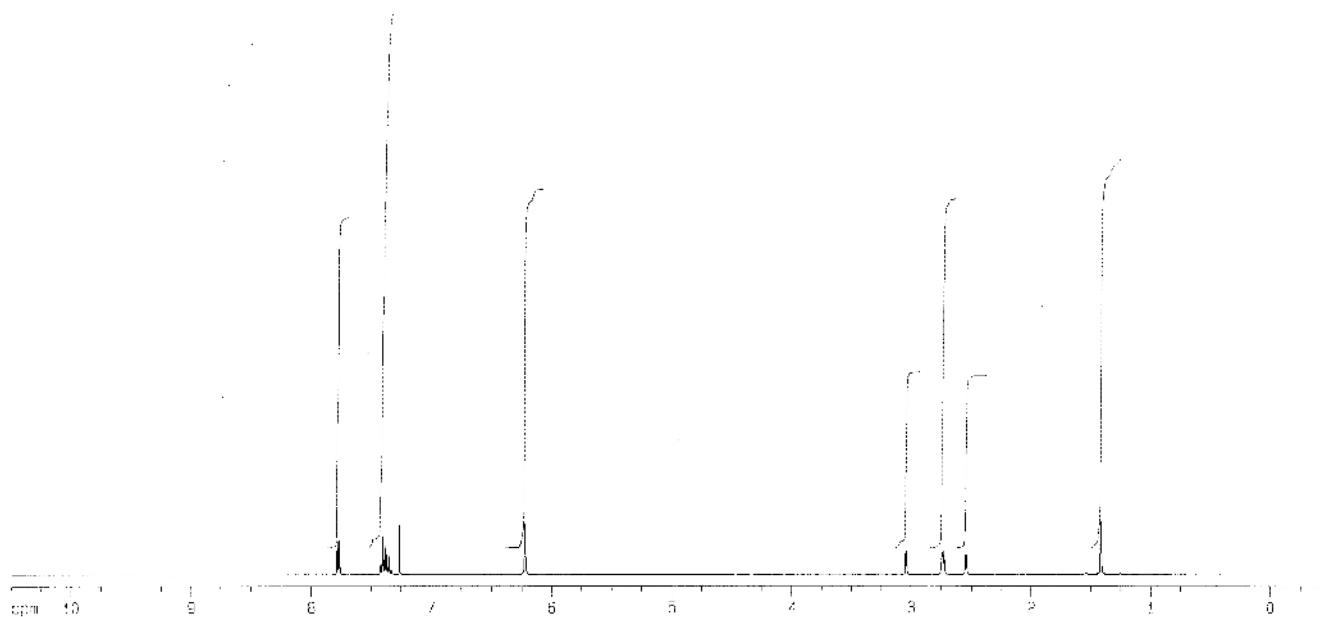
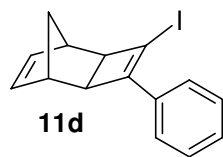
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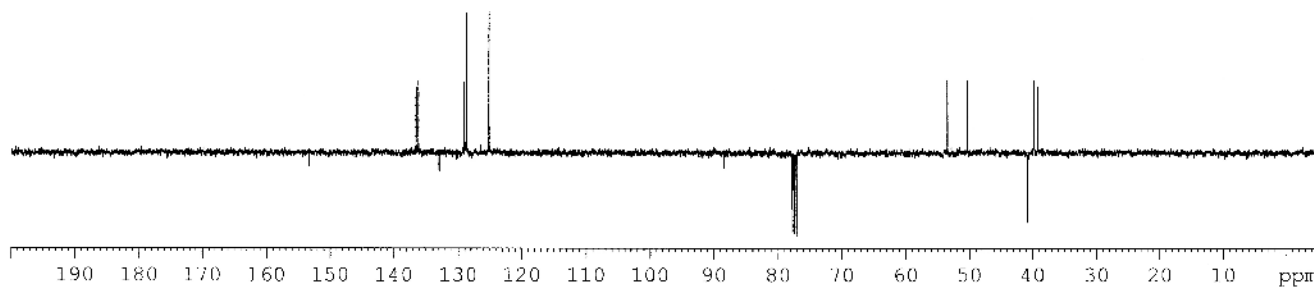
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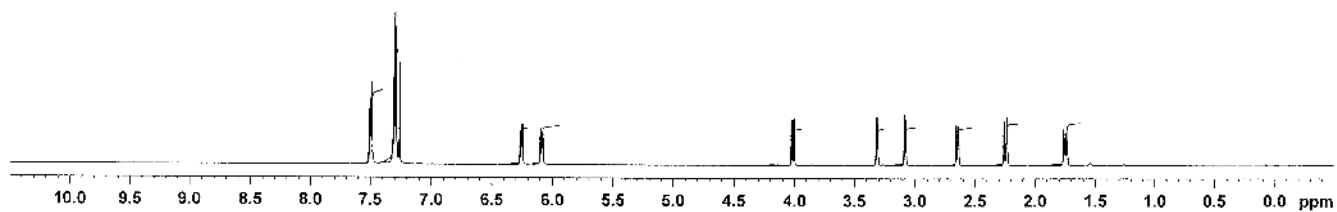
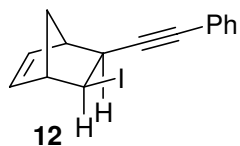
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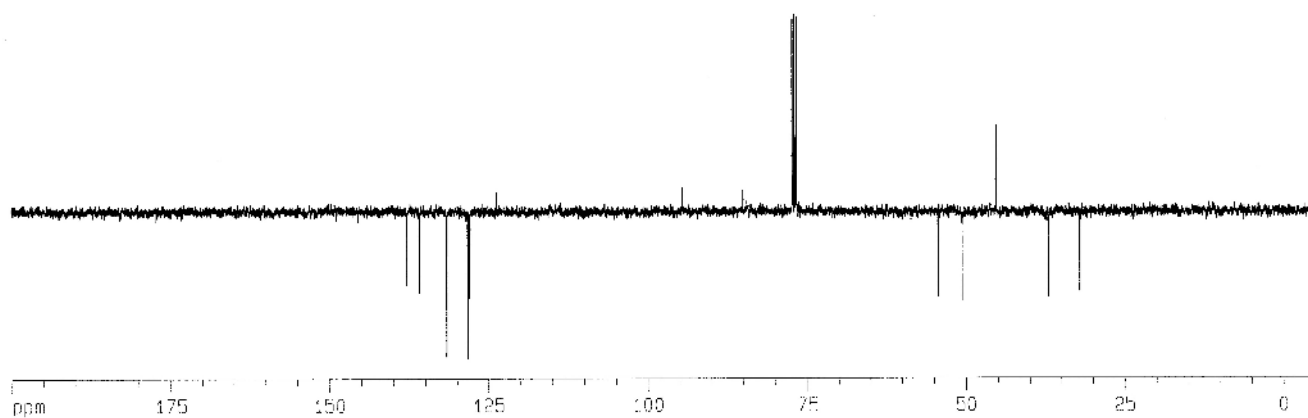
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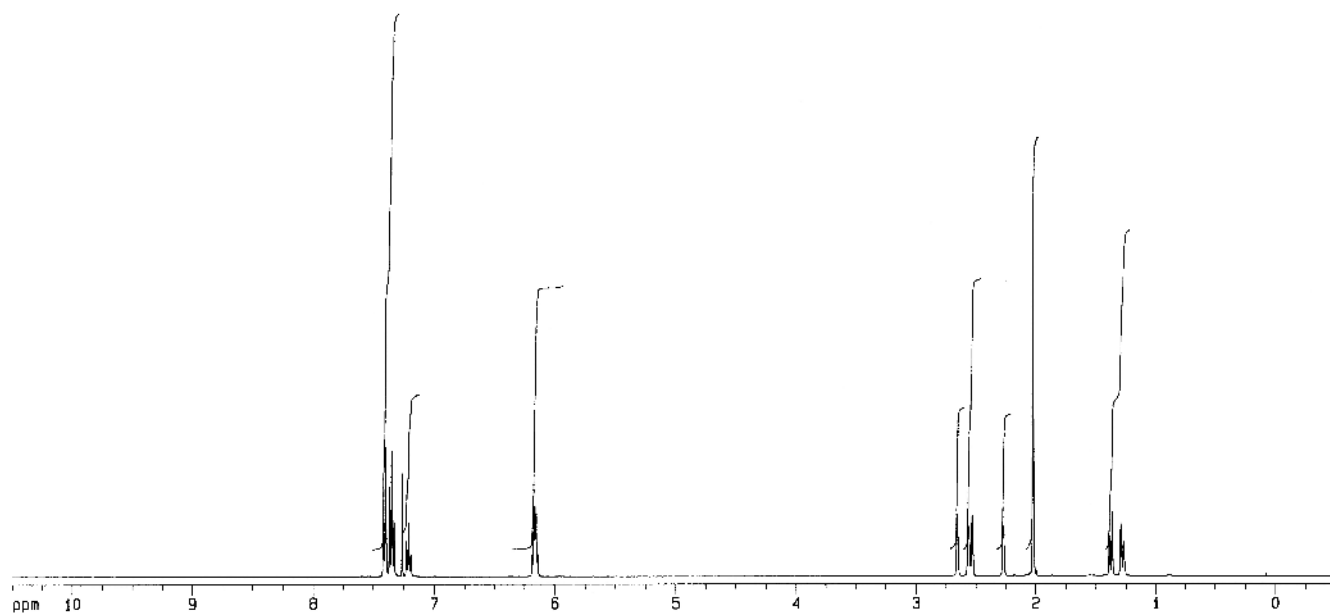
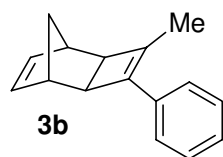
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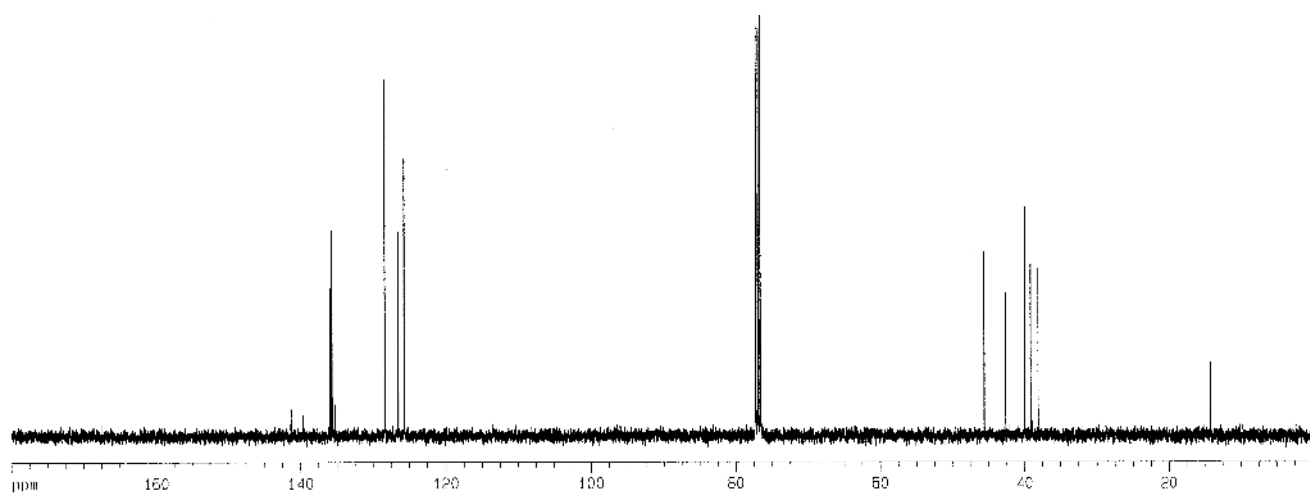
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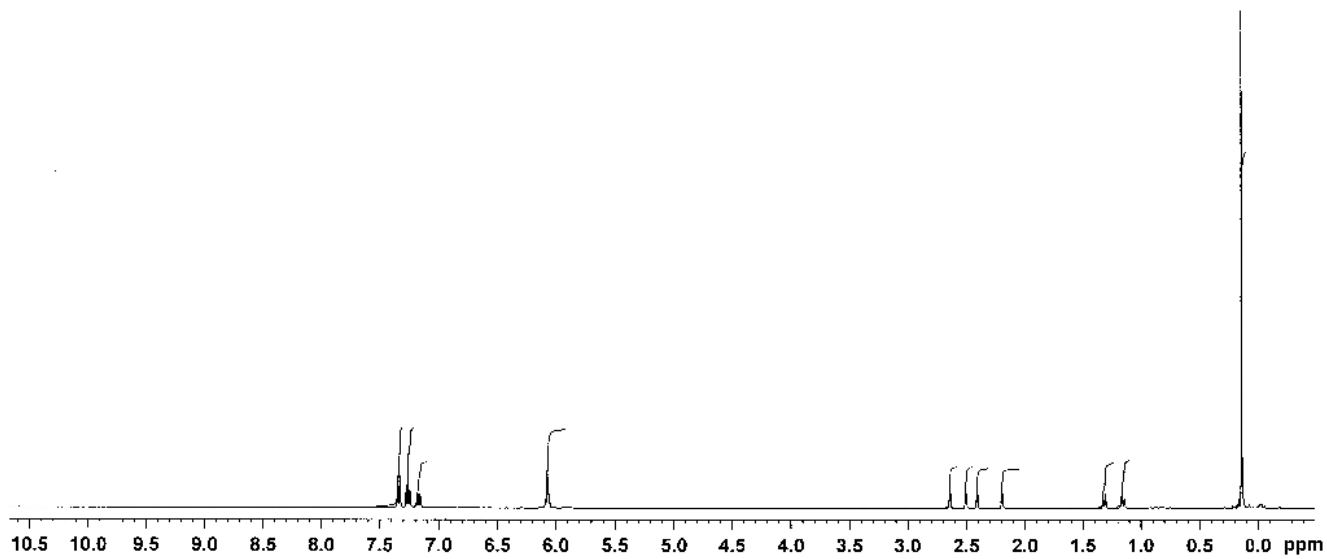
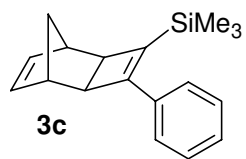
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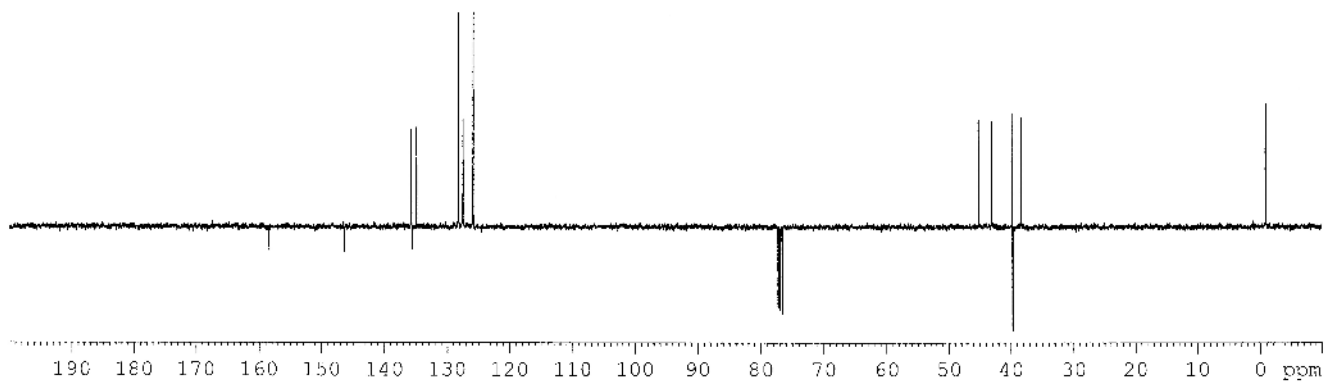
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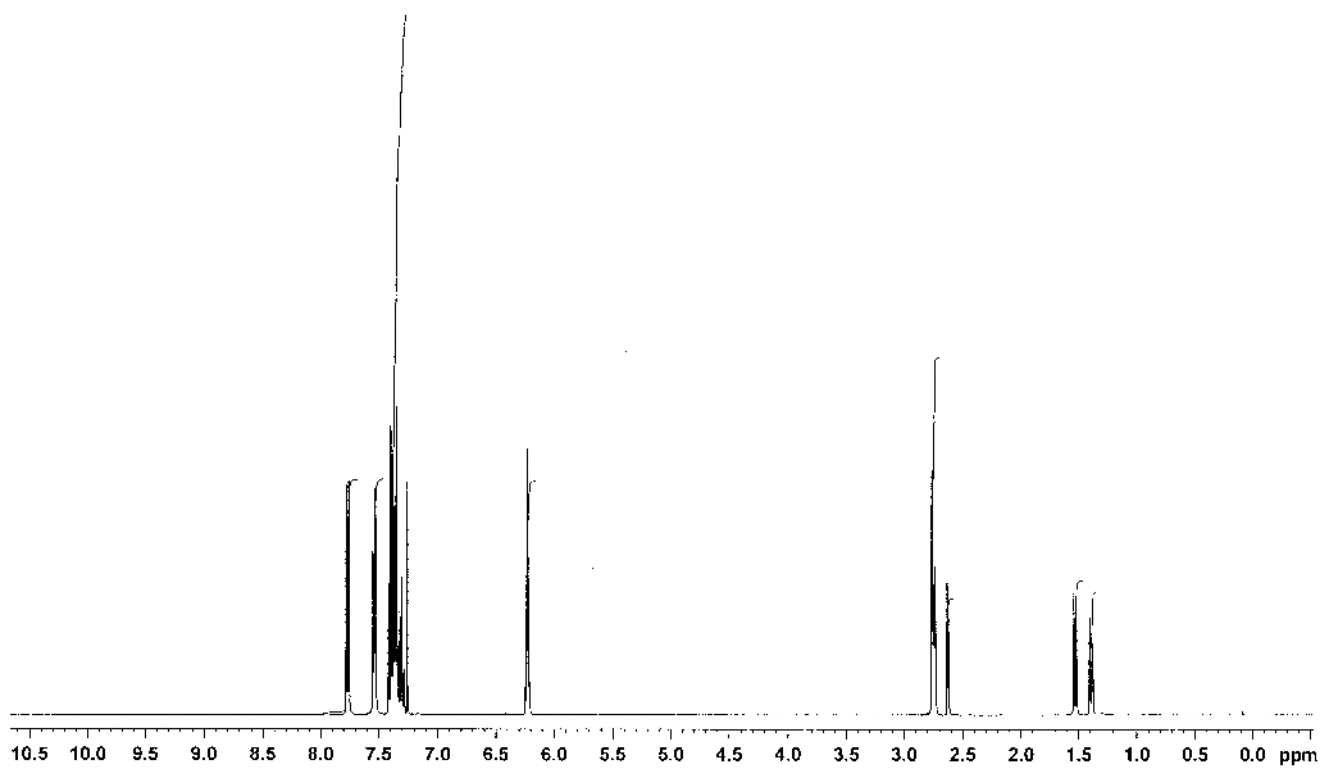
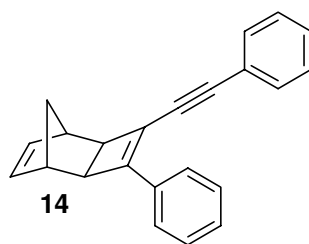
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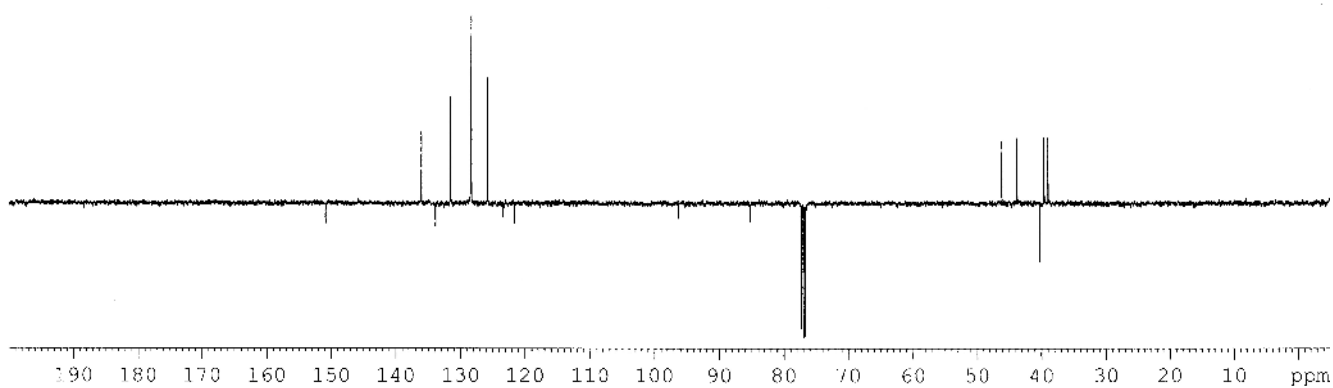
(400 MHz ¹H NMR spectrum)



(100 MHz ¹³C-APT NMR spectrum)



(400 MHz ^1H NMR spectrum)



(100 MHz ^{13}C -APT NMR spectrum)