

Supporting Information for

Regiodivergent Medium-Ring Oxasilacycle Synthesis from Diallylsilanes

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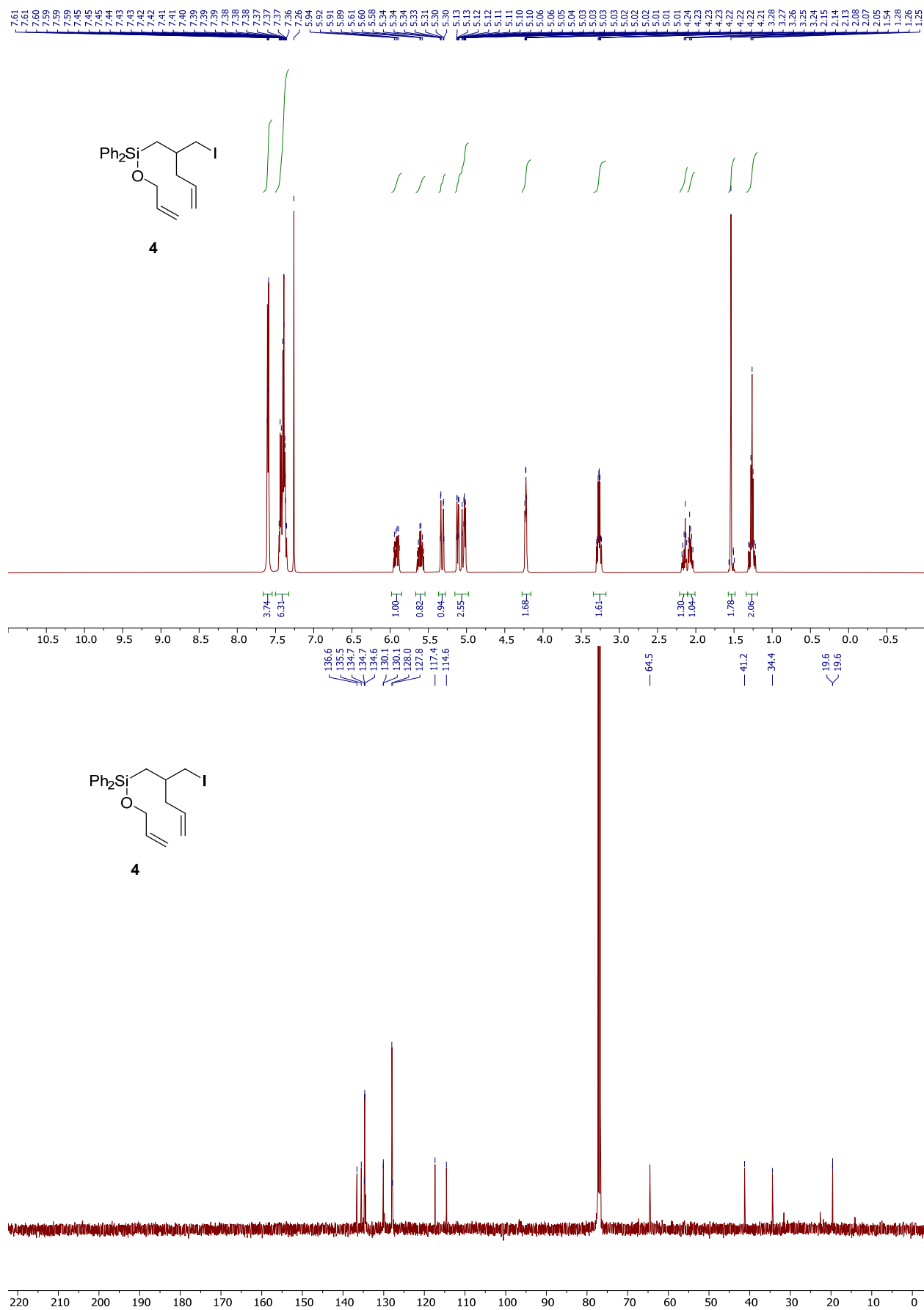
^aDepartment of Chemistry, Western Washington University, Bellingham, WA, 98225, USA

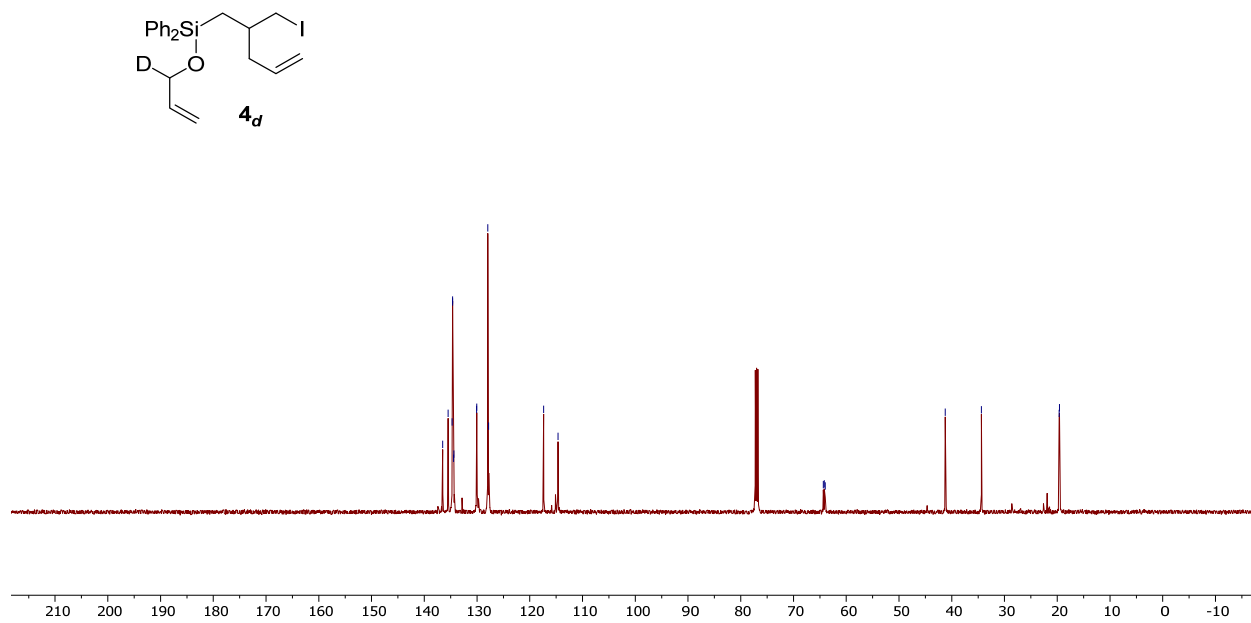
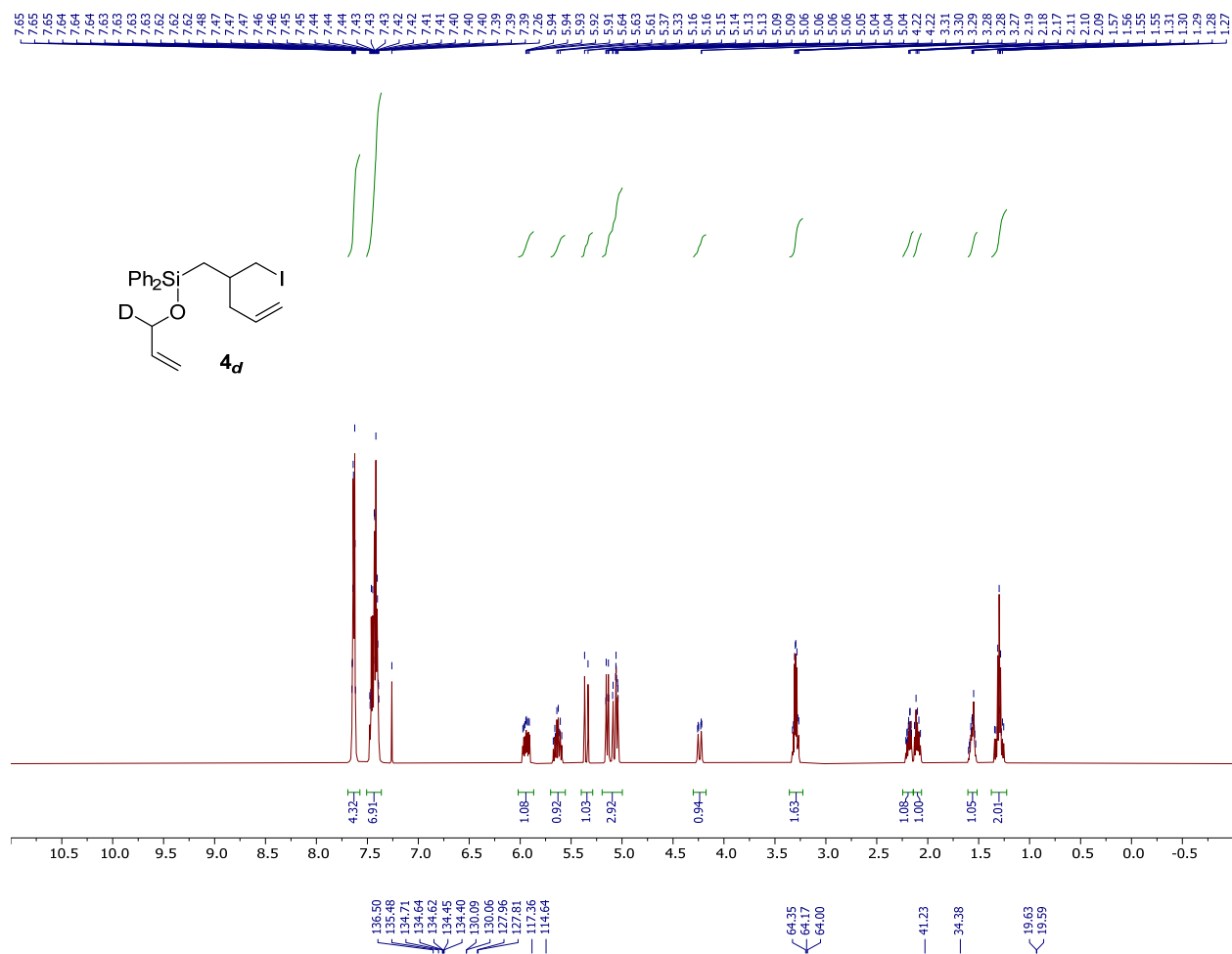
^bDepartment of Chemistry, University of San Diego, San Diego, CA, 92110

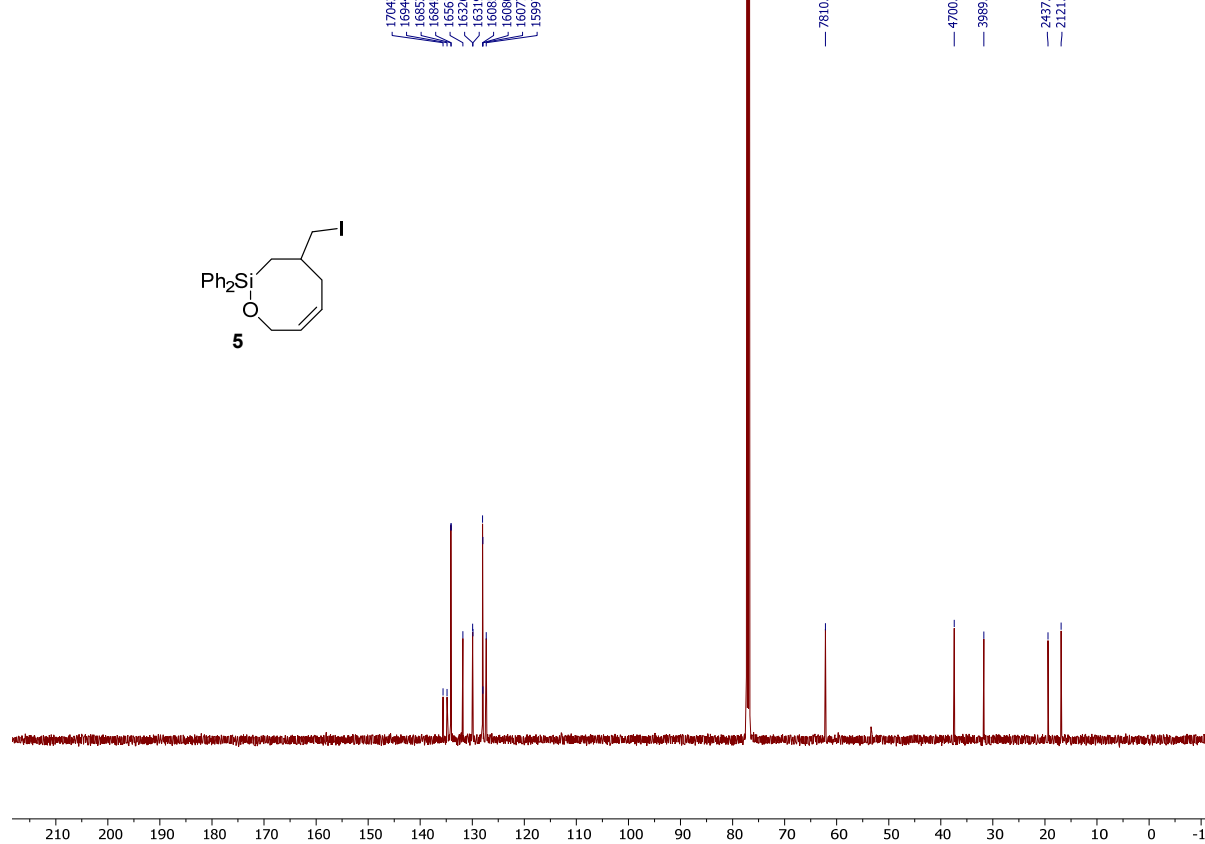
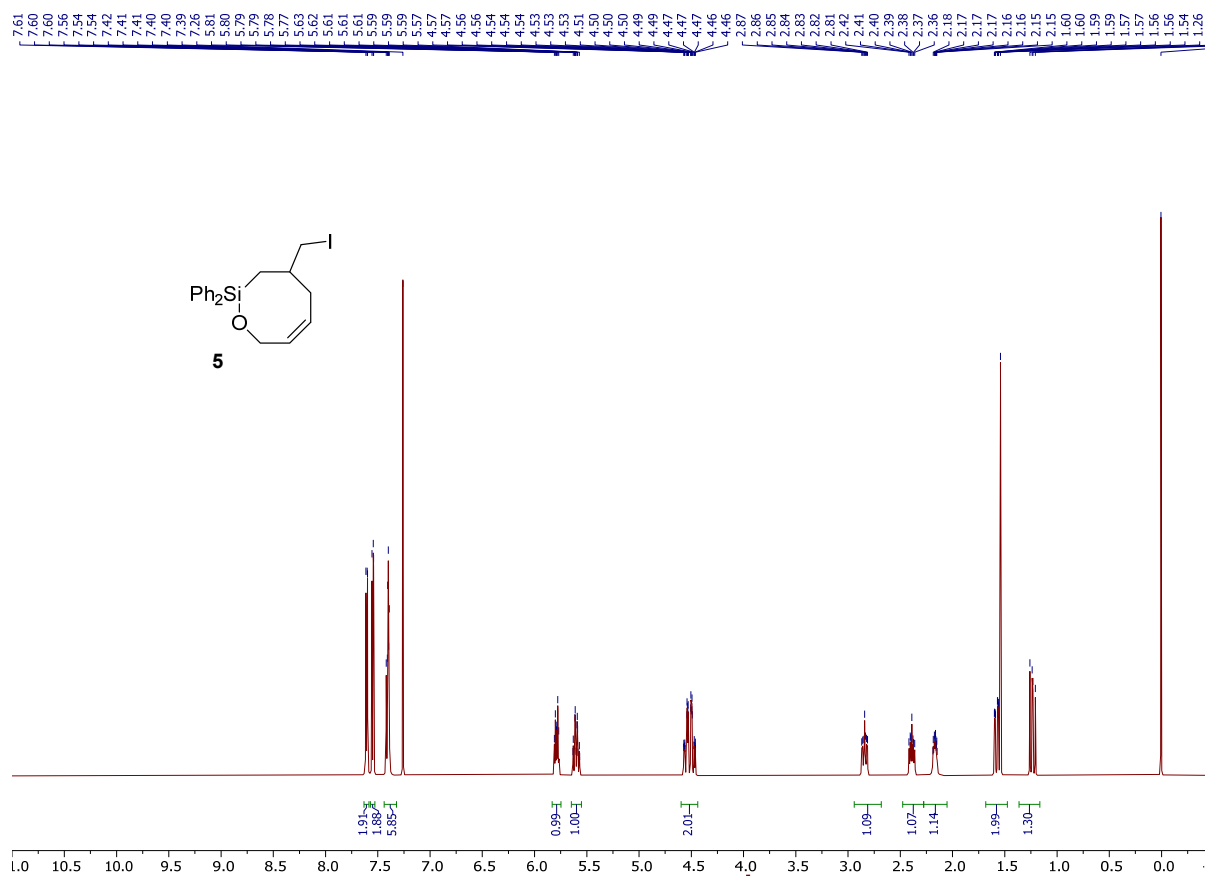
Contents

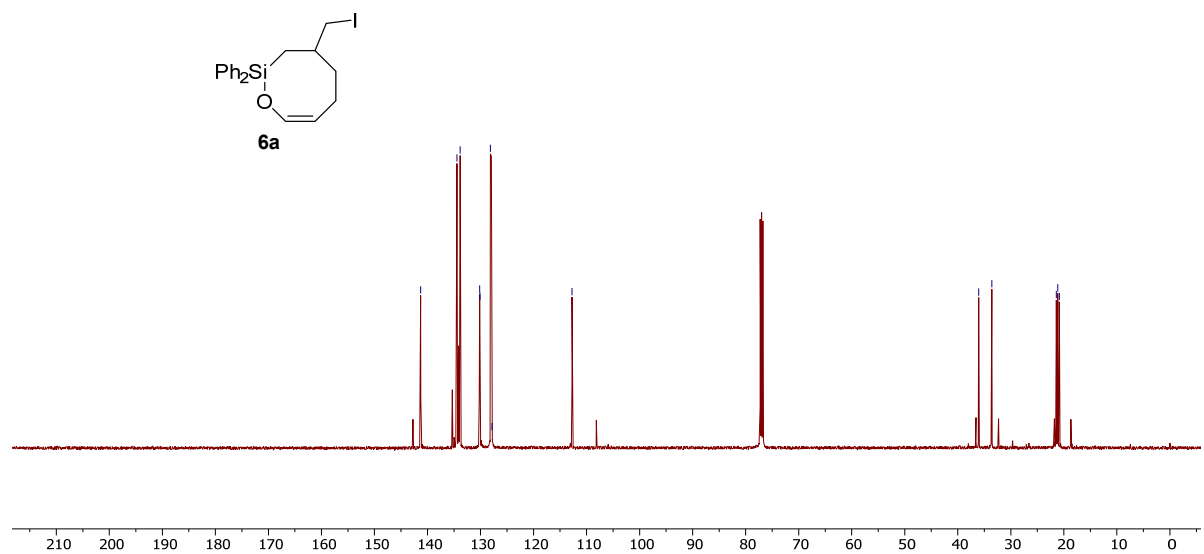
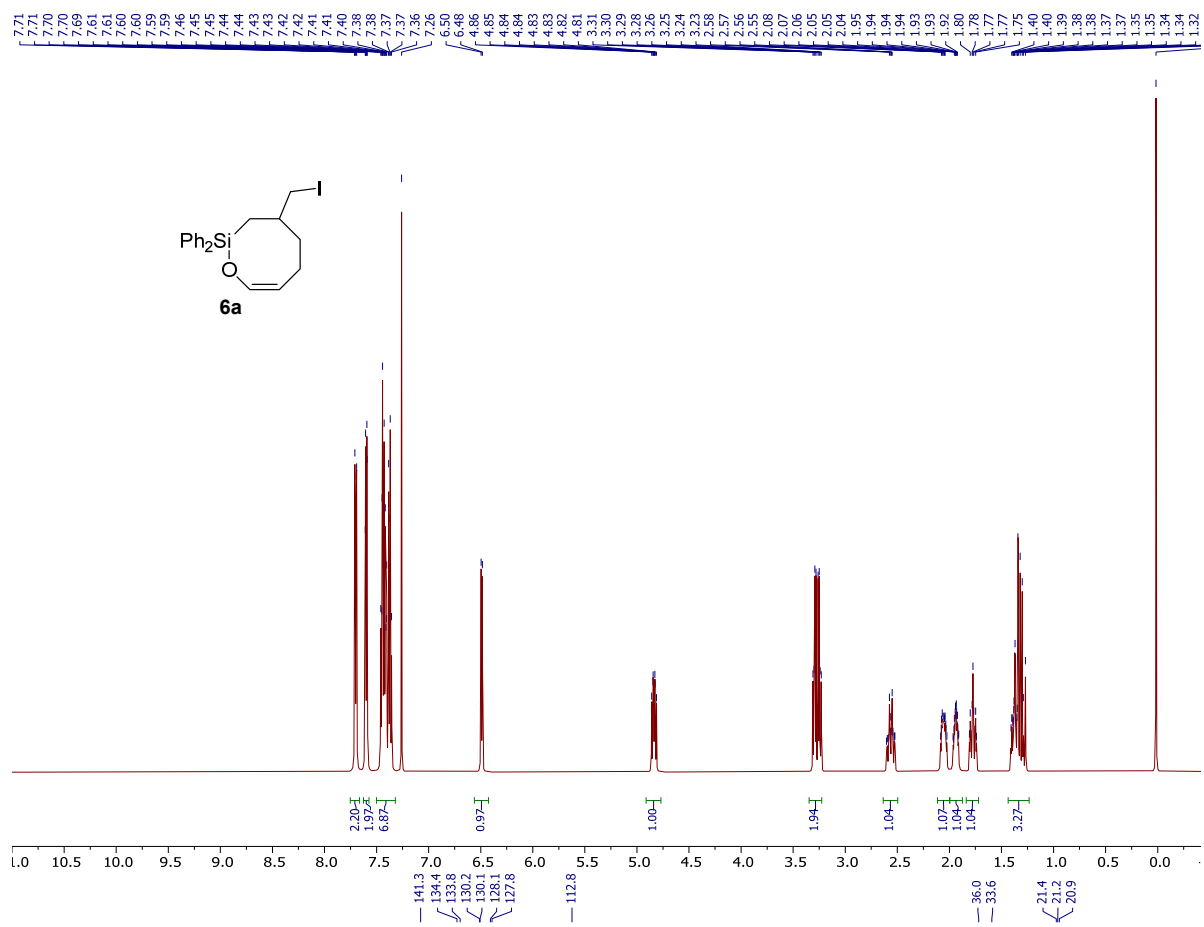
| <i>Compound</i> | <i>NMR Spectra</i> | <i>Compound</i> | <i>NMR Spectra</i> |
|---|--------------------|-----------------|--------------------|
| 4 | S2 | 16b | S18 |
| 4_d | S3 | 17 | S19 |
| 5 | S4 | 18 | S20 |
| 6a | S5 | 19 | S21 |
| 6c | S6 | 20 | S22 |
| 6d | S7 | 21 | S23 |
| 7 | S8 | 22 | S24 |
| 8 | S9 | 23 | S25 |
| 9 | S10 | 24 | S26 |
| 10 | S11 | 25 | S27 |
| 11 | S12 | 26 | S28 |
| 12 | S13 | 27 | S29 |
| 13 | S14 | 28 | S30 |
| 14 | S15 | 29 | S31 |
| 15 | S16 | 30 | S31 |
| 16a | S17 | | |
| <i>Item</i> | | <i>Page</i> | |
| Figure S1. Compound 17 COSY NMR Spectrum | | S32 | |
| Figure S2. Stacked ¹ H NMR spectra of compound 6d obtained from the reactions of 4 with Ru-II and RuClH(CO)(PPh ₃) ₃ | | S33 | |
| Figure S3. Stacked ¹ H NMR spectra of compound 6a obtained from reactions of 4 with Ru-II and 5/6c with RuClH(CO)(PPh ₃) ₃ | | S34 | |

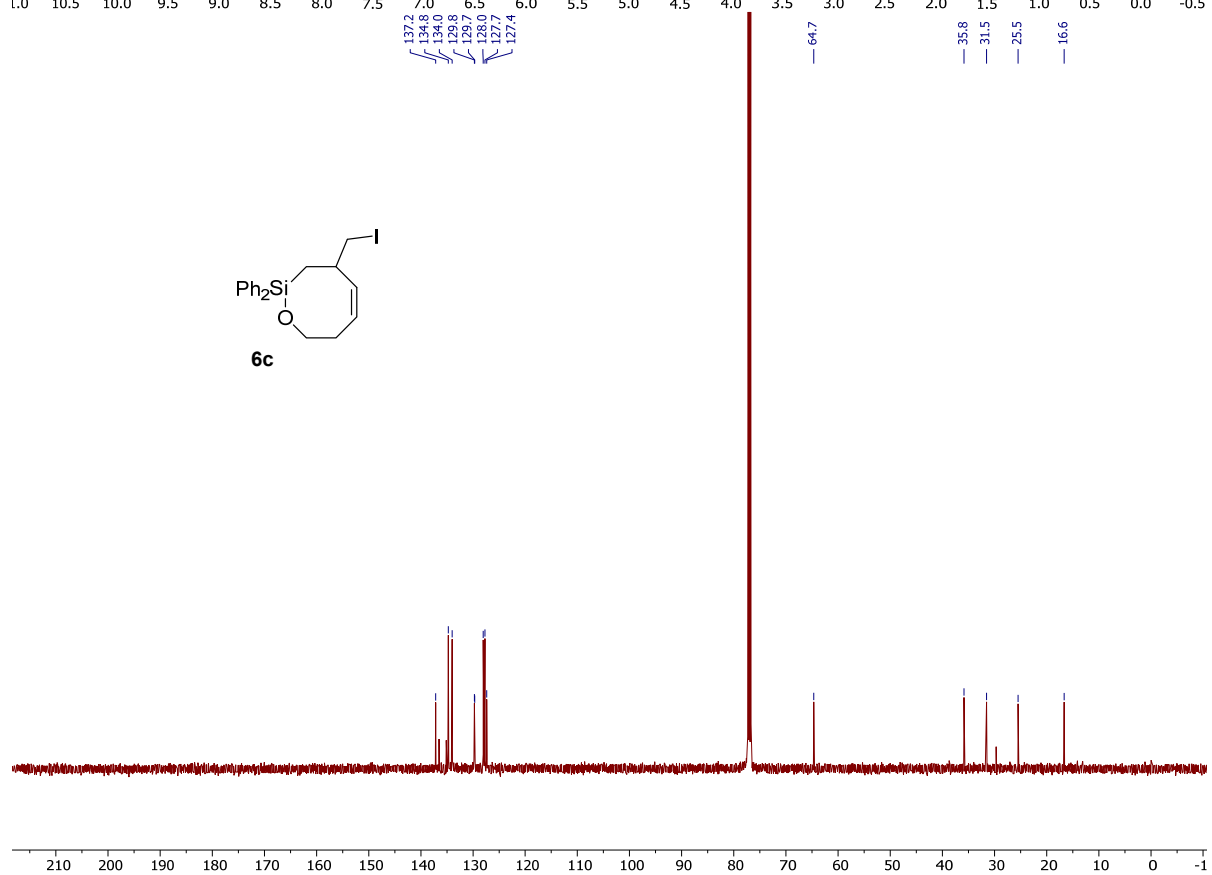
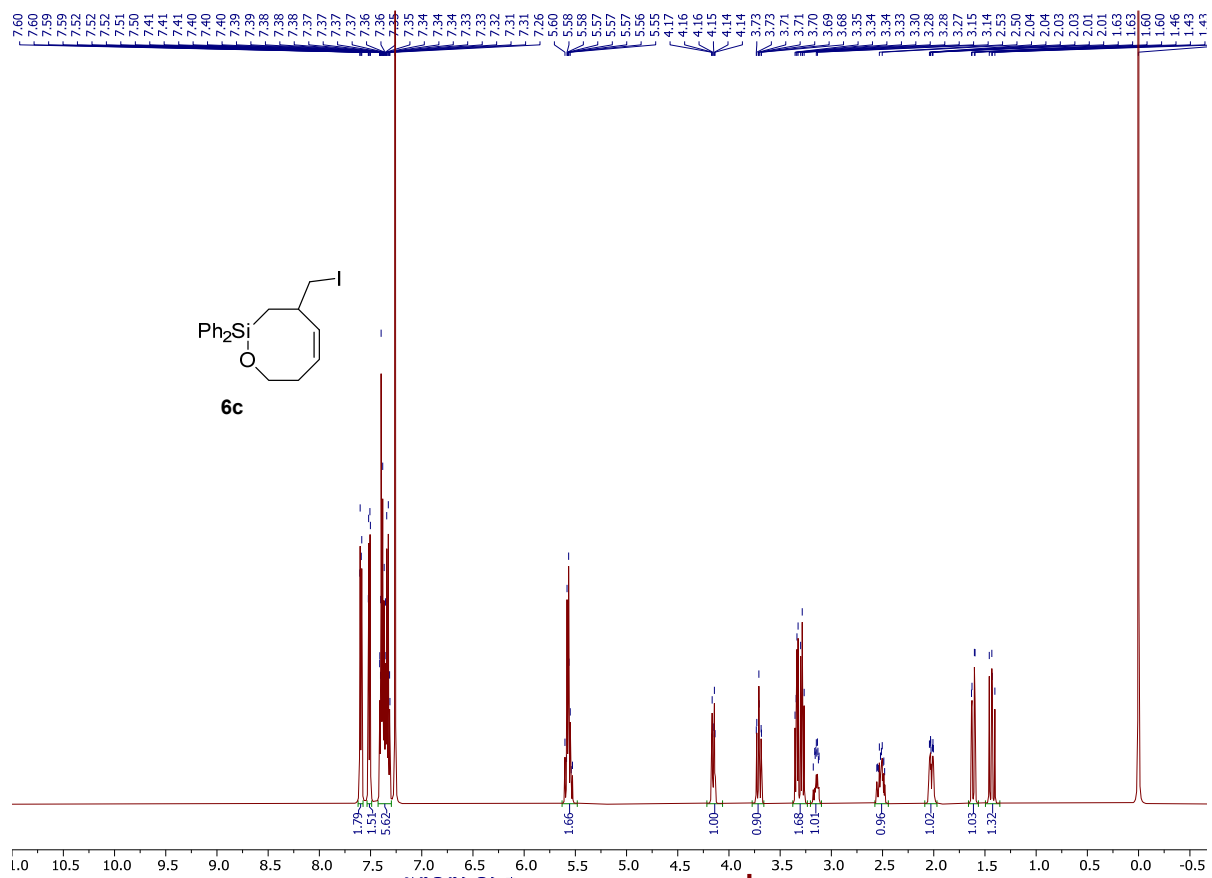
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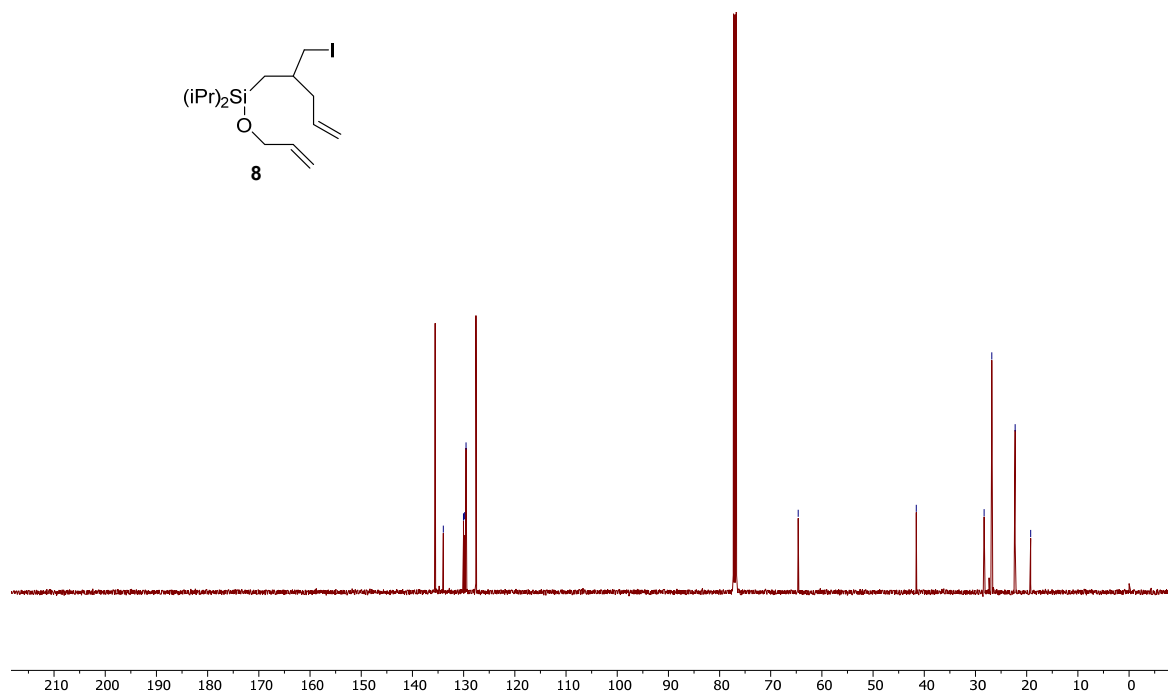
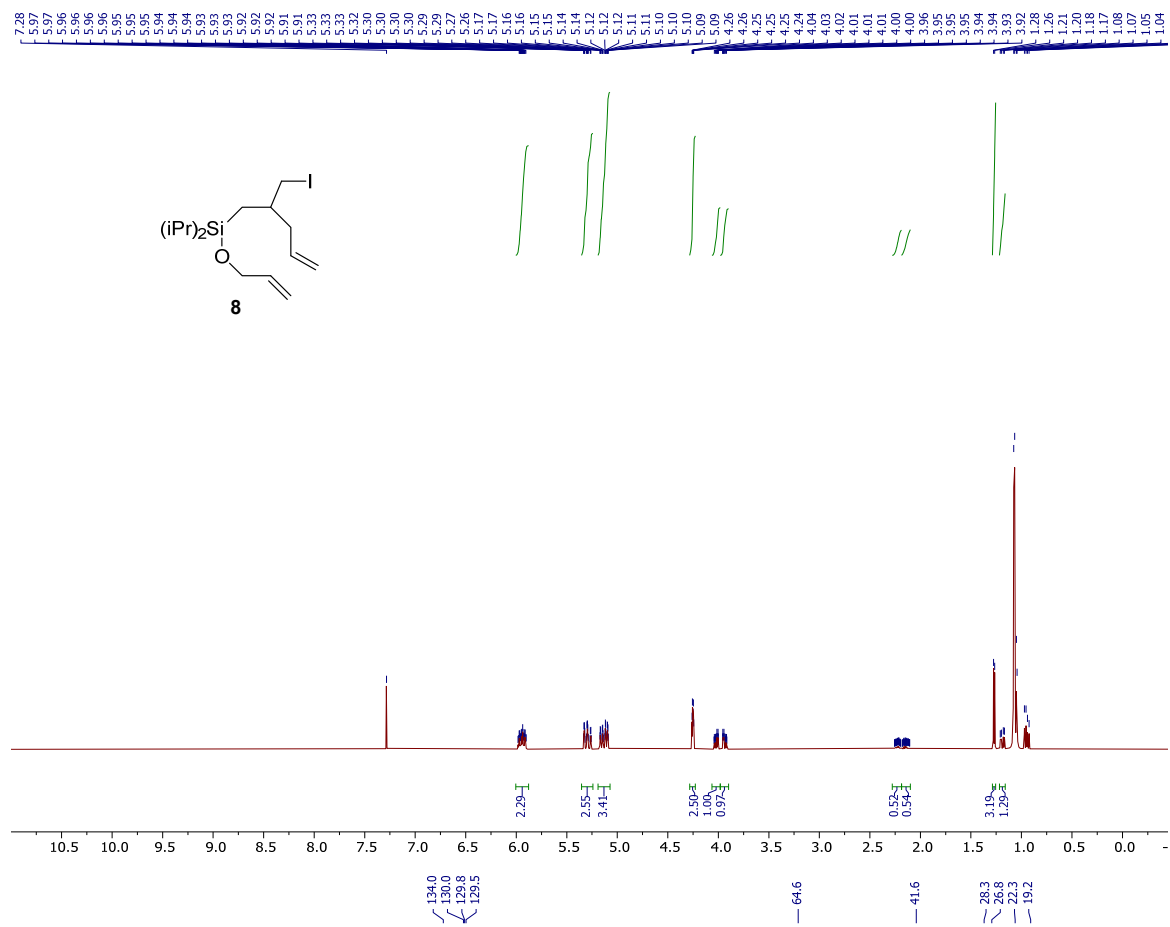


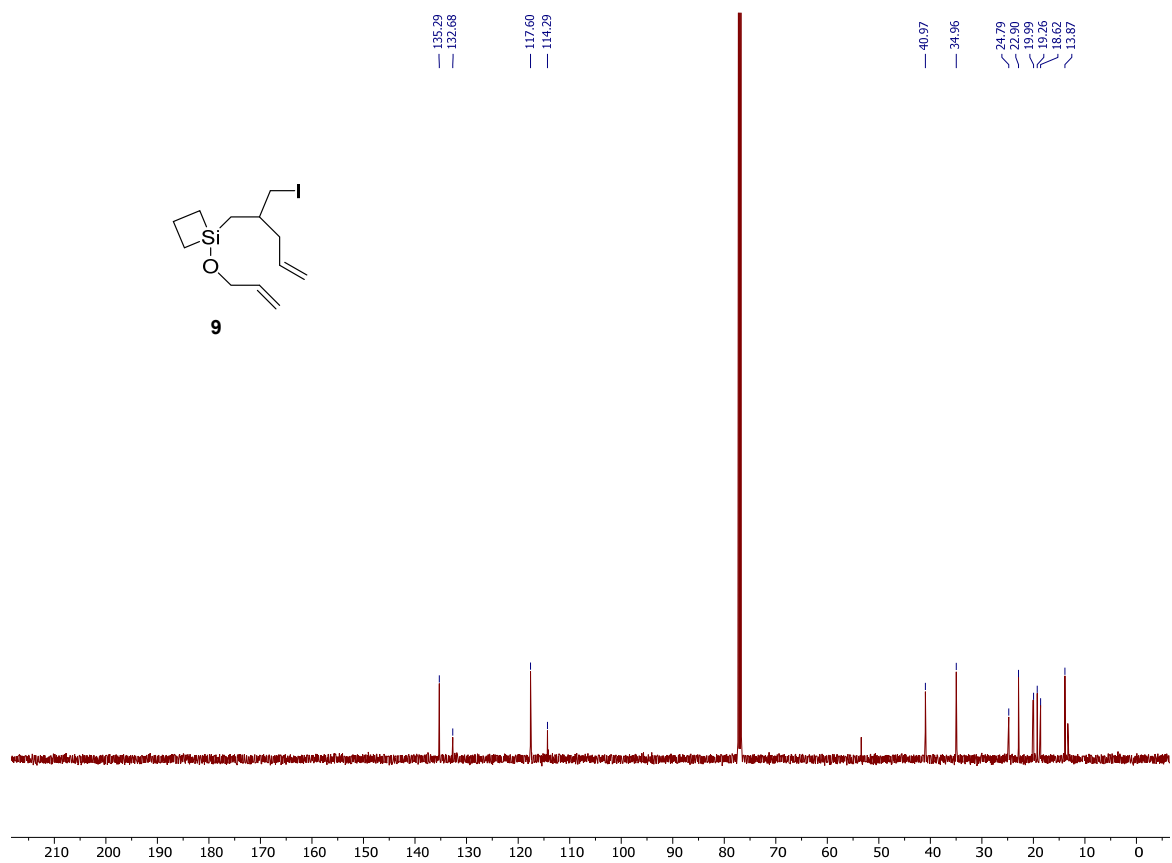
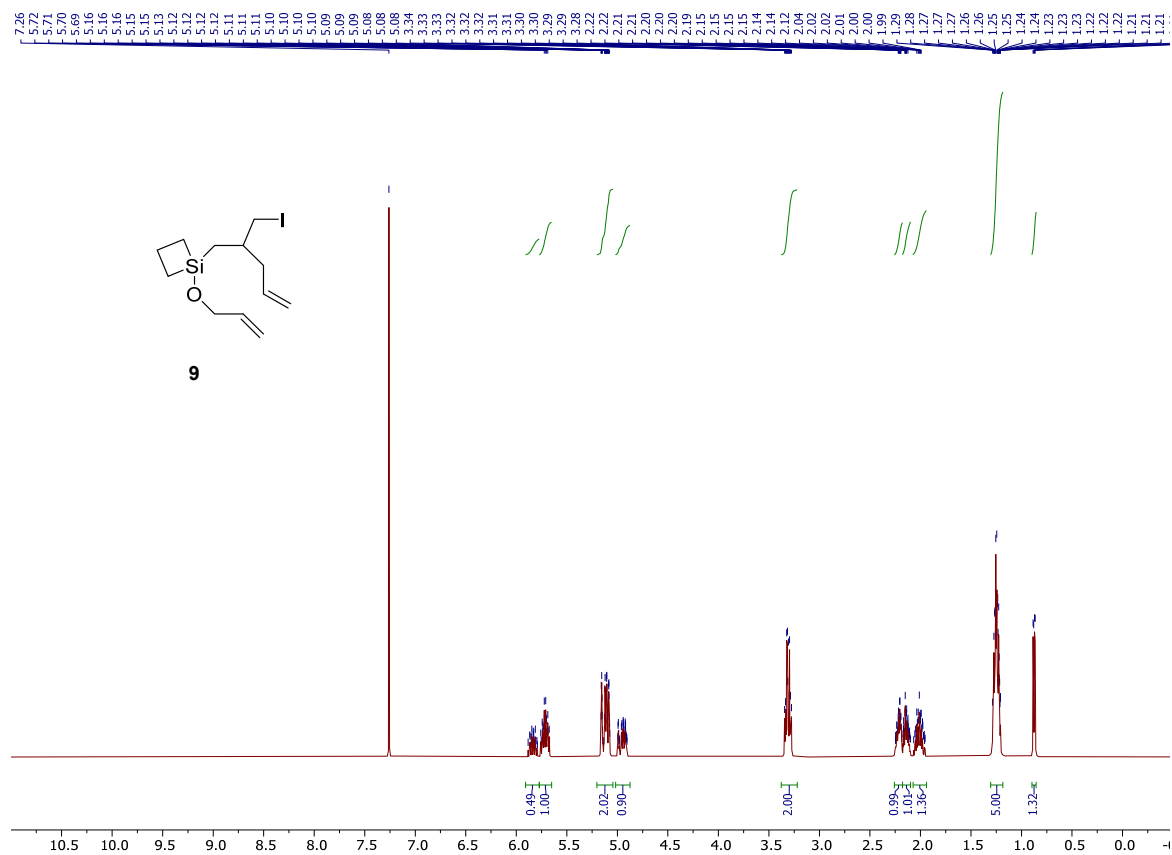


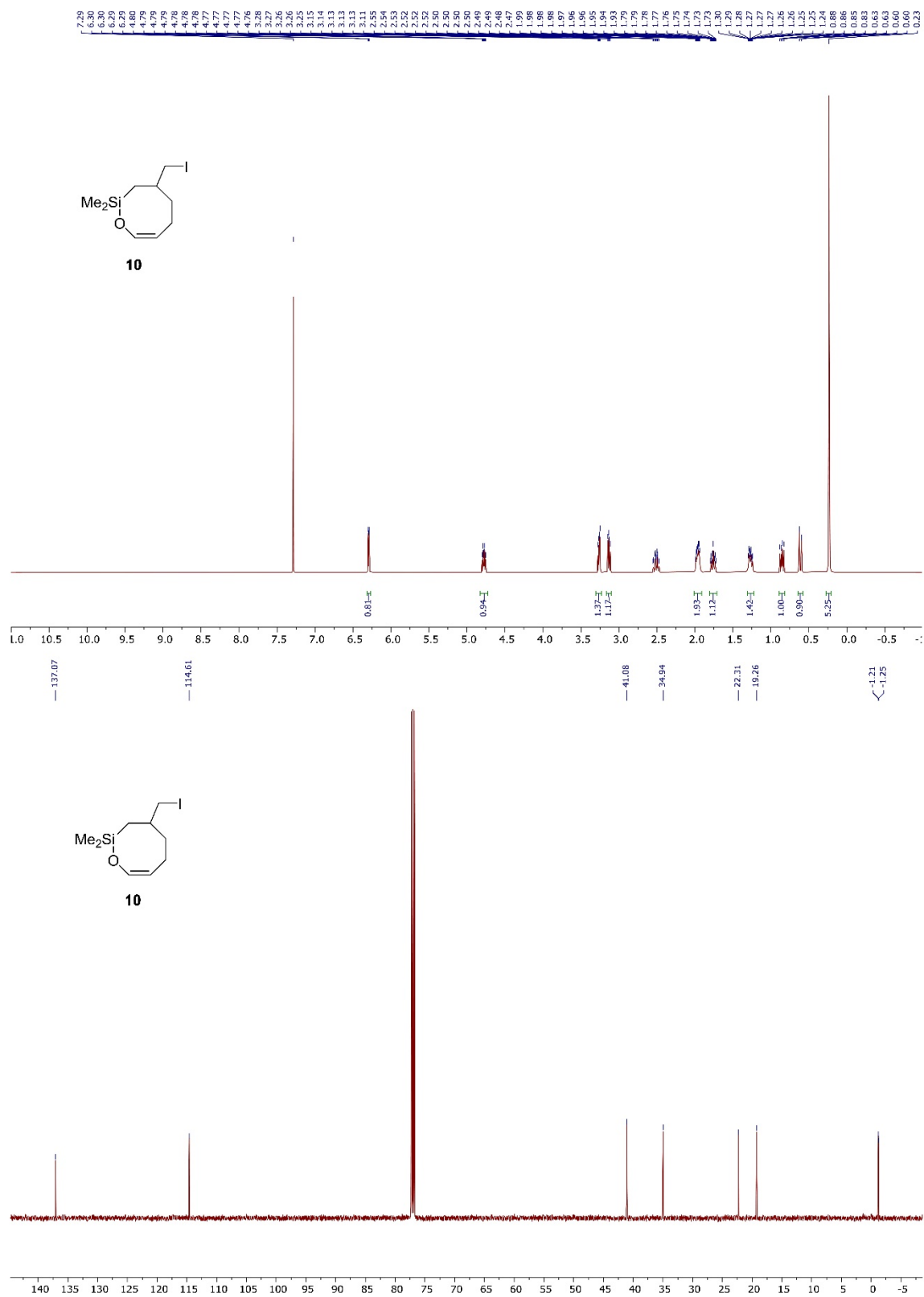


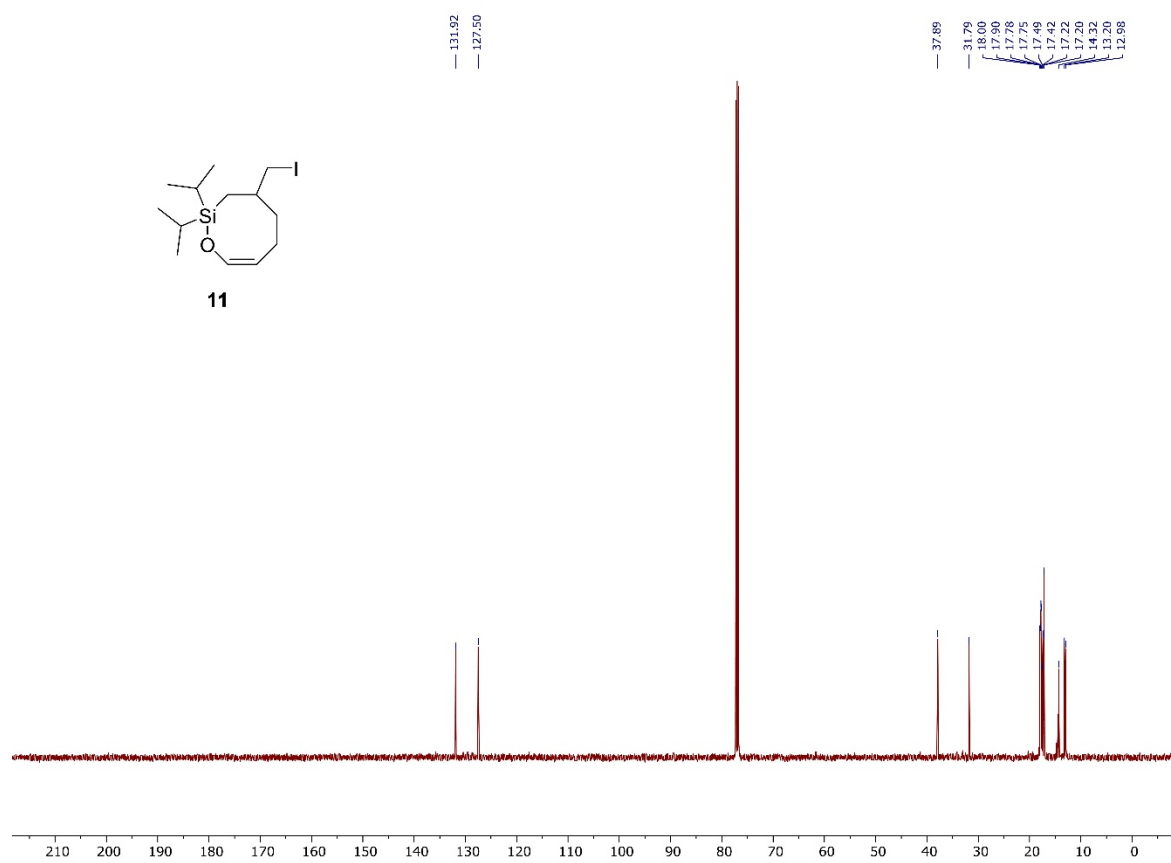
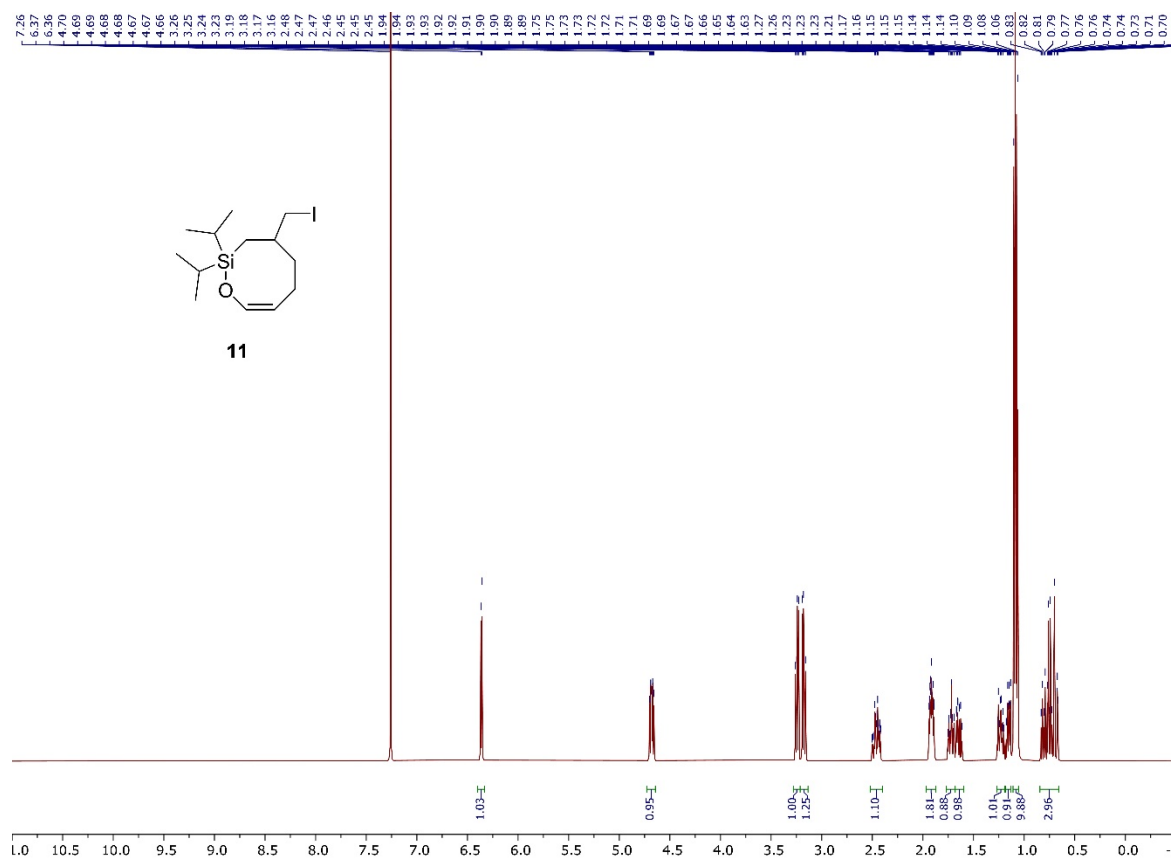


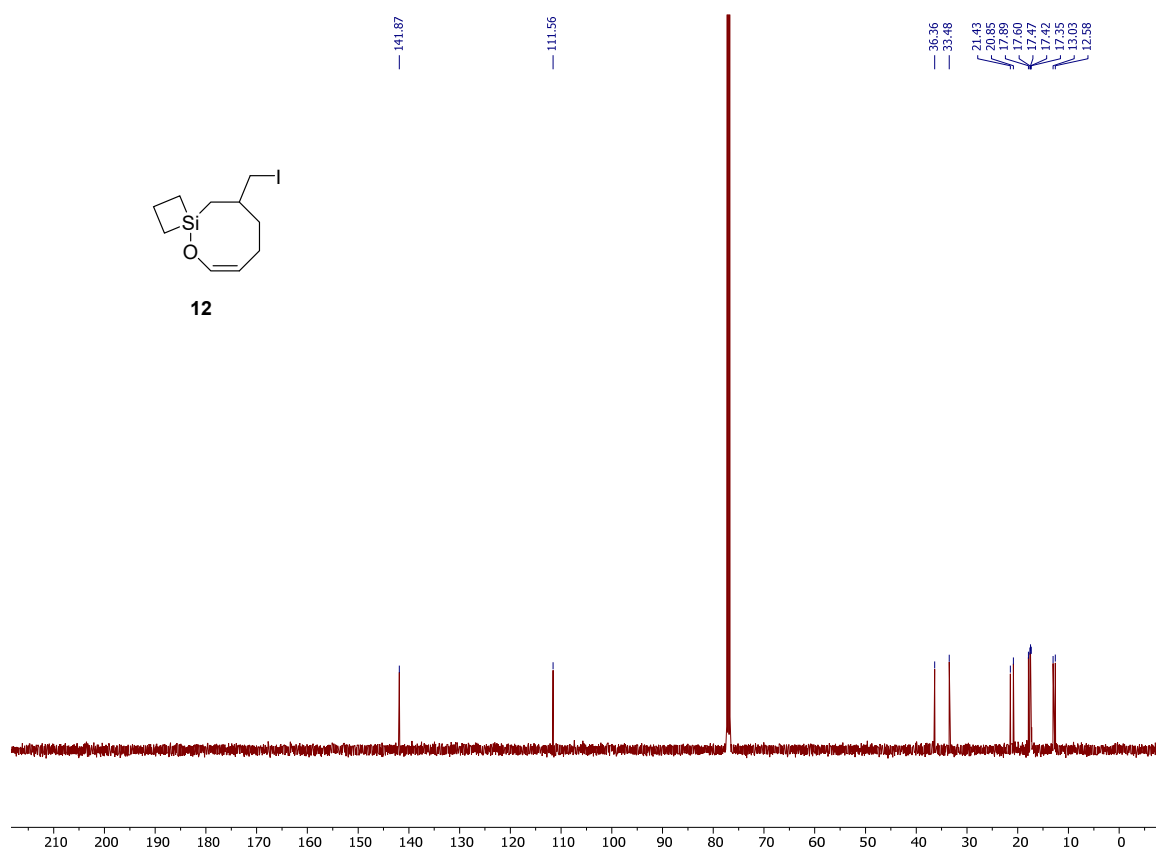
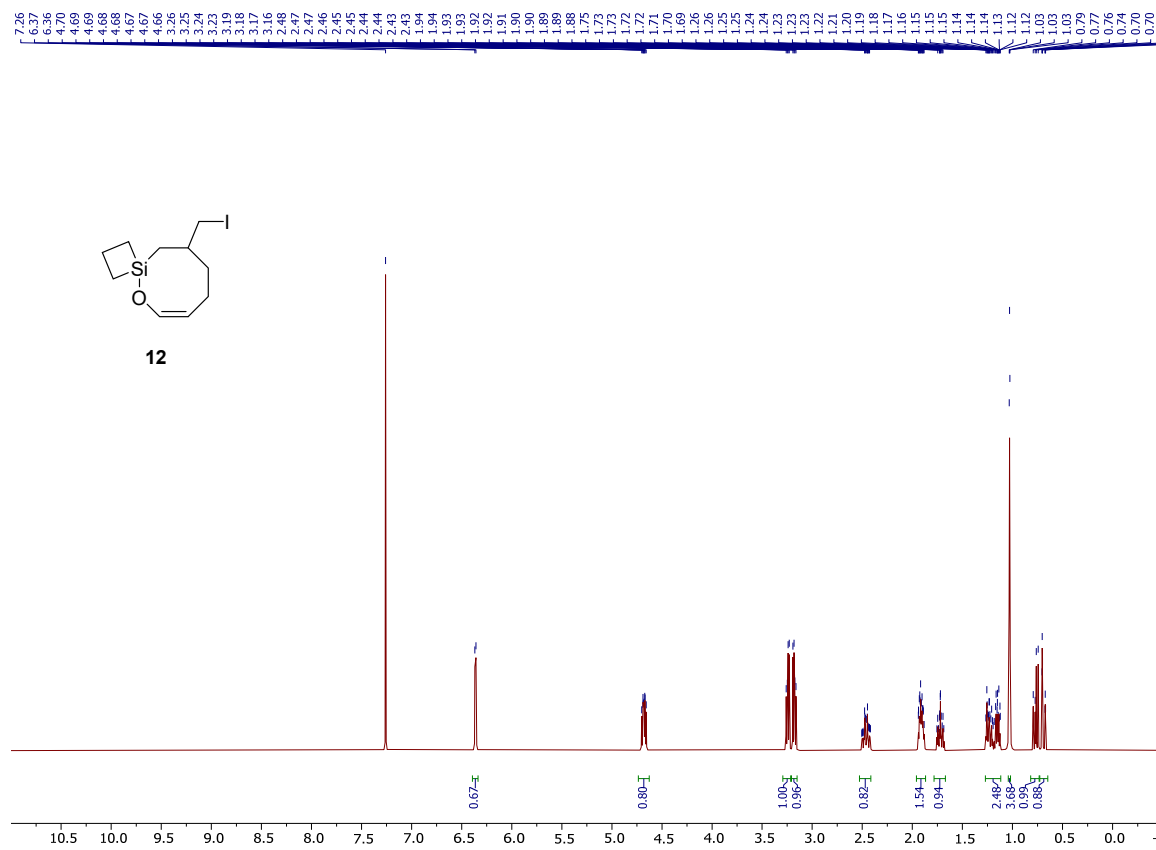




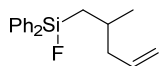




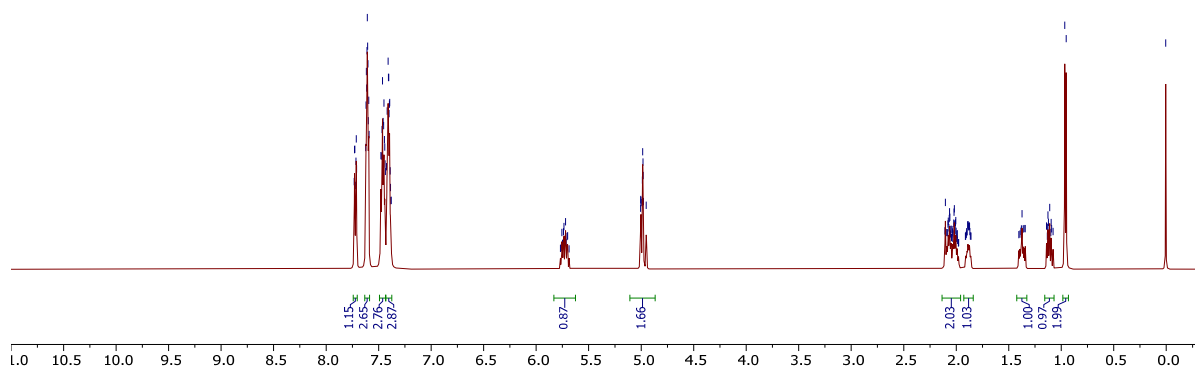




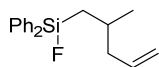
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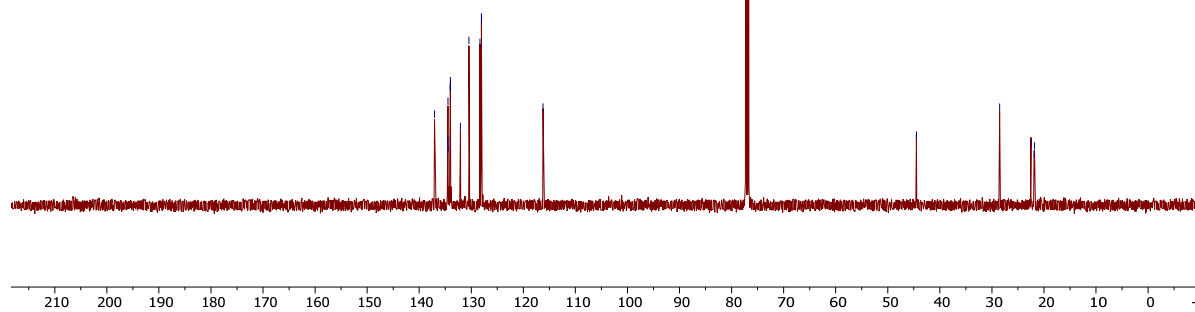
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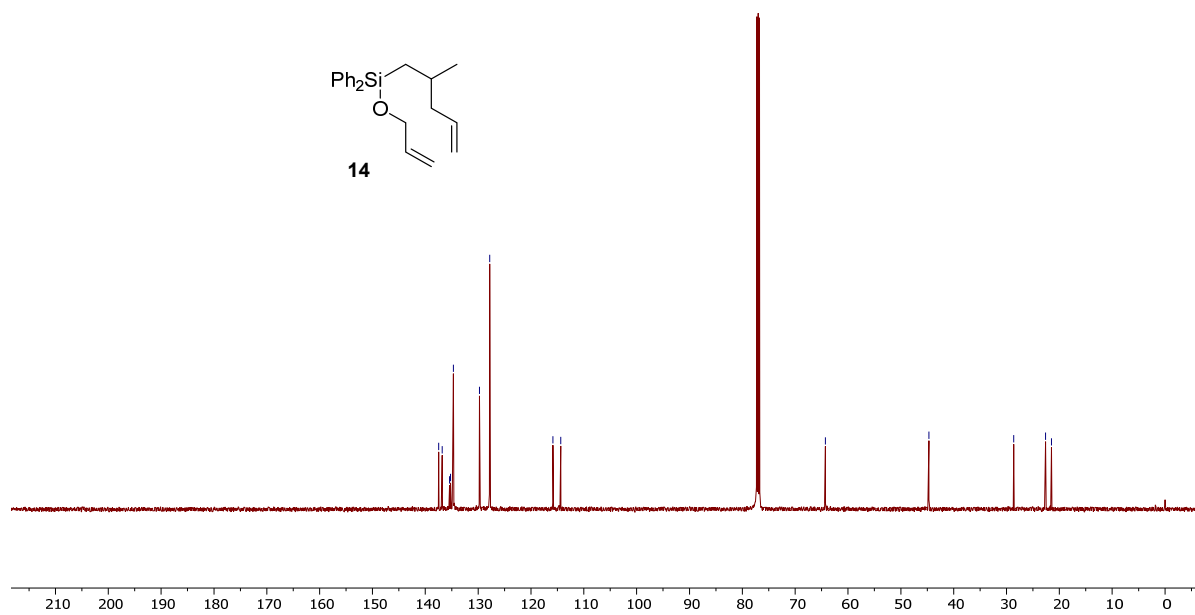
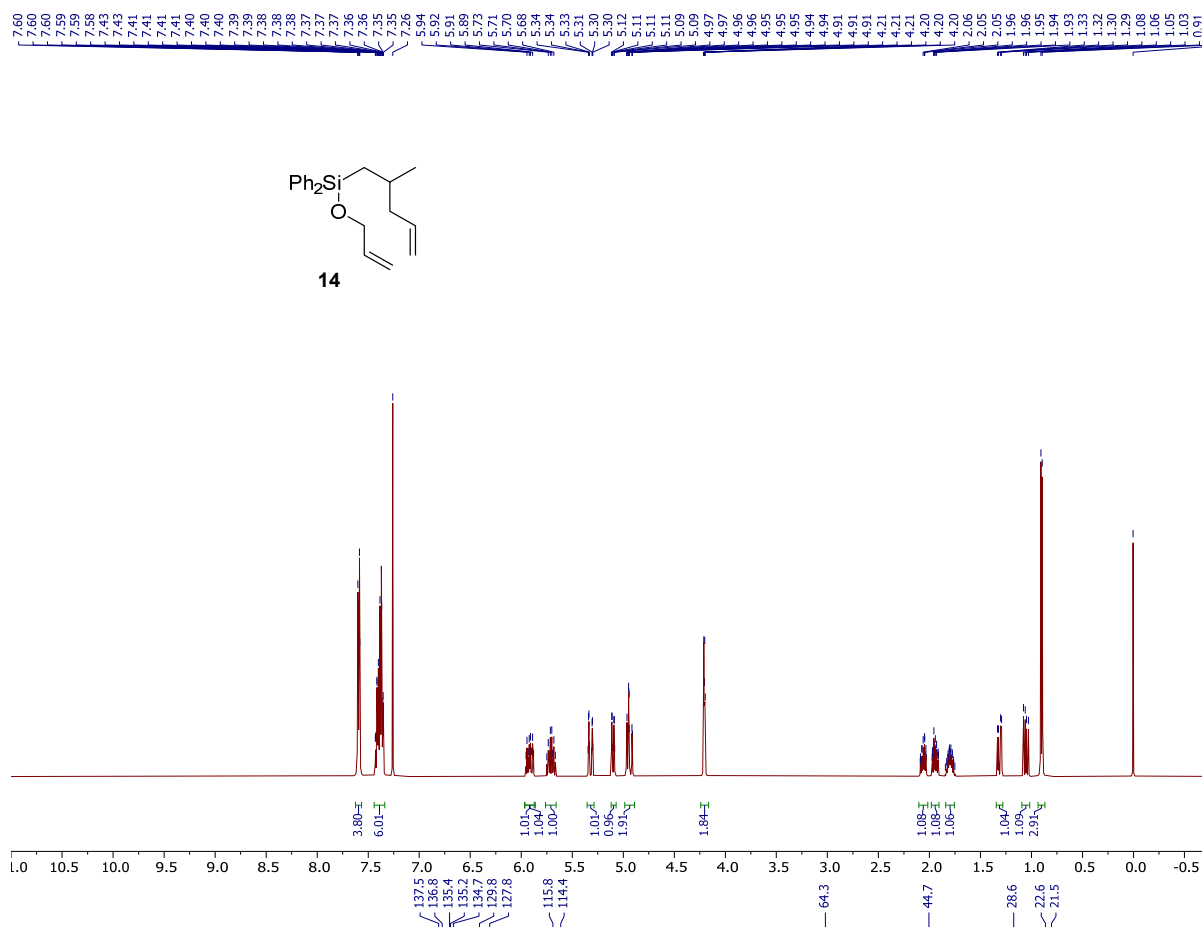


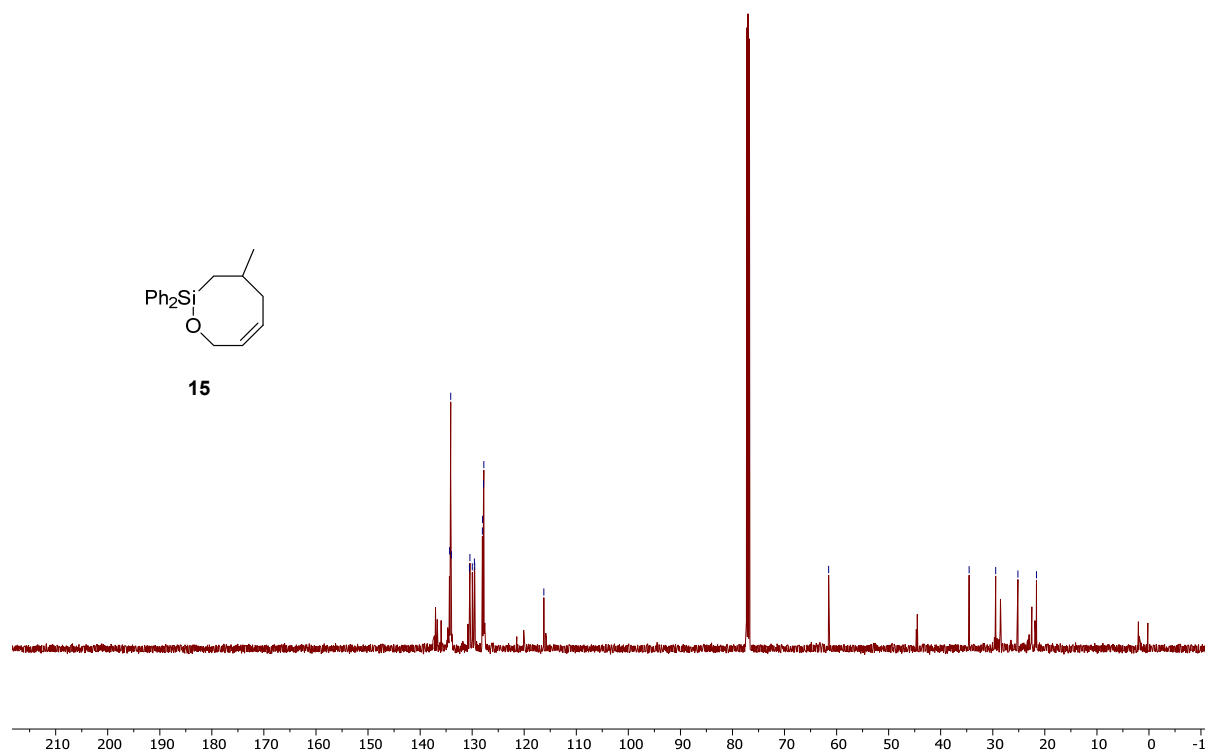
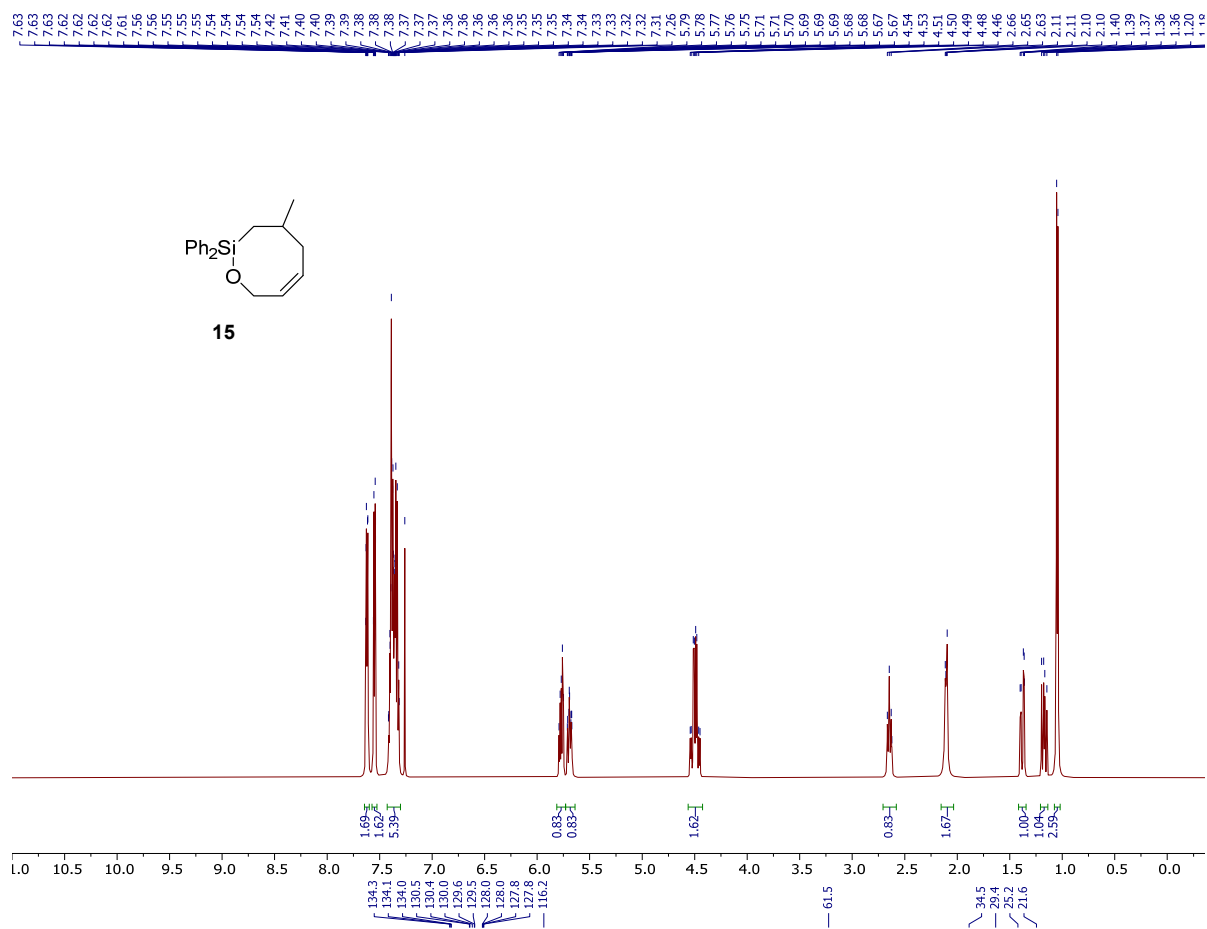
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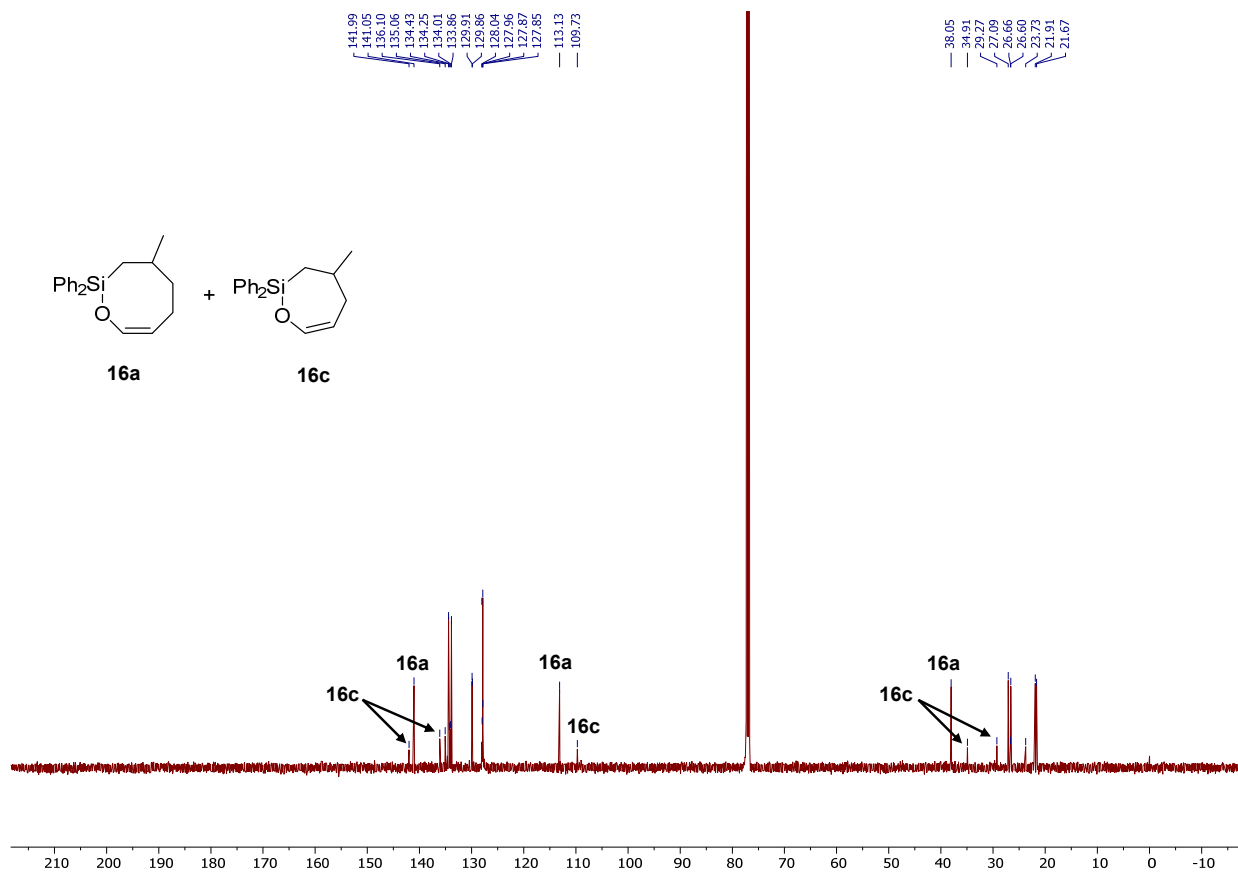
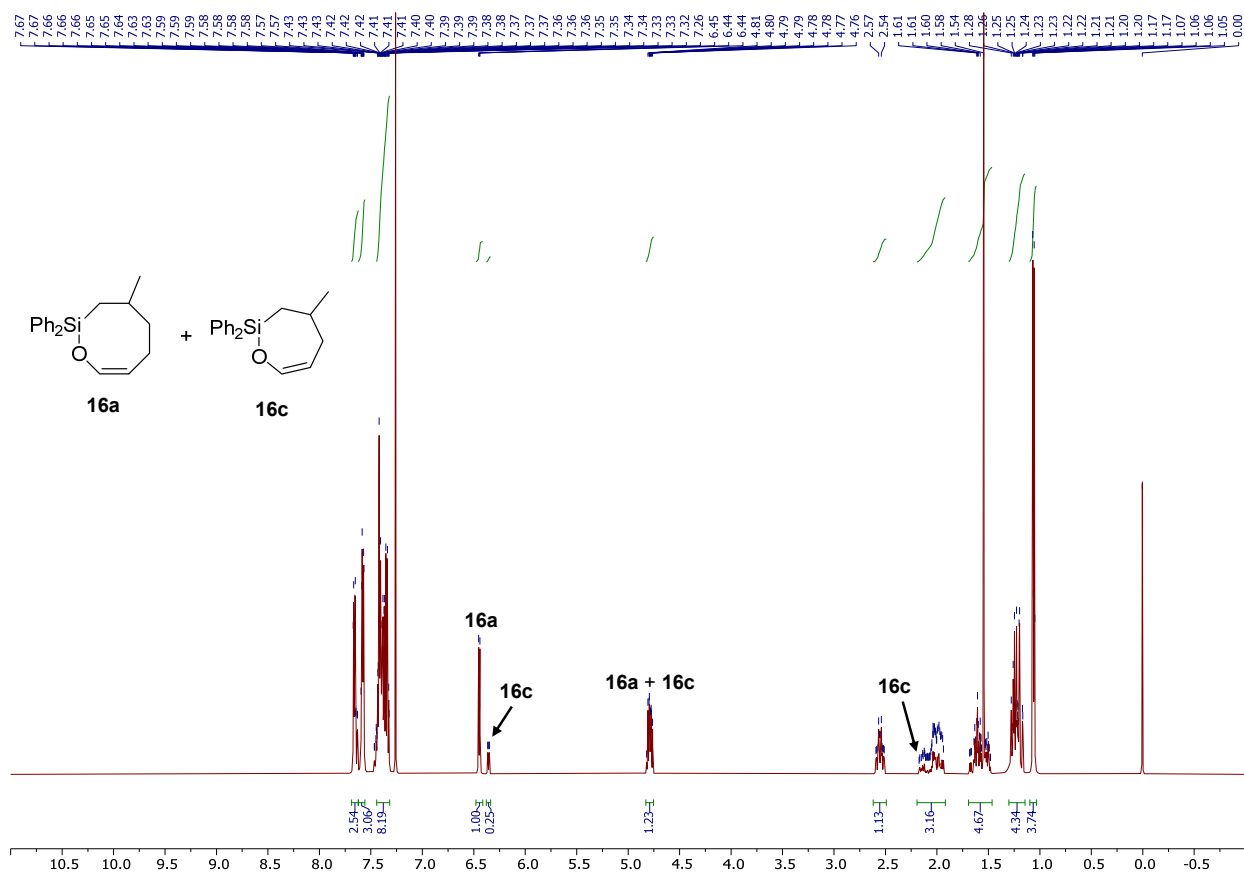


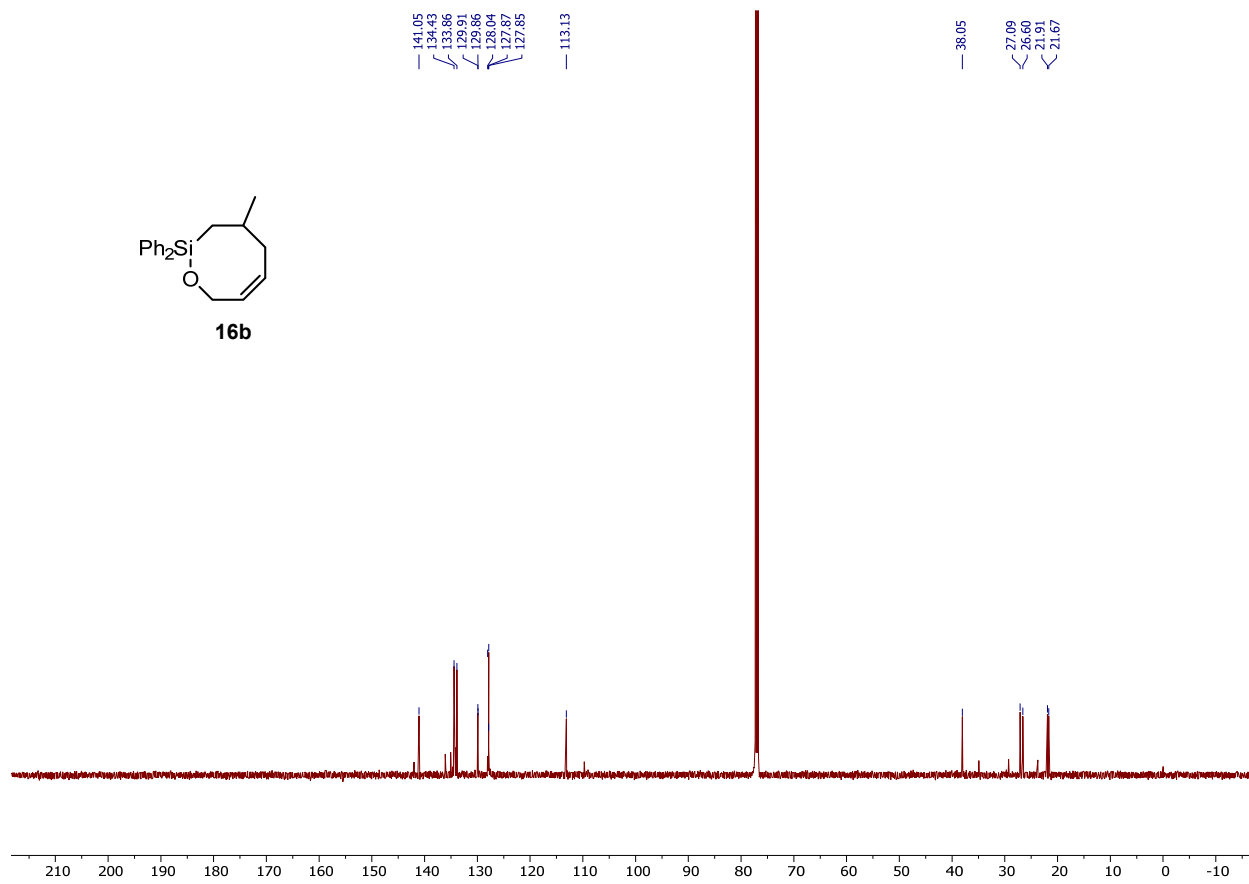
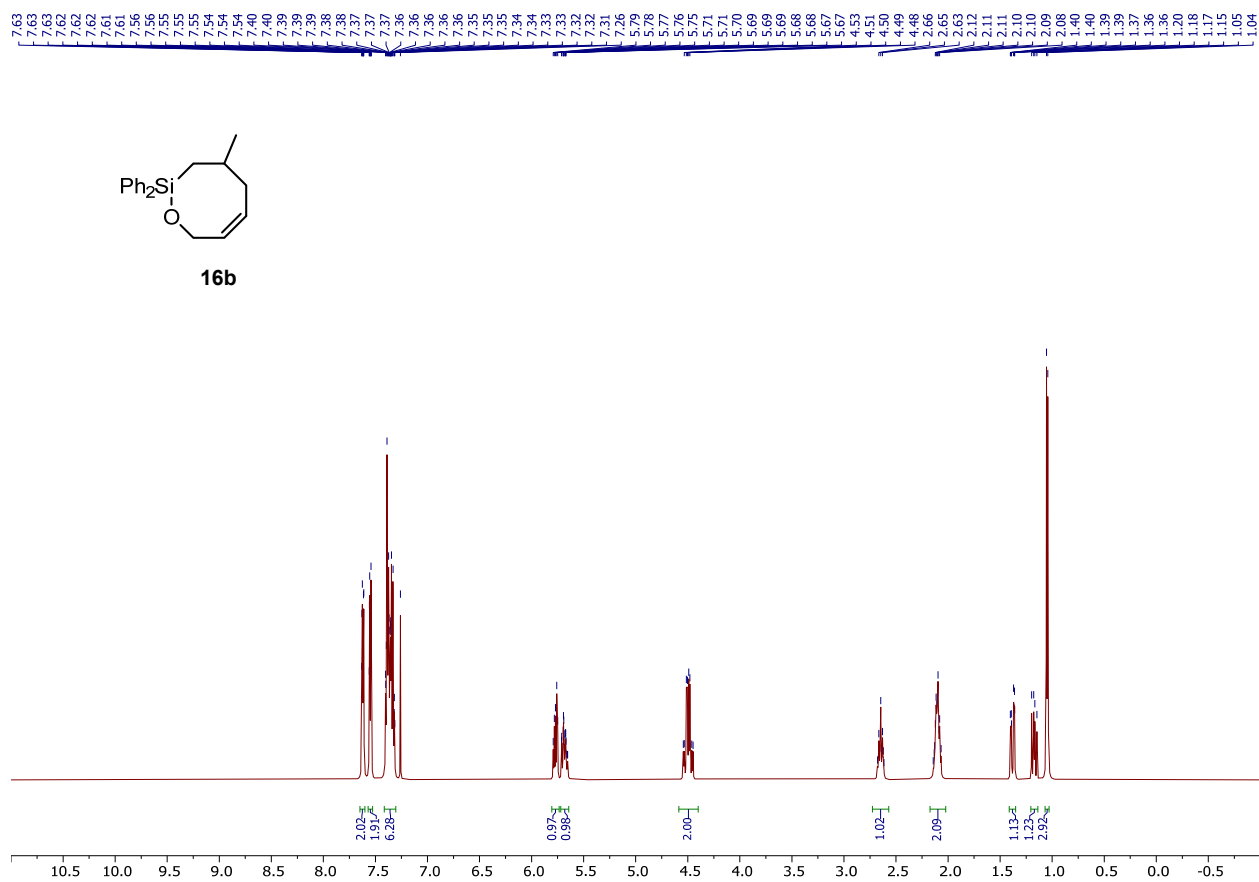
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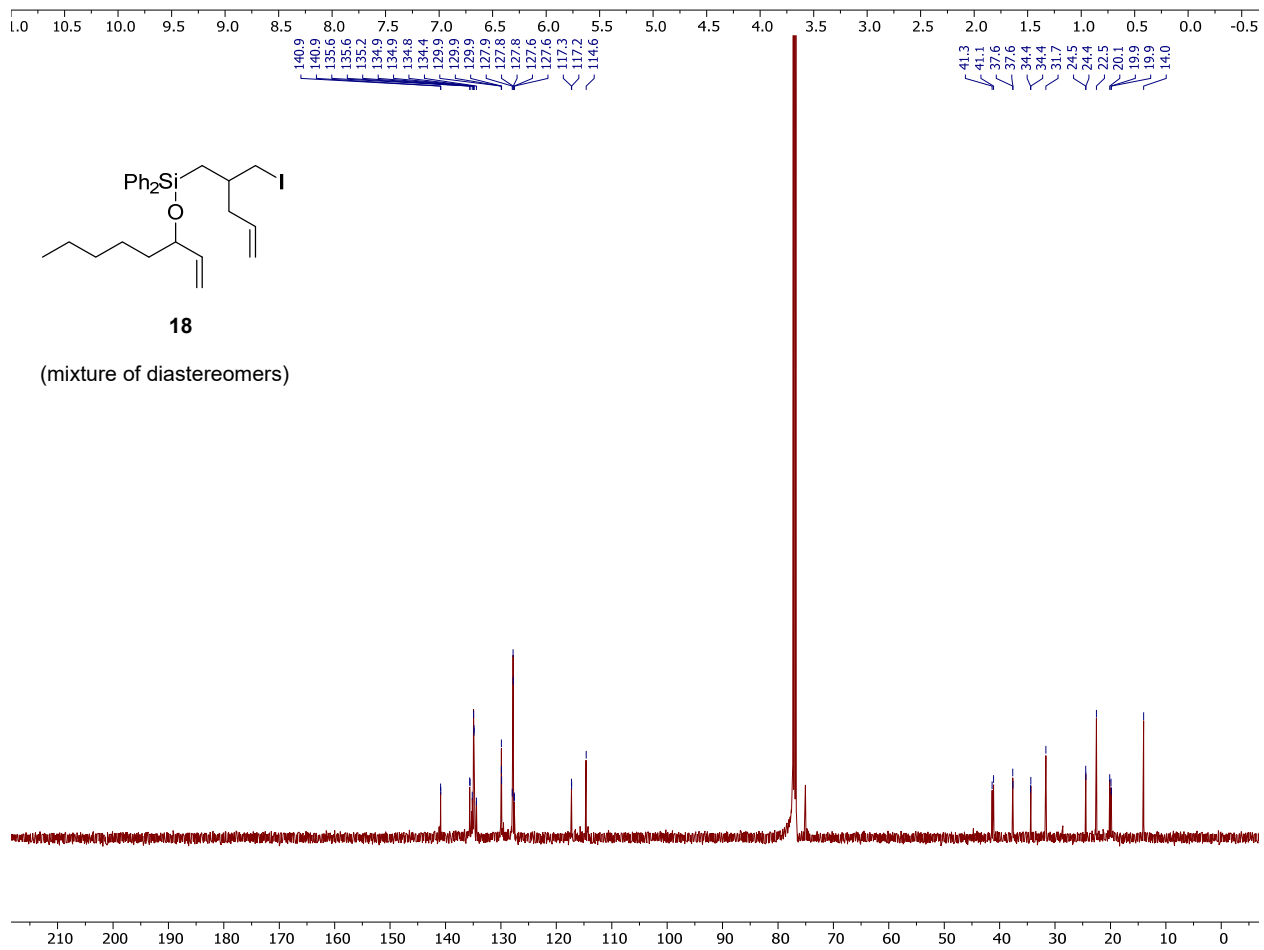
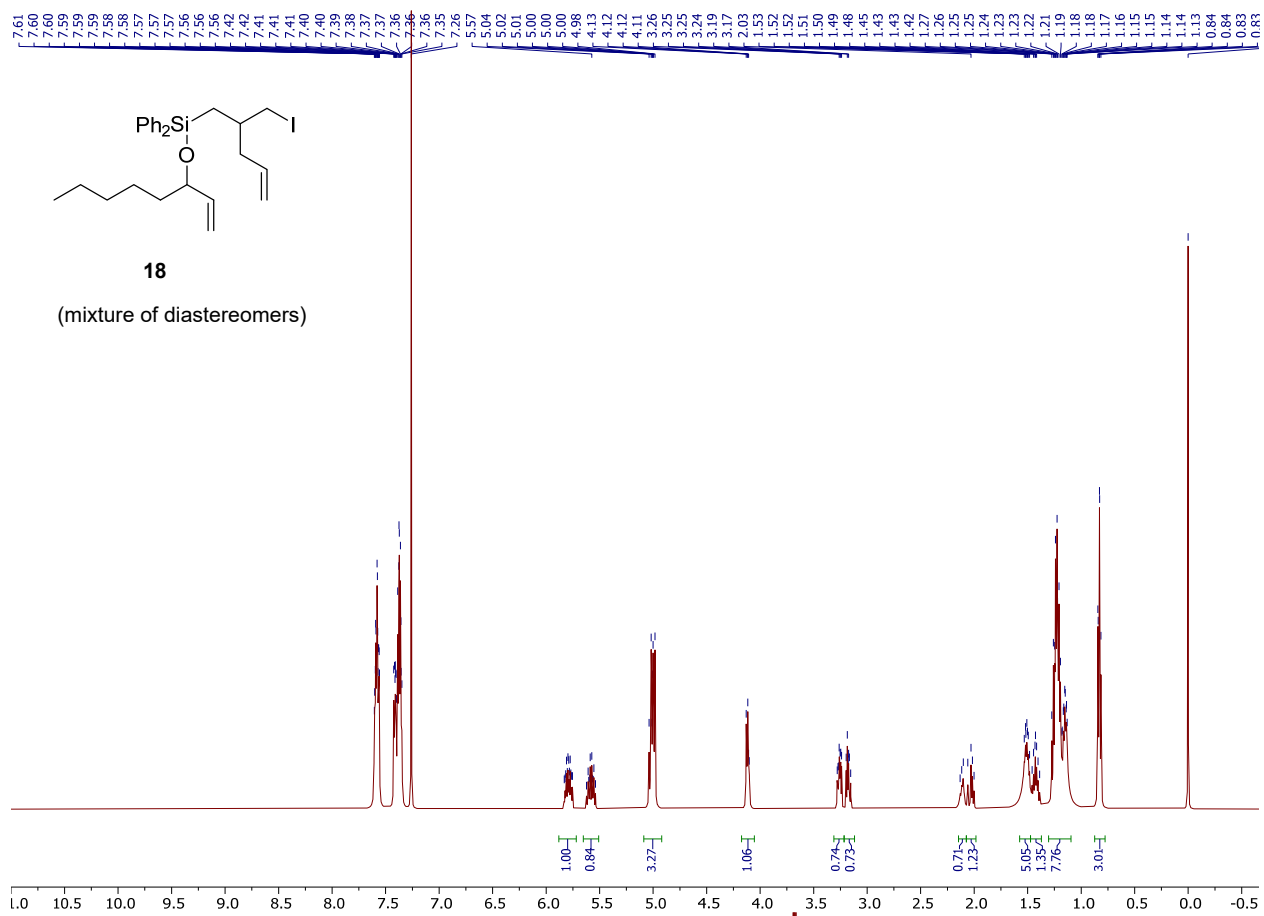


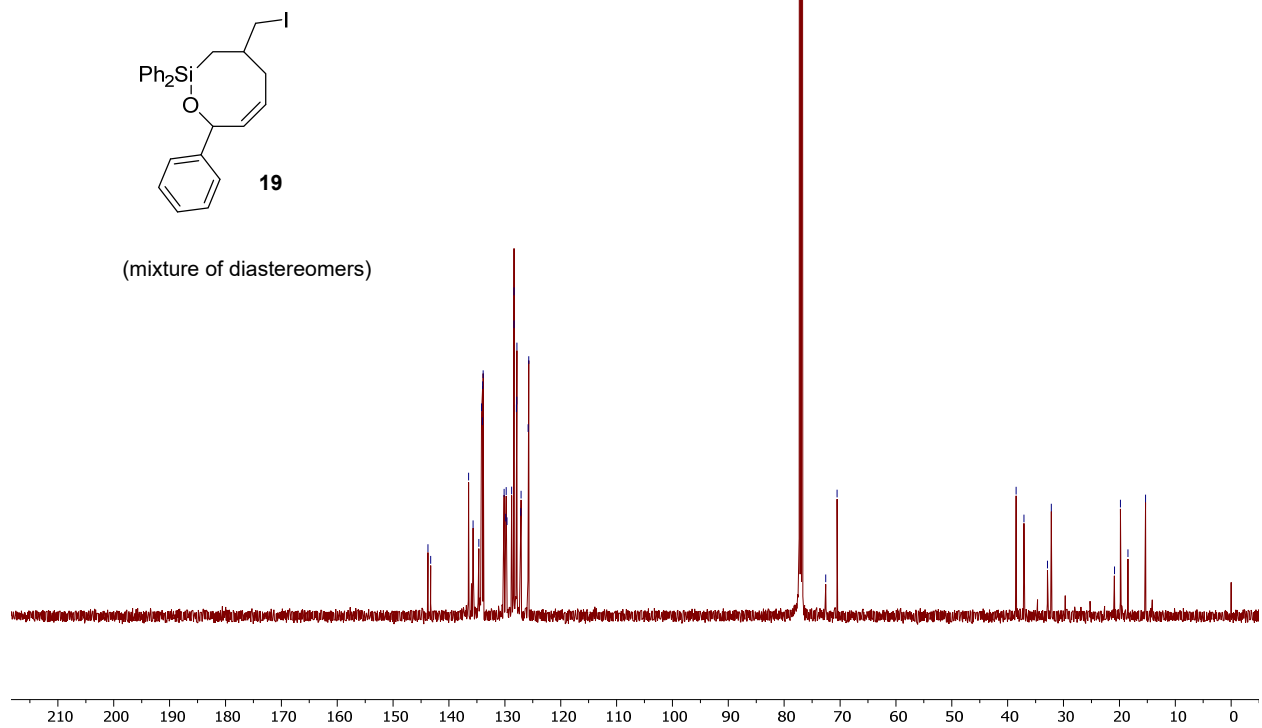
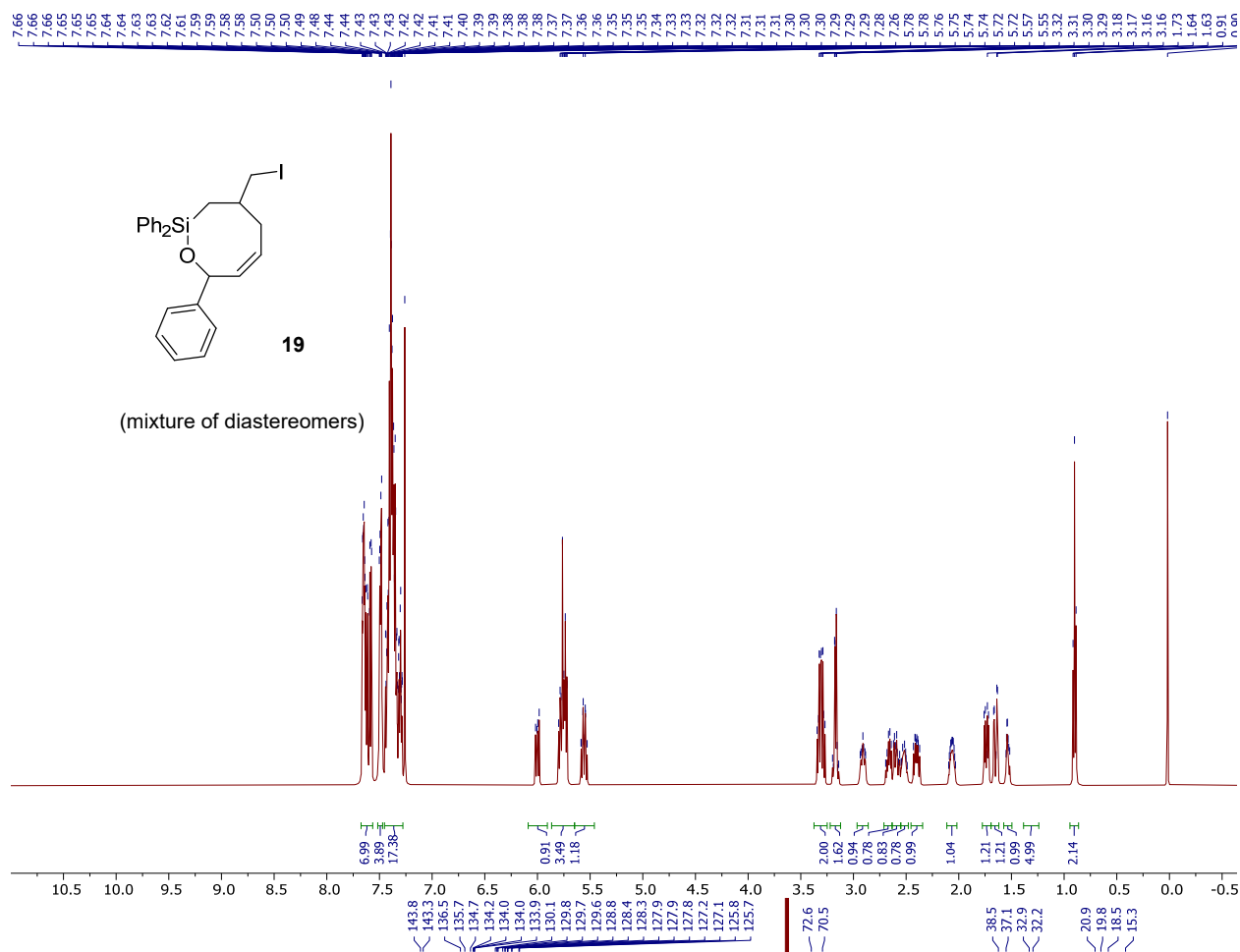


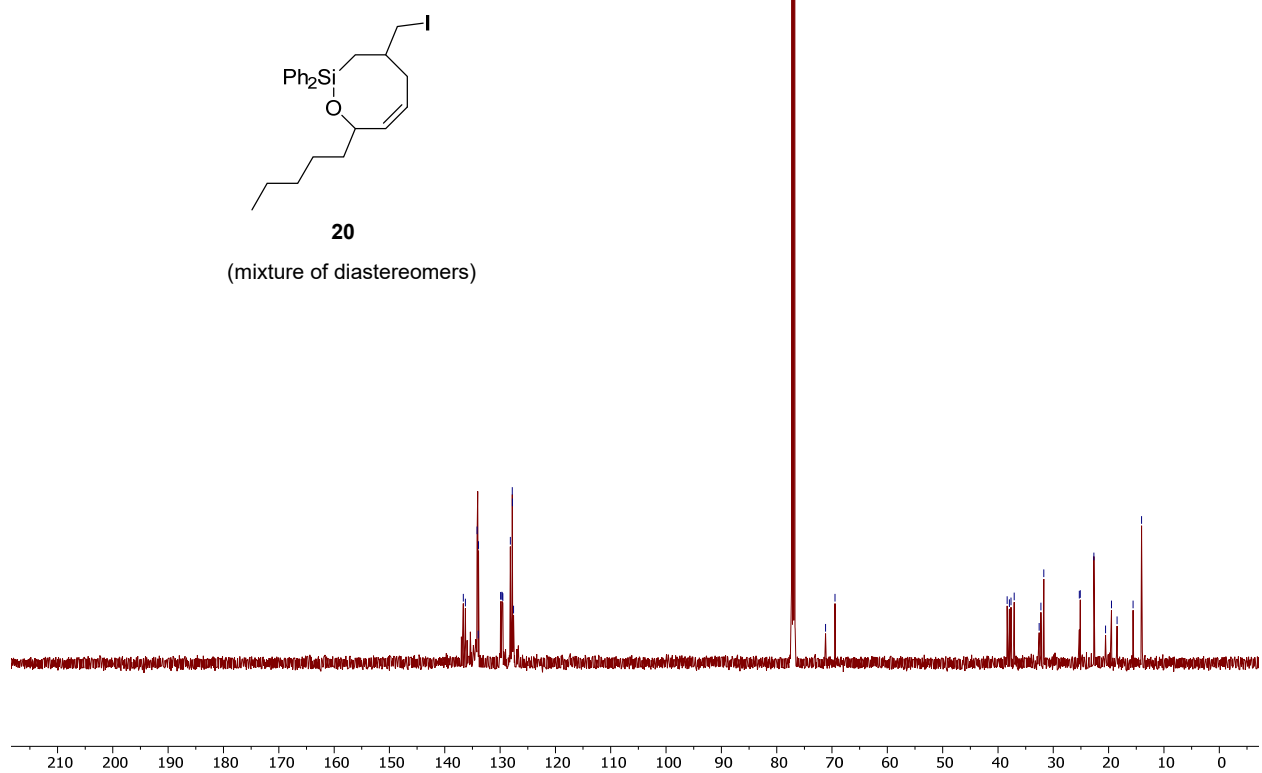
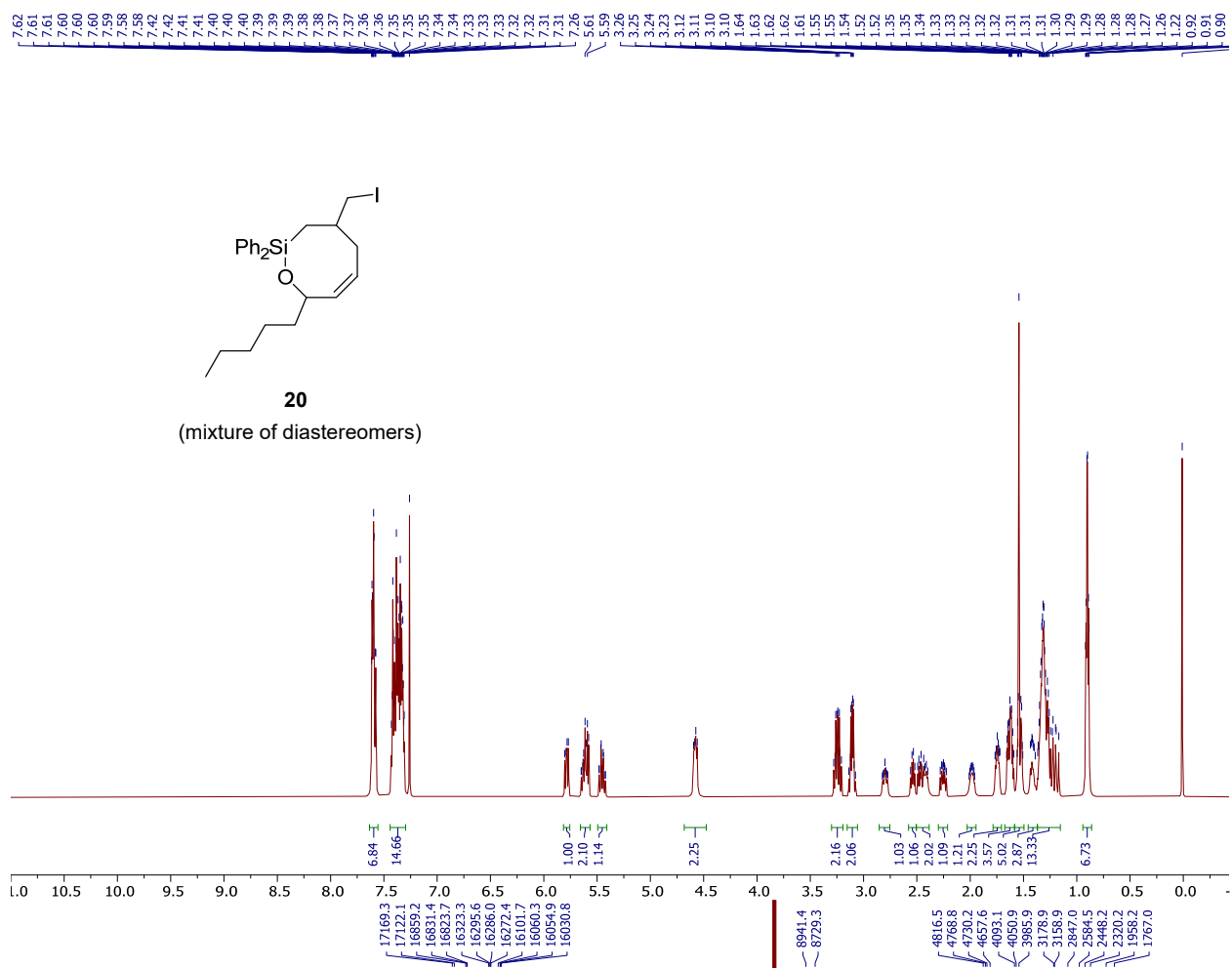


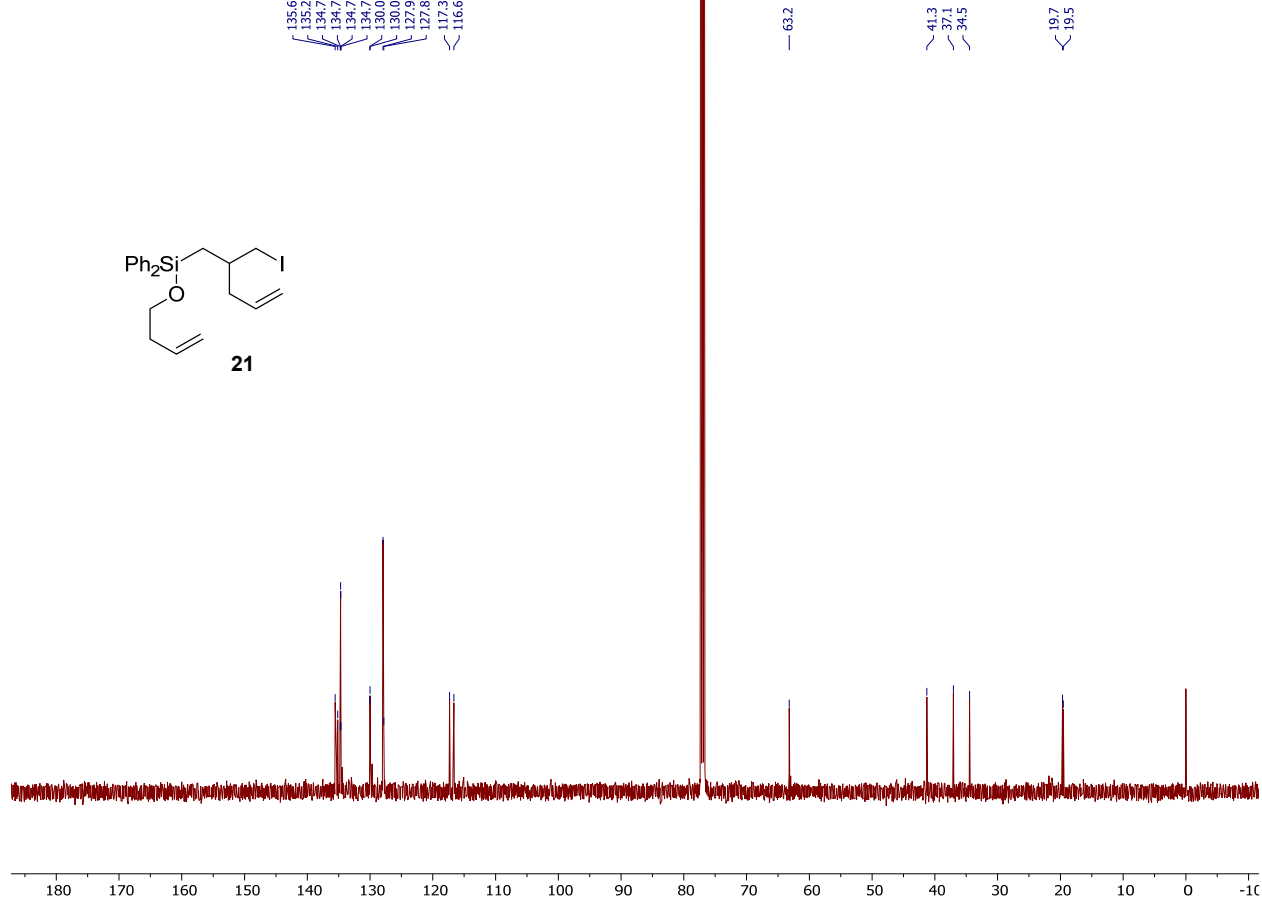
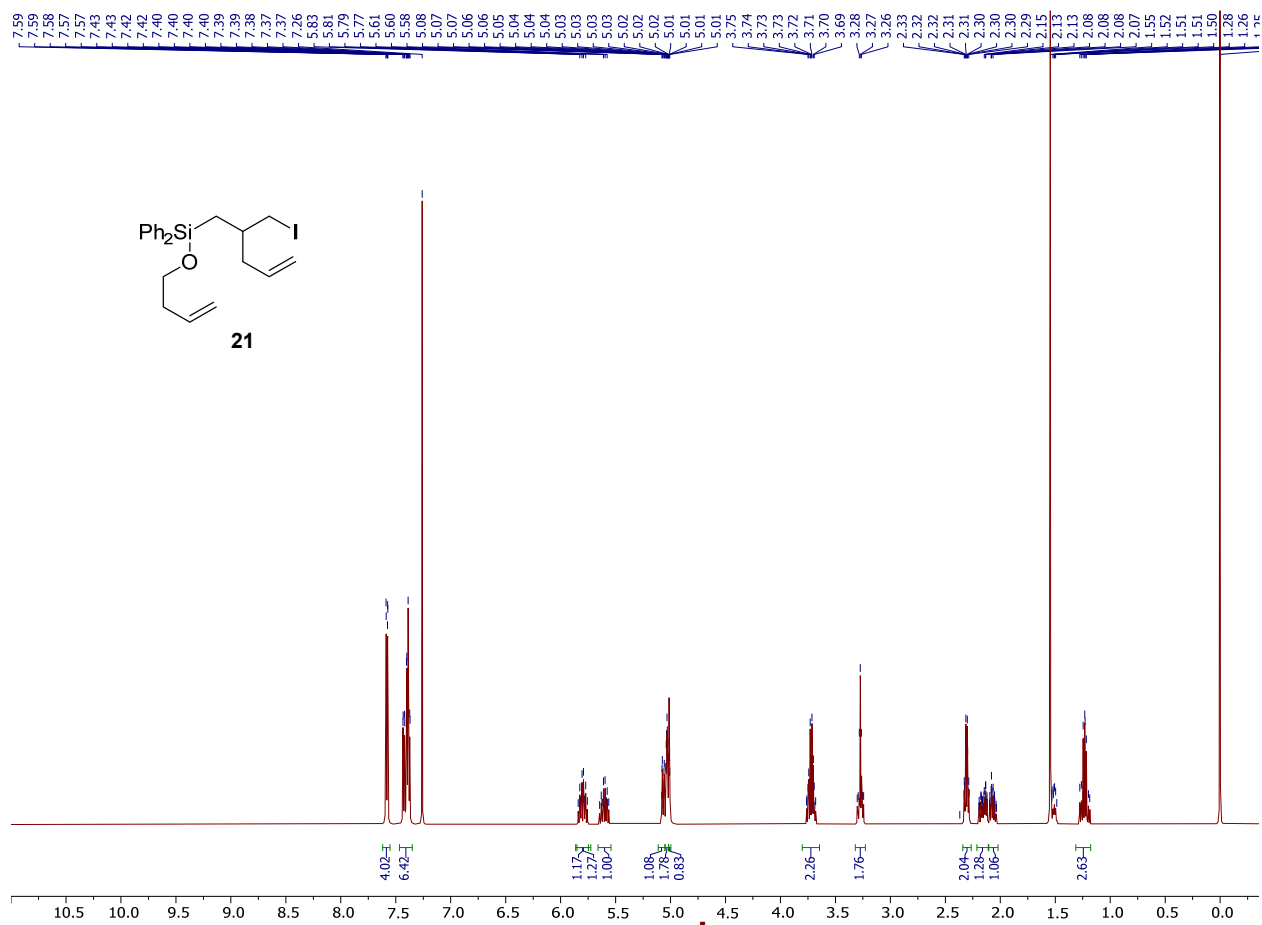


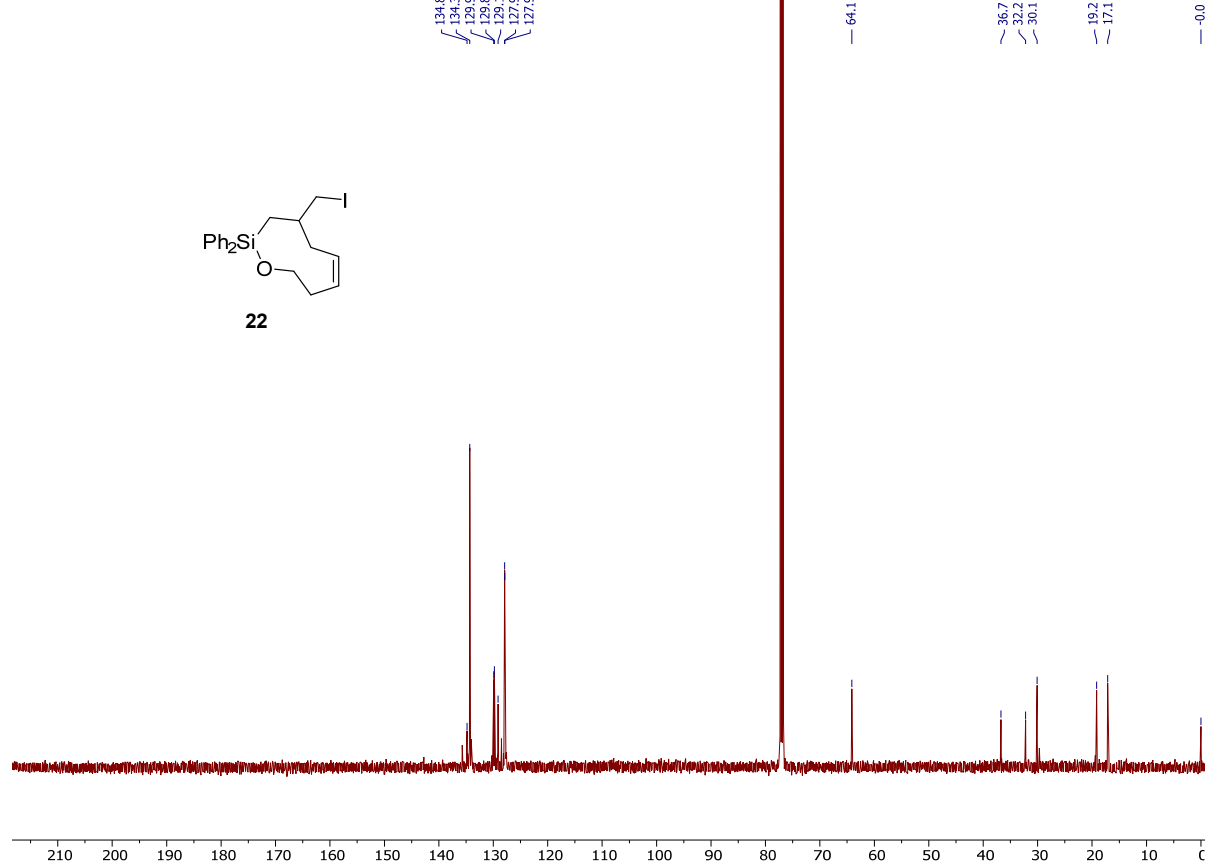
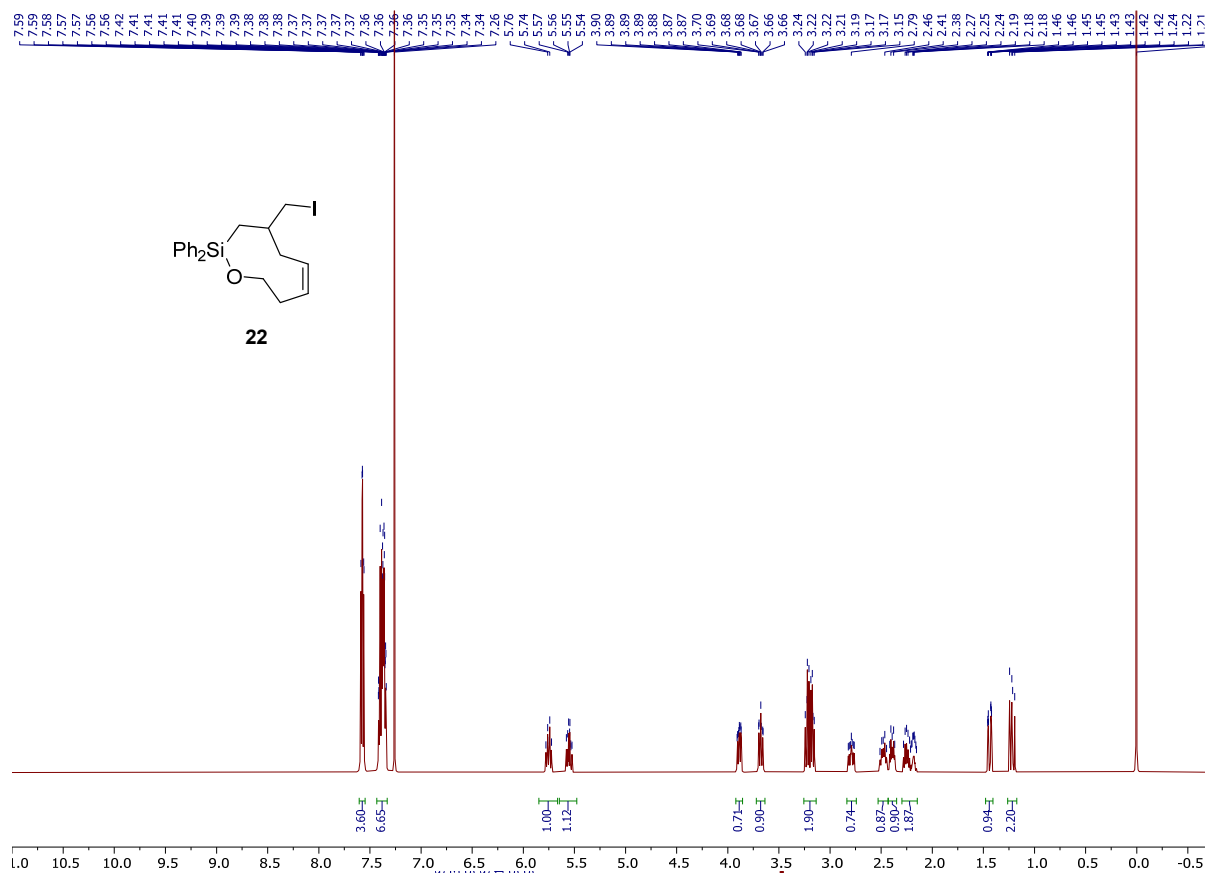




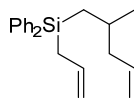




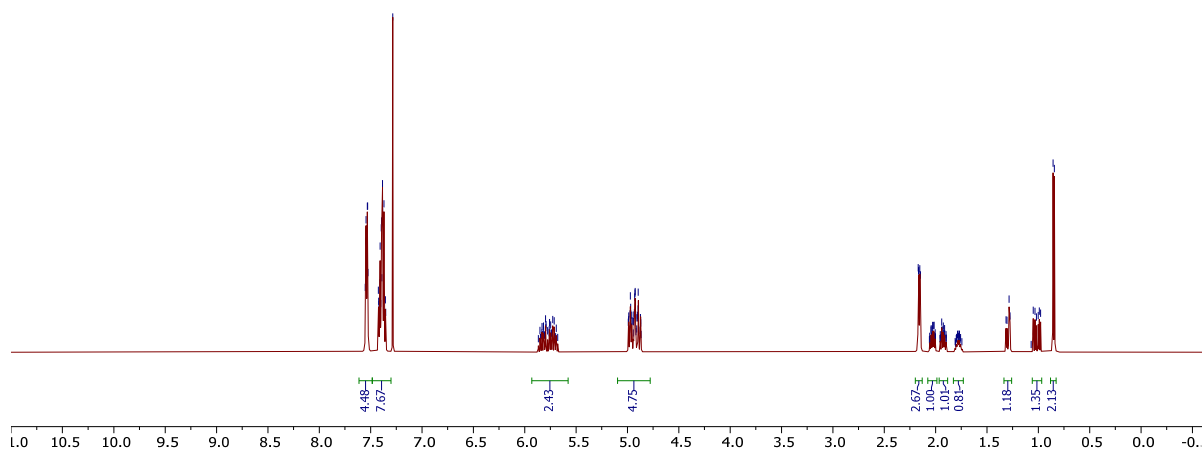




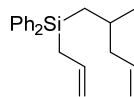
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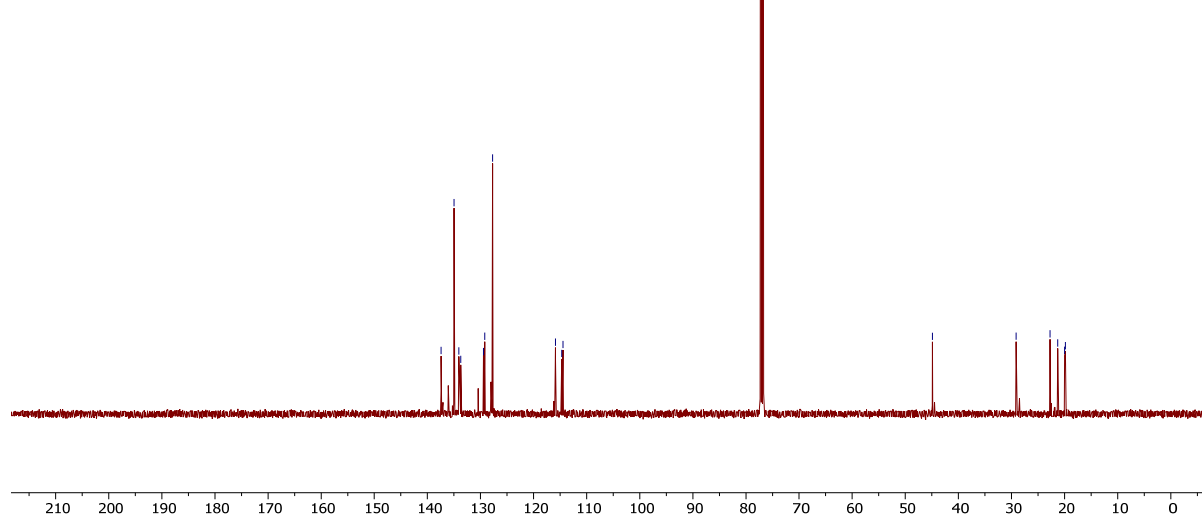
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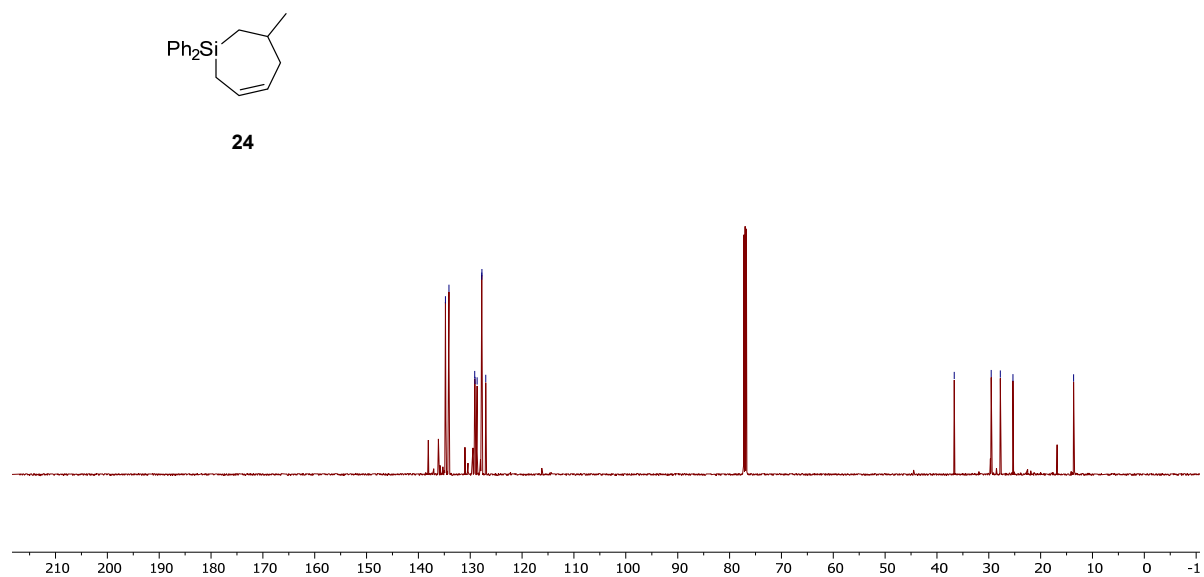
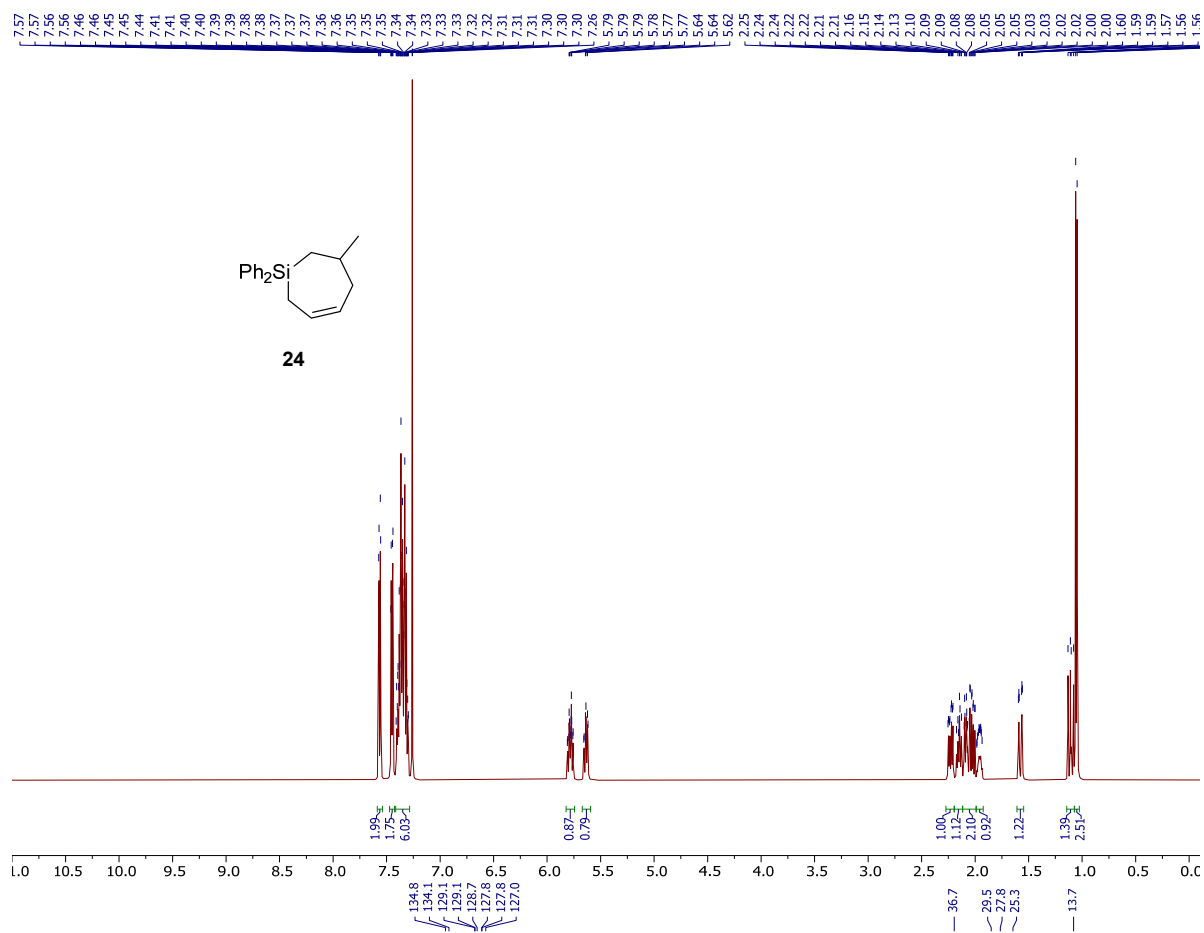


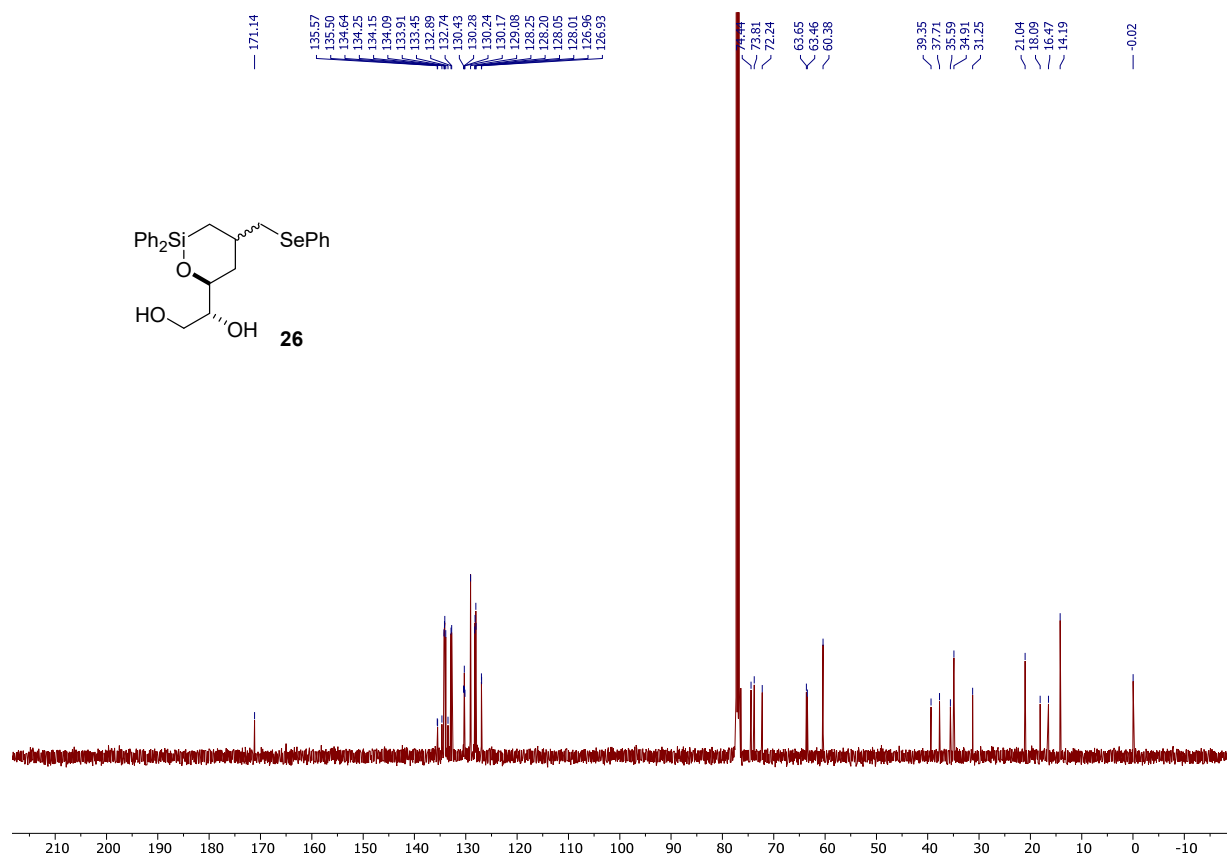
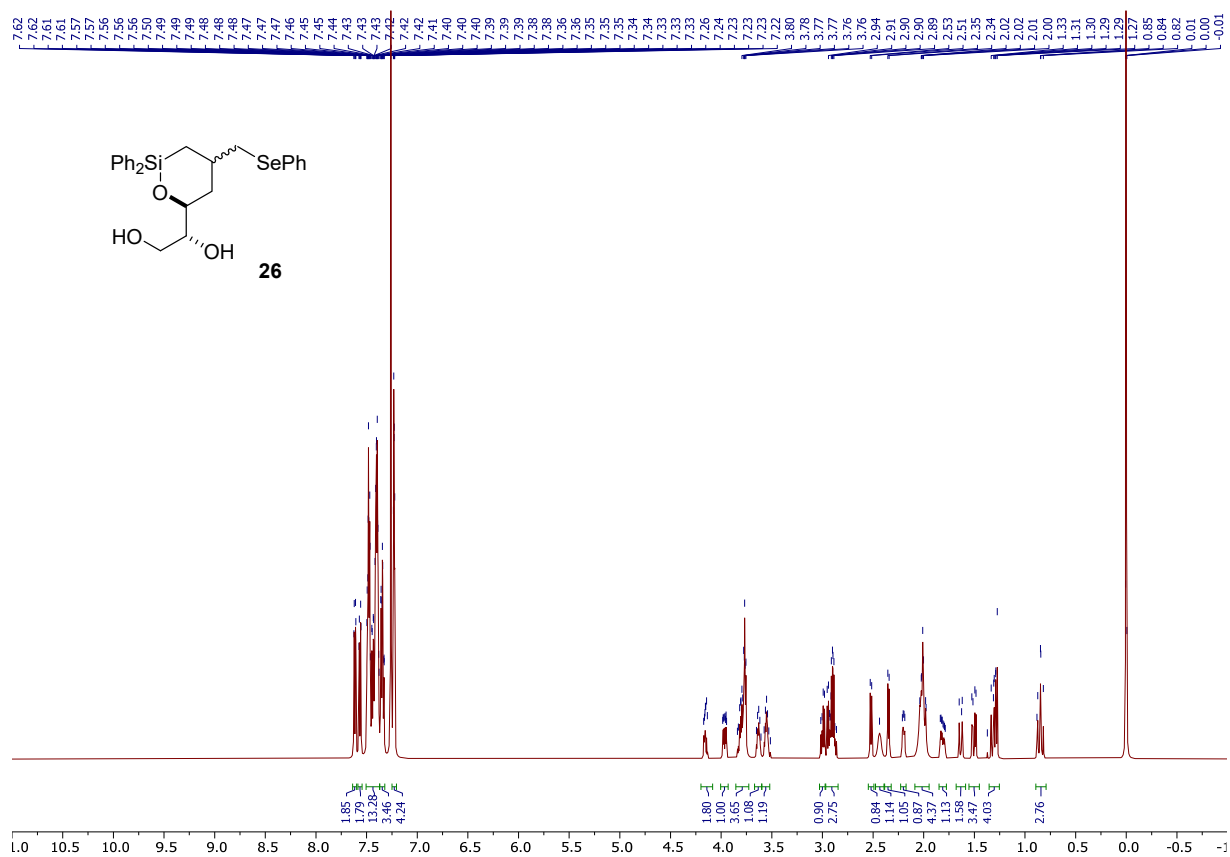
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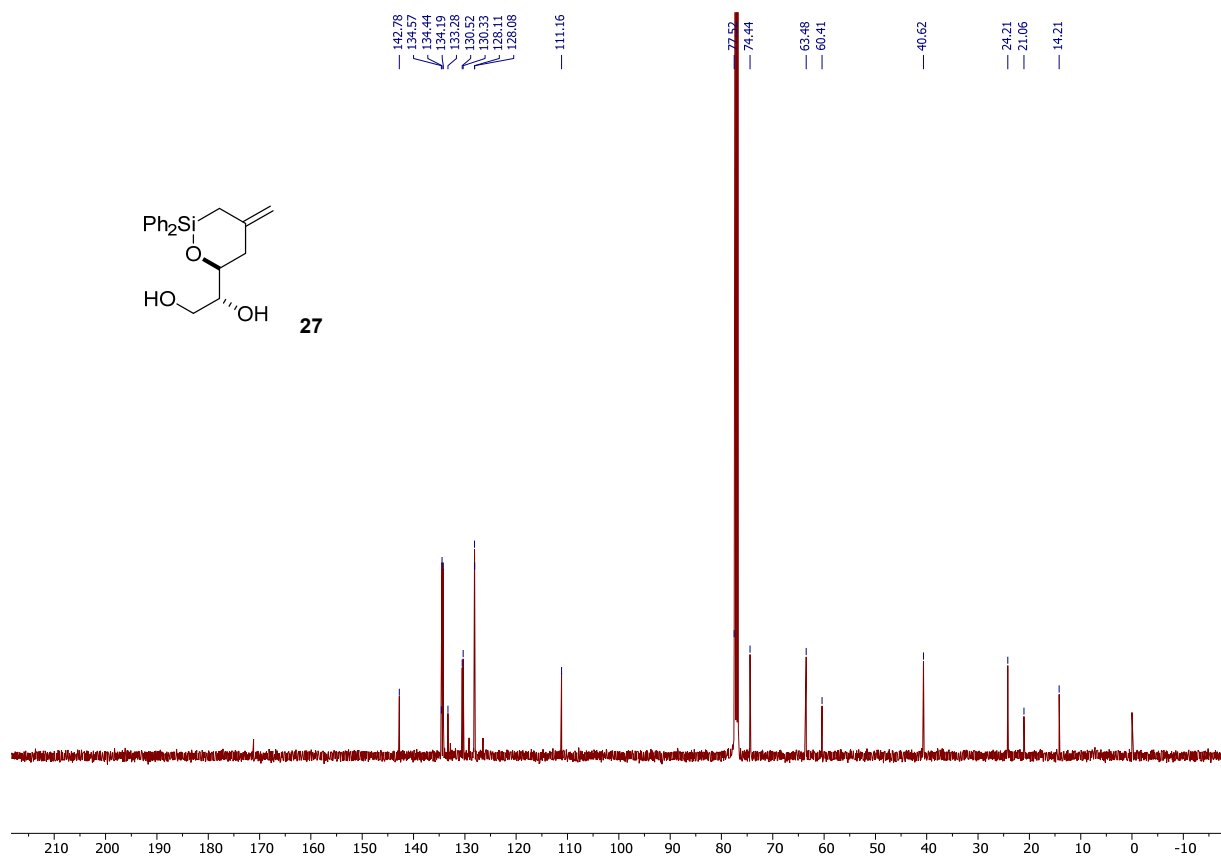
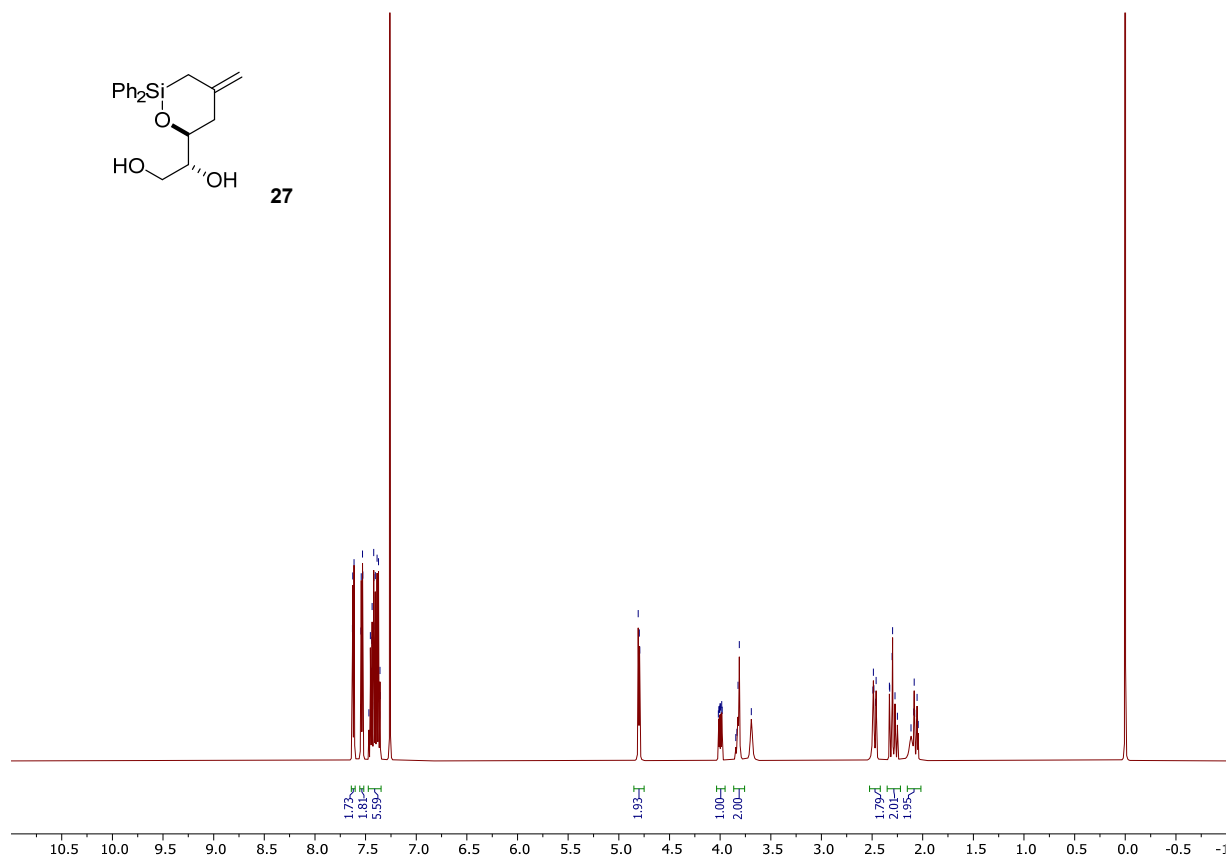
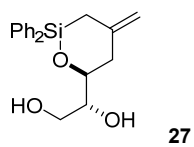


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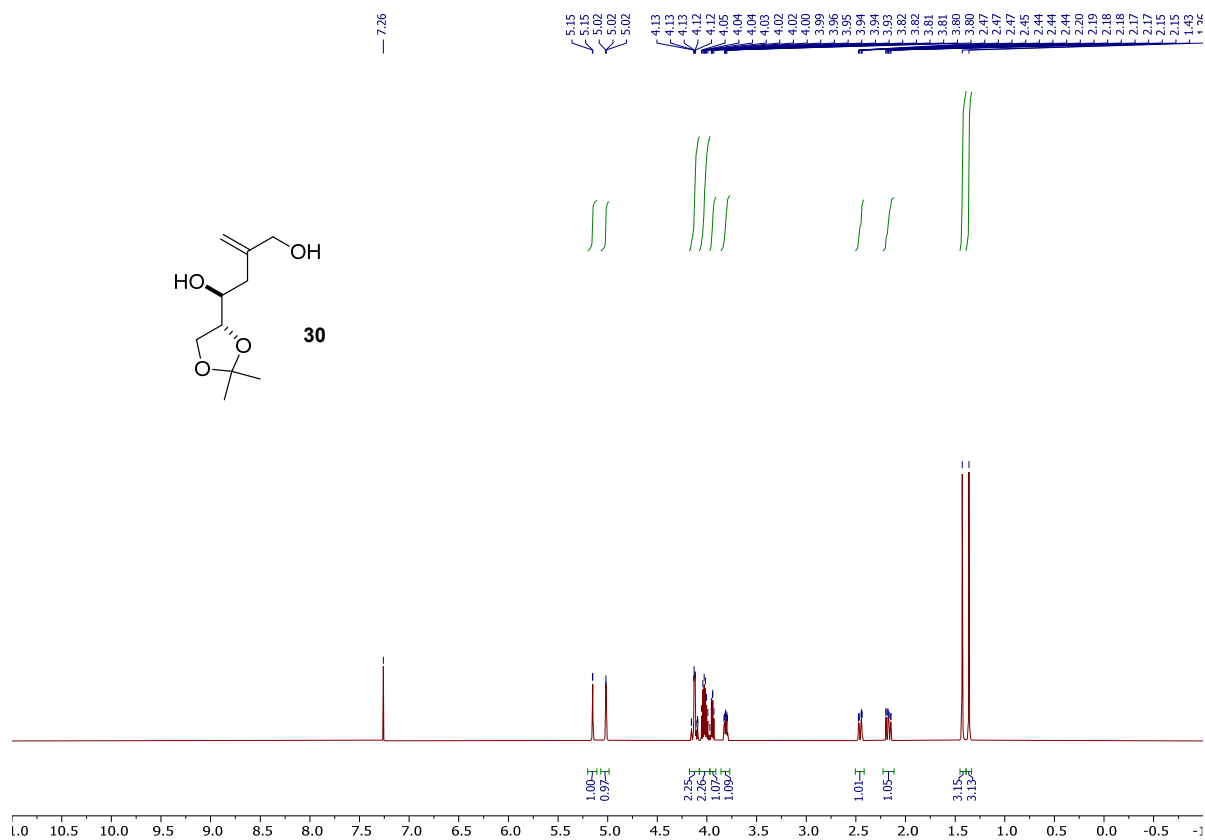
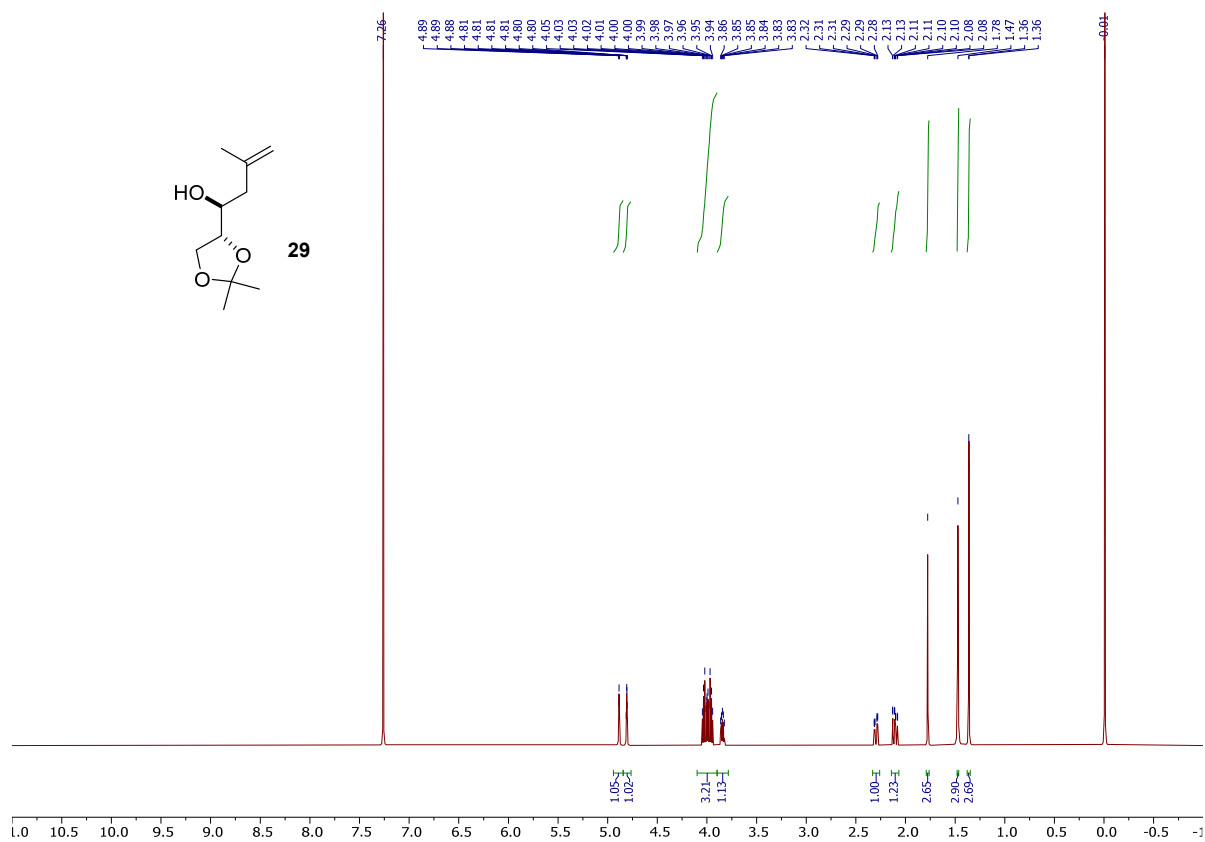


Figure S1. COSY NMR spectrum of product mixture obtained upon treatment of **16** with **Ru-II** in DCM at rt. The major product was confirmed to be the 9-membered oxasilacycle **17**. Small enol ether peaks at ~6.5 ppm were tentatively assigned to the minor enol ether isomer shown along with the associated 8-membered ring enol ether resulting from isomerization followed by RCM.

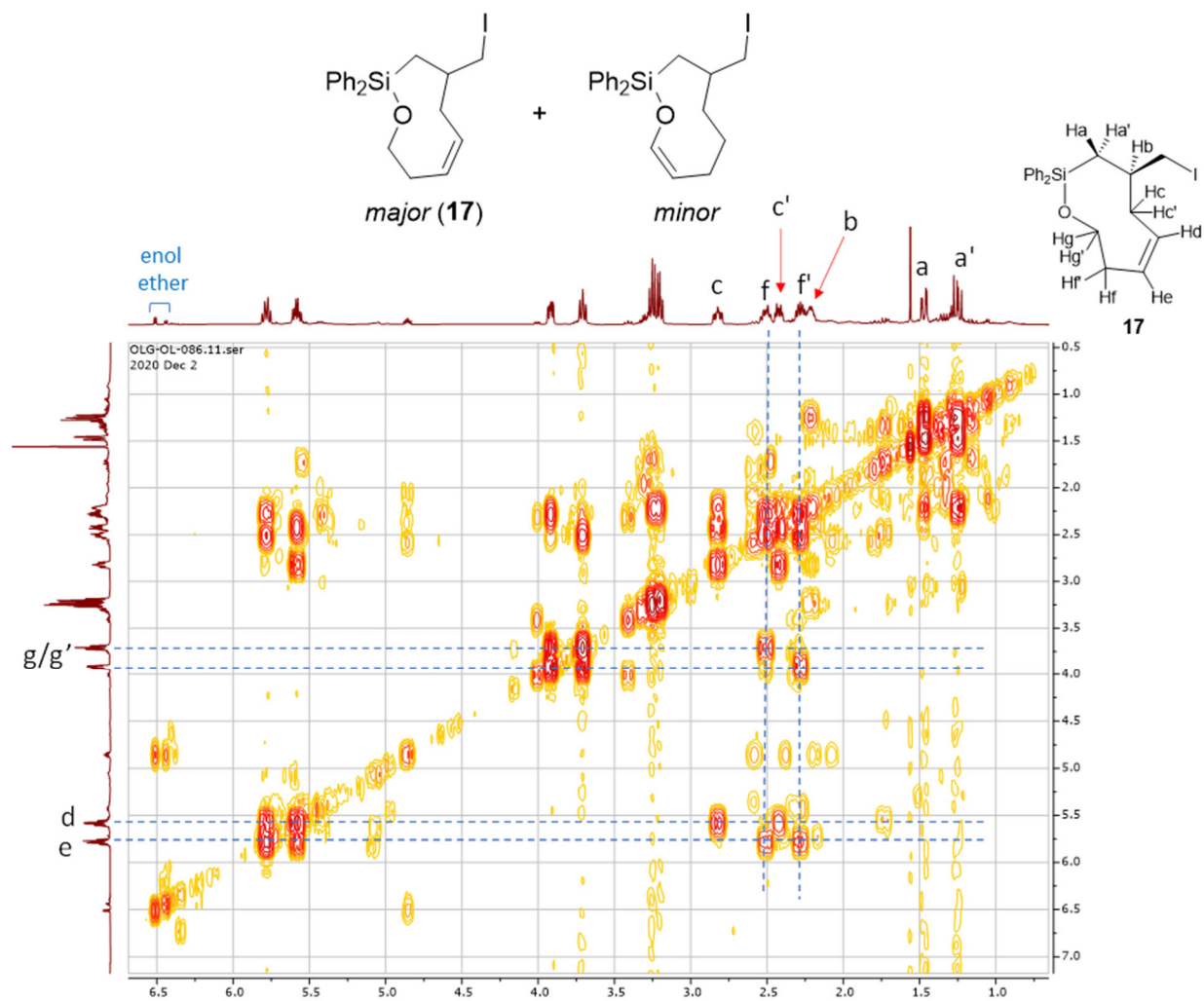


Figure S2. ^1H NMR spectra of **6d** isolated from the **Ru-II** catalyzed RCM of diene **4** (top) and the crude mixture obtained from the reaction of **4** with $\text{RuClH}(\text{CO})(\text{PPh}_3)_3$ (bottom).

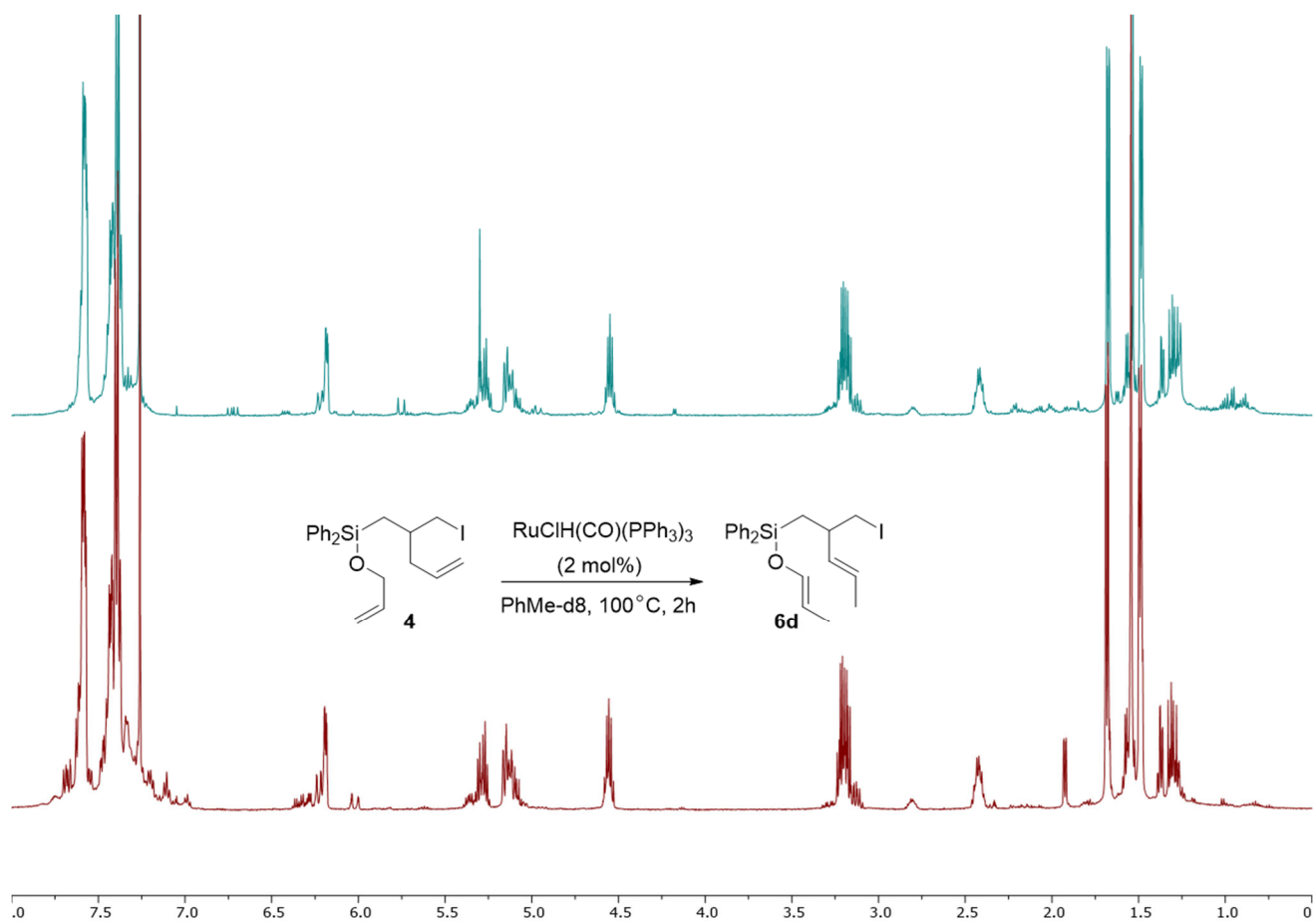


Figure S3. ^1H NMR spectra of product **6a** isolated from the **Ru-II** catalyzed RCM of diene **4** (top), the crude product mixture obtained from the reaction of **5** with $\text{RuClH}(\text{CO})(\text{PPh}_3)_3$ (middle), and the crude product mixture obtained from the reaction of **6c** with $\text{RuClH}(\text{CO})(\text{PPh}_3)_3$. Despite slight differences due to different NMR solvents (bottom spectra is in toluene- d_8 , while the top two spectra are in CDCl_3), it is clear that both **5** and **6c** are cleanly converted to compound **6a** upon treatment with $\text{RuClH}(\text{CO})(\text{PPh}_3)_3$.

