# Cu(II)-Catalyzed Allylic Silylation of Morita-Baylis-Hillman Alcohols via Dual Activation of Si-B Bond and Hydroxyl Group

Qing-Qing Xuan,<sup>1,2</sup> Neng-Jun Zhong,<sup>1,2</sup> Chuan-Li Ren,<sup>1,2</sup> Li Liu,<sup>1</sup>\* Dong Wang,<sup>1</sup> Yong-Jun Chen,<sup>1</sup>

Chao-Jun Li<sup>3</sup>\*

<sup>1</sup>Beijing National Laboratory for Molecular Sciences (BNLMS), CAS Key Laboratory of Molecular Recognition and Function, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China

<sup>2</sup>University of Chinese Academy of Sciences, Beijing 100049, China

<sup>3</sup> Department of Chemistry, McGill University, Montreal, Quebec, Canada H3A 0B8

\*Corresponding Author: <u>lliu@iccas.ac.cn</u>; <u>cj.li@mcgill.ca</u>

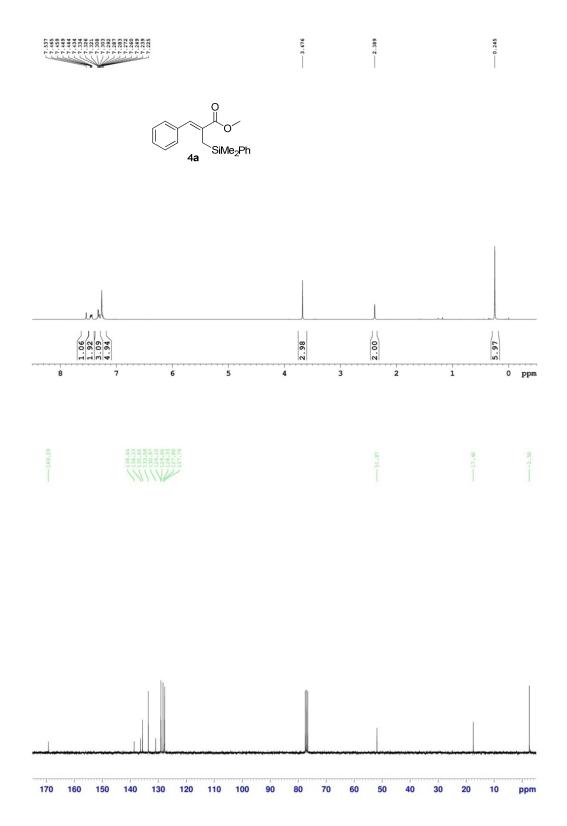
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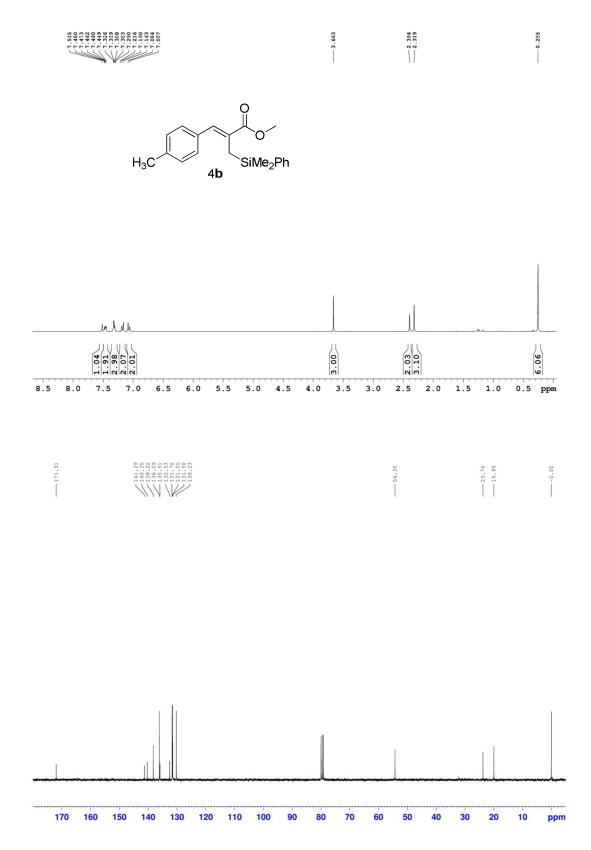
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#### 1. General methods

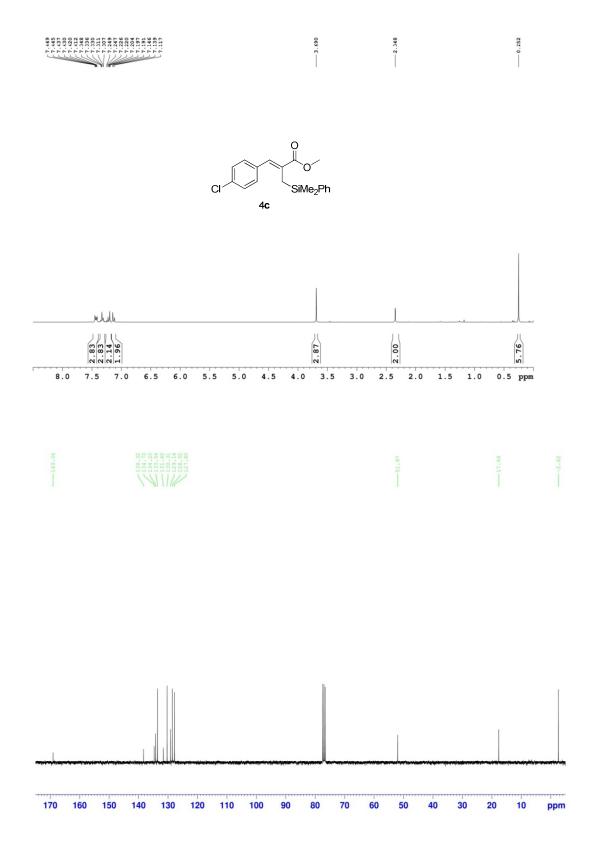
Unless otherwise noted, all reagents were obtained from commercial suppliers and were used without further purification. MBH alcohols were prepared according to original or modified literature procedures. All reactions were carried out under an argon atmosphere, unless otherwise noted. <sup>1</sup>H, <sup>13</sup>C spectra were recorded in CDCl<sub>3</sub> at 300MHz. NOESY spectra were recorded in CDCl<sub>3</sub> at 600 MHz. Chemical shifts are reported in ppm from tetramethylsilane with the solvent resonance as the internal standard. The following abbreviations were used to designate chemical shift multiplicities: s= singlet, d= doublet, t= triplet, m= multiplet. The configurations of the products were determined by NOESY. All first-order splitting patterns were assigned on the basis of the appearance of the multiplet. Splitting patterns that could not be easily interpreted are designated as multiplet (m) or broad (br). IR spectra were recorded on FT-IR spectrometer as a solid suspended in a potassium bromide disk. Melting points were measured on melting point apparatus. Mass spectra were obtained using electrospray ionization (ESI) mass spectrometer. Column chromatography was performed using silica gel (200-300 mesh). TLC was performed on glass-backed silica plates.

# <sup>1</sup>H NMR and <sup>13</sup>C NMR of **4a**

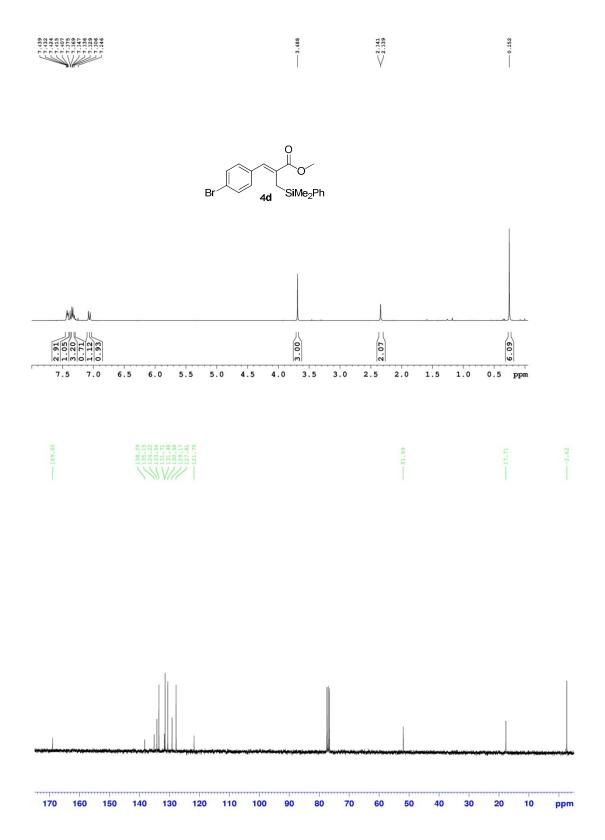


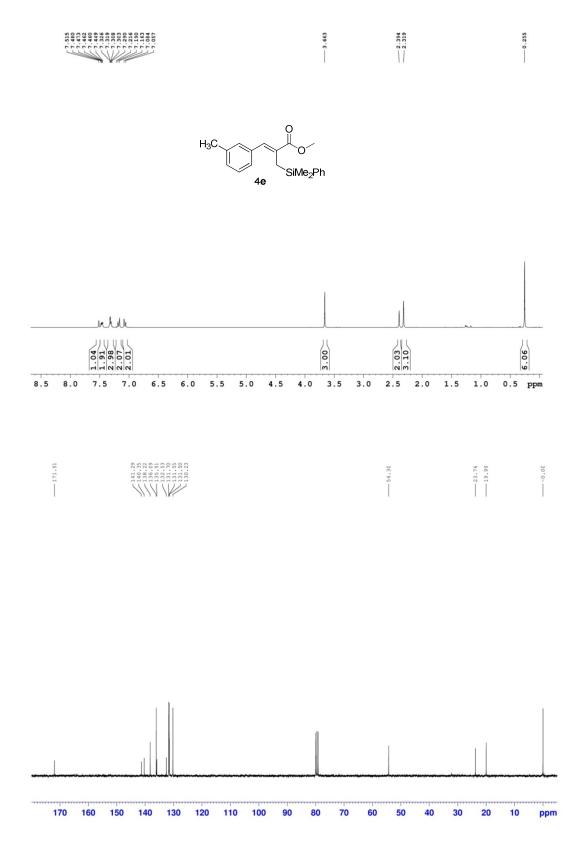


<sup>1</sup>H NMR and <sup>13</sup>C NMR of **4c** 

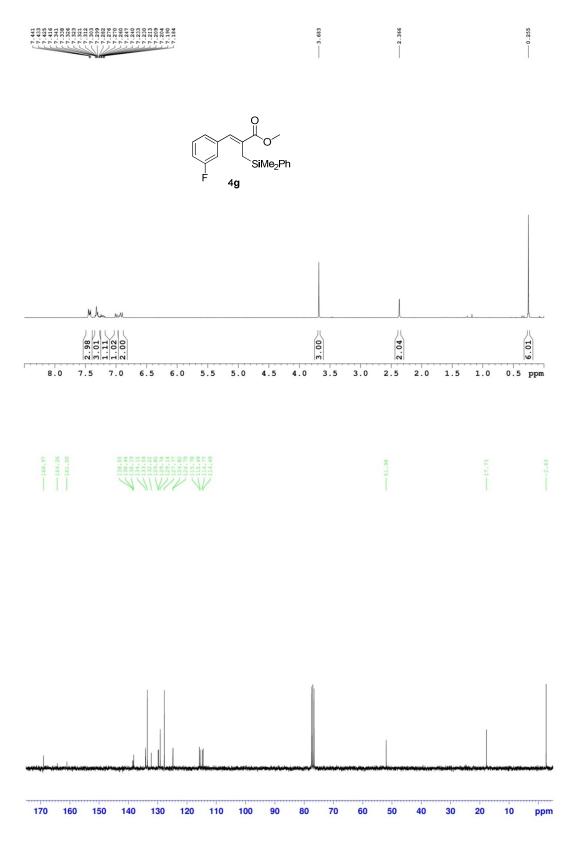


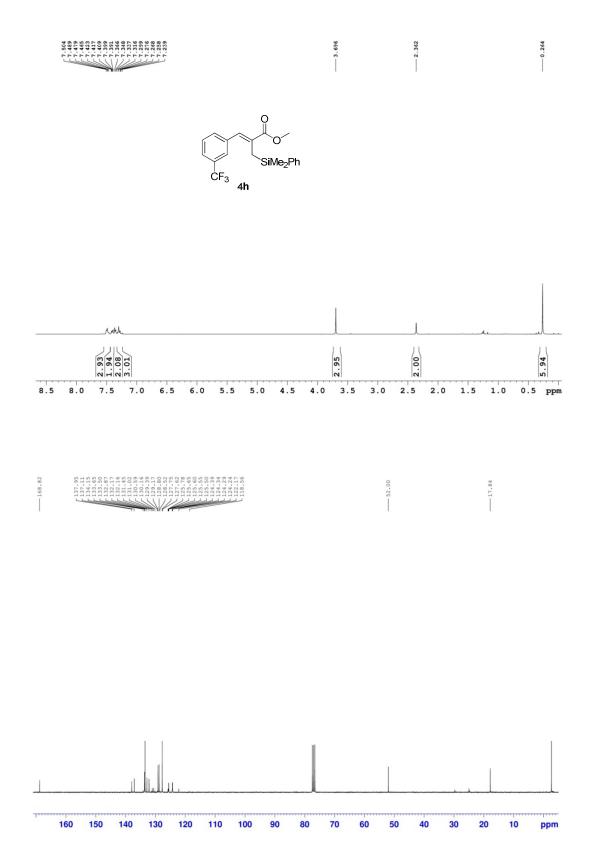
 $^1\mathrm{H}$  NMR and  $^{13}\mathrm{C}$  NMR of  $\mathbf{4d}$ 



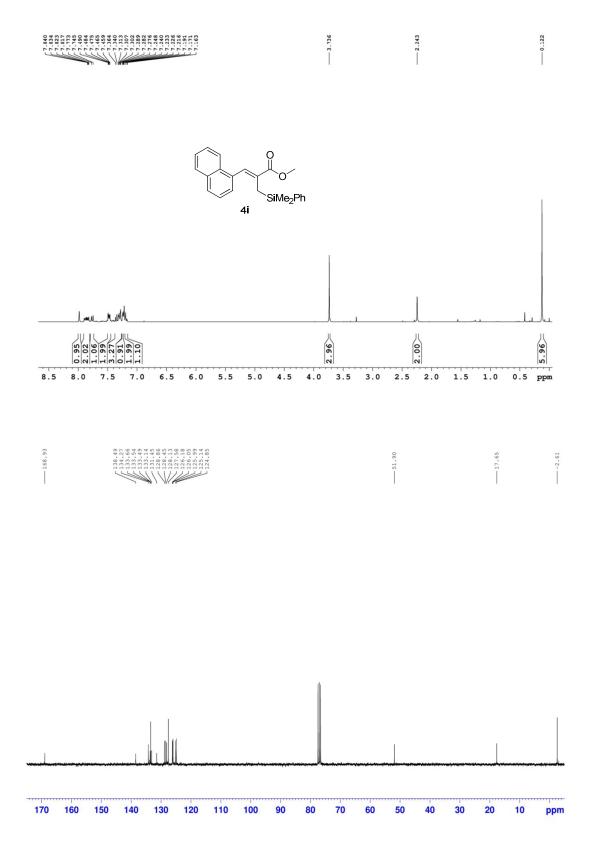


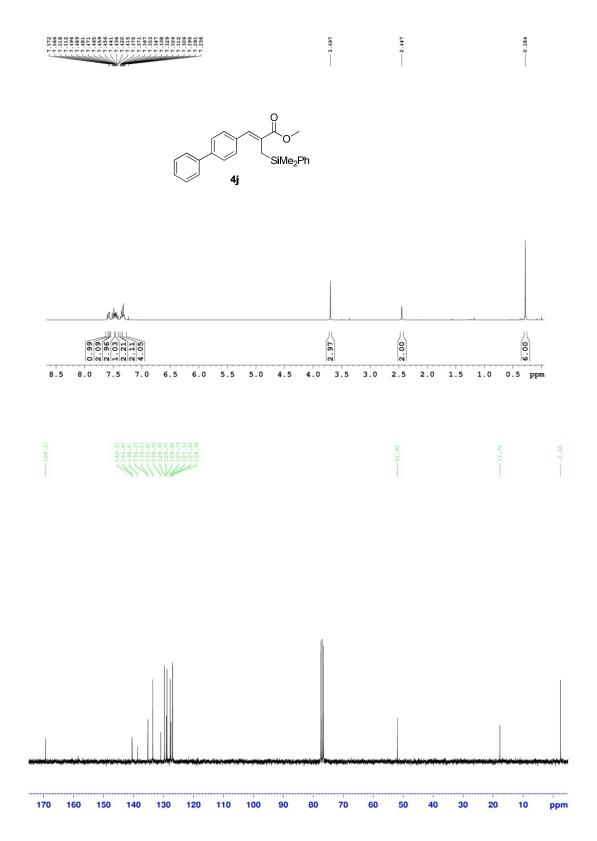




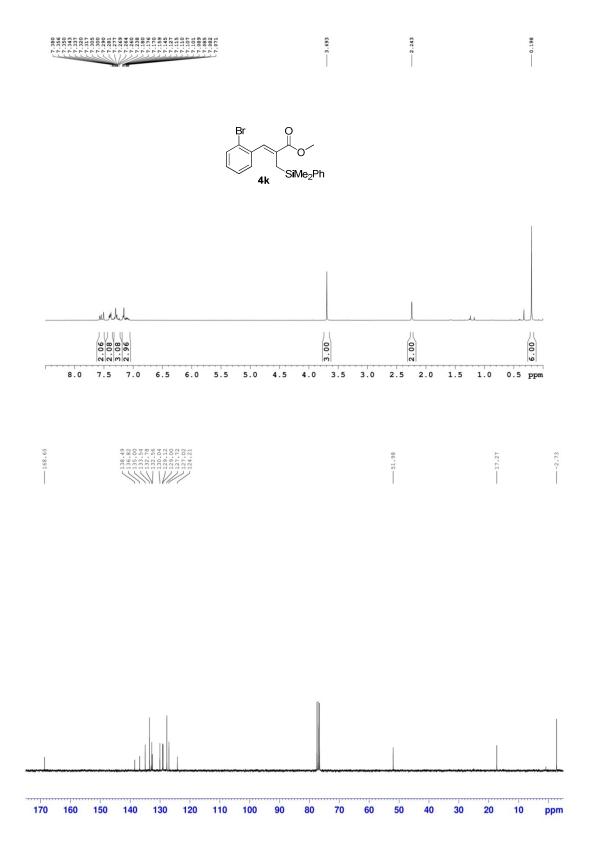


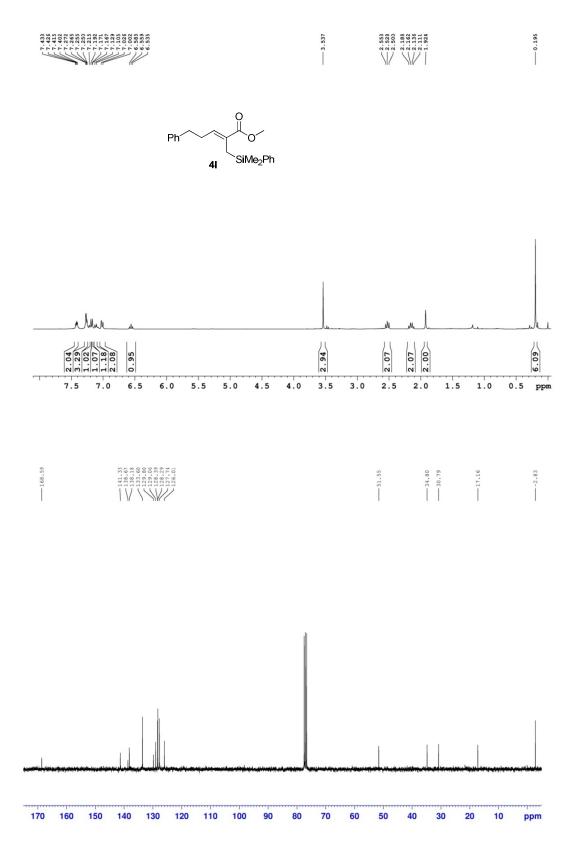
<sup>1</sup>H NMR and <sup>13</sup>C NMR of **4i** 

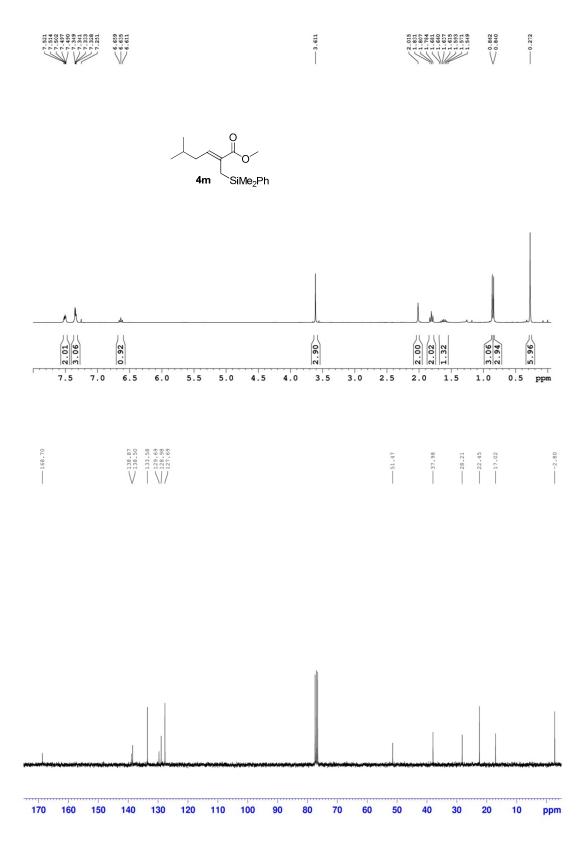


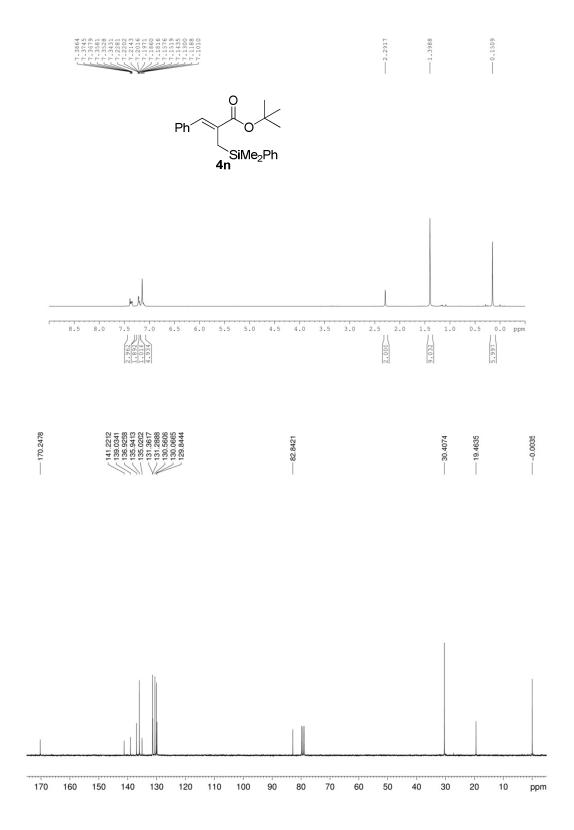


<sup>1</sup>H NMR and <sup>13</sup>C NMR of **4**k

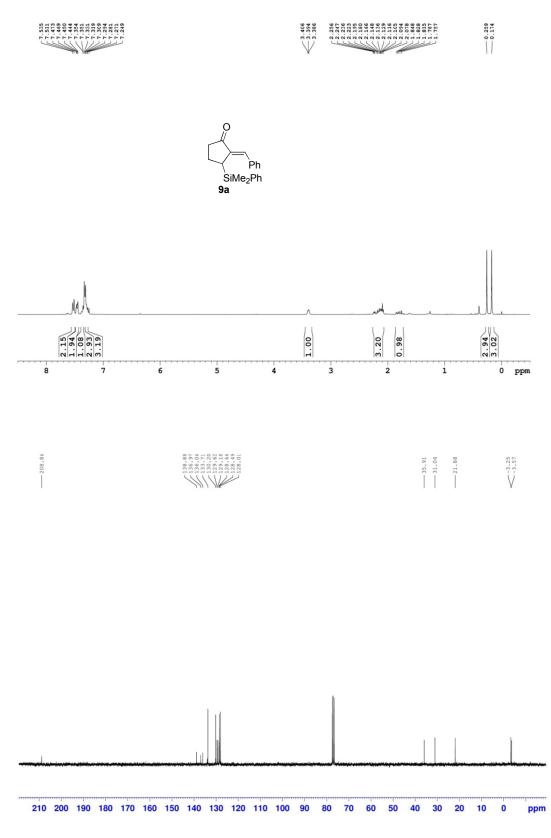




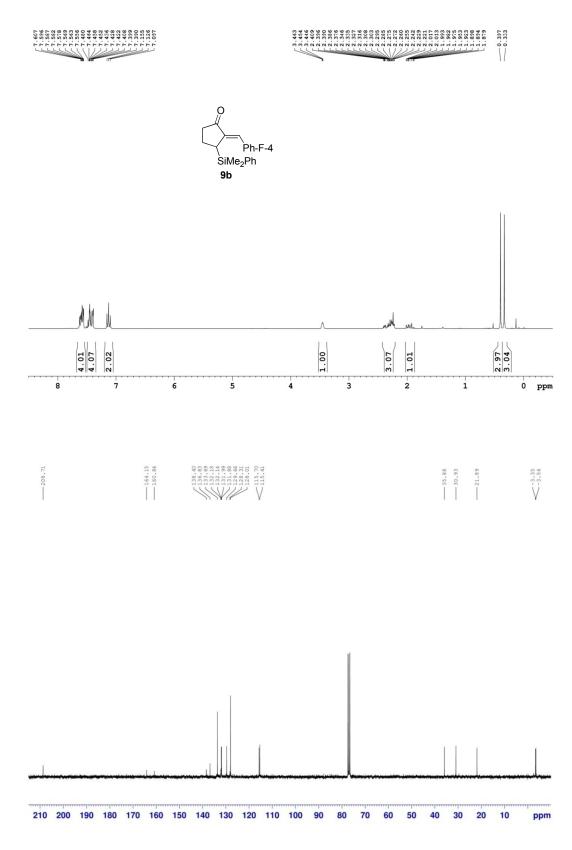




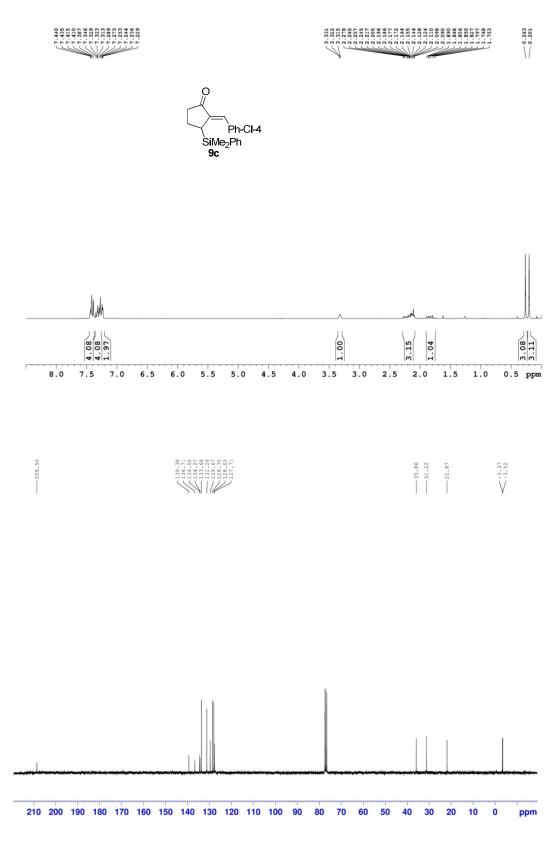
## <sup>1</sup>H NMR and <sup>13</sup>C NMR of **9a**

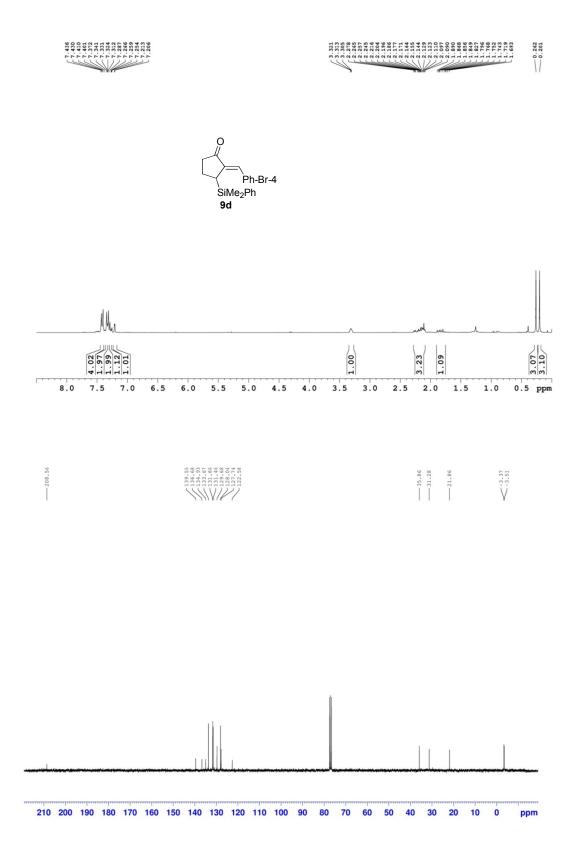


## <sup>1</sup>H NMR and <sup>13</sup>C NMR of **9b**

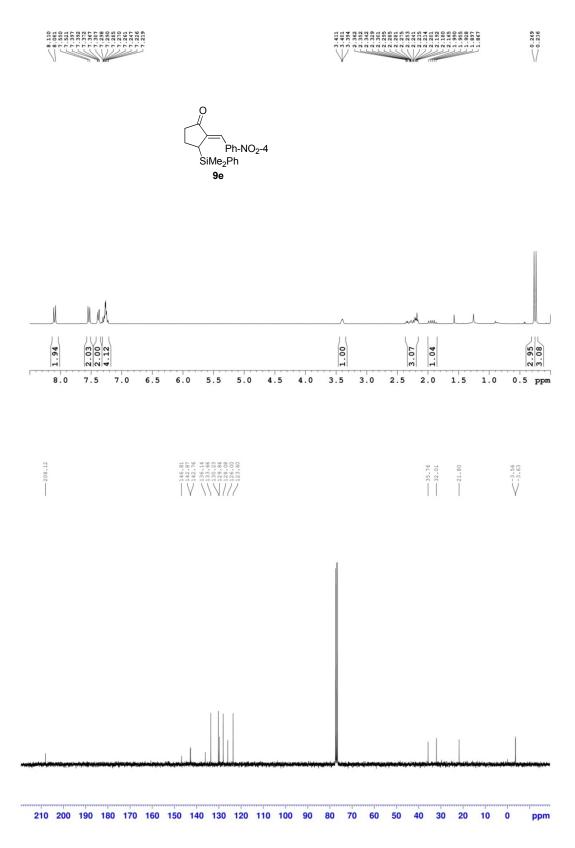


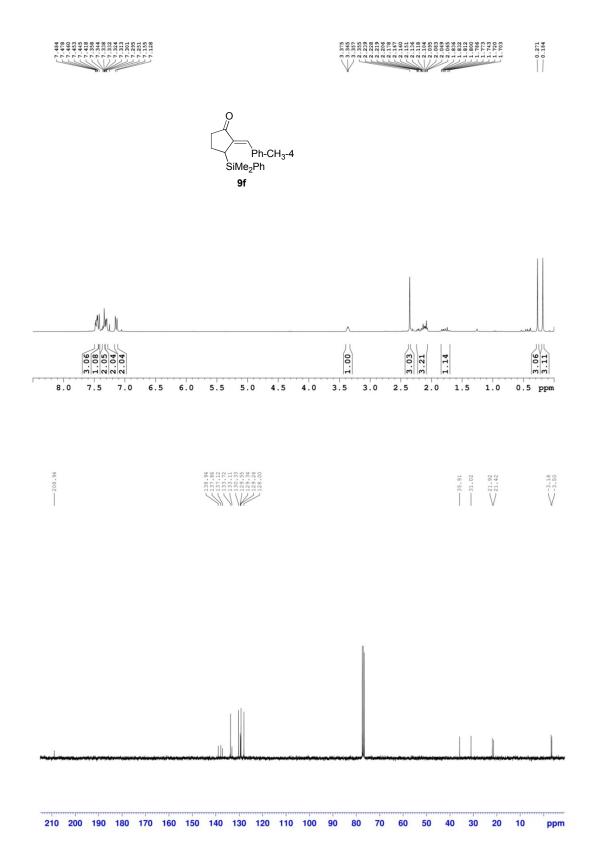
## <sup>1</sup>H NMR and <sup>13</sup>C NMR of **9c**



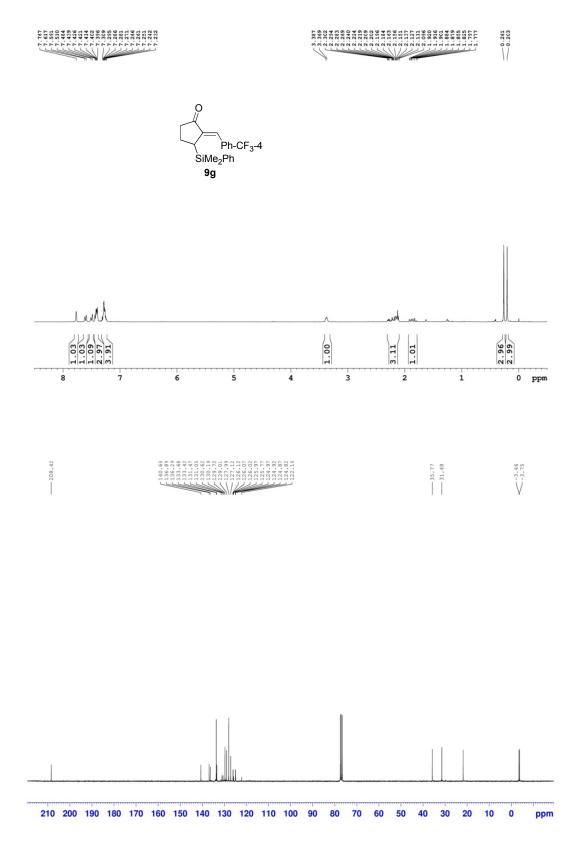


## <sup>1</sup>H NMR and <sup>13</sup>C NMR of **9e**



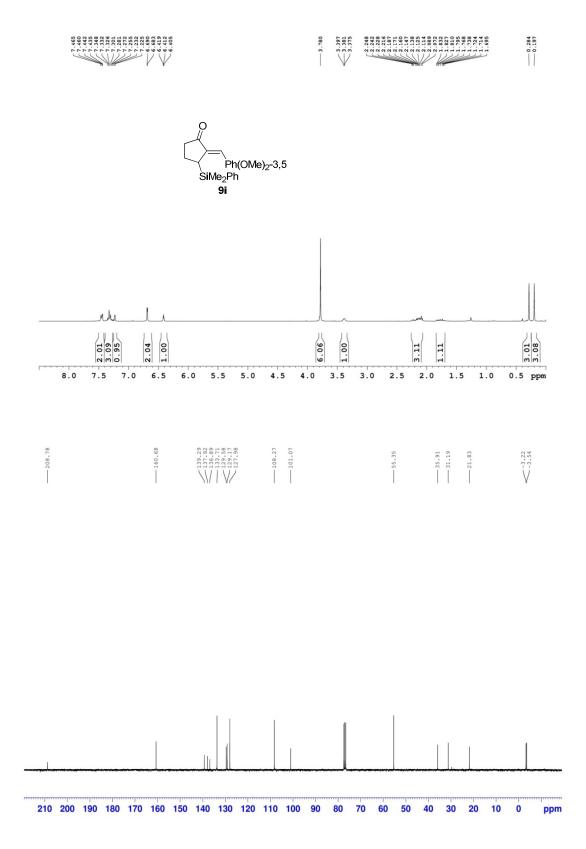


# <sup>1</sup>H NMR and <sup>13</sup>C NMR of **9g**

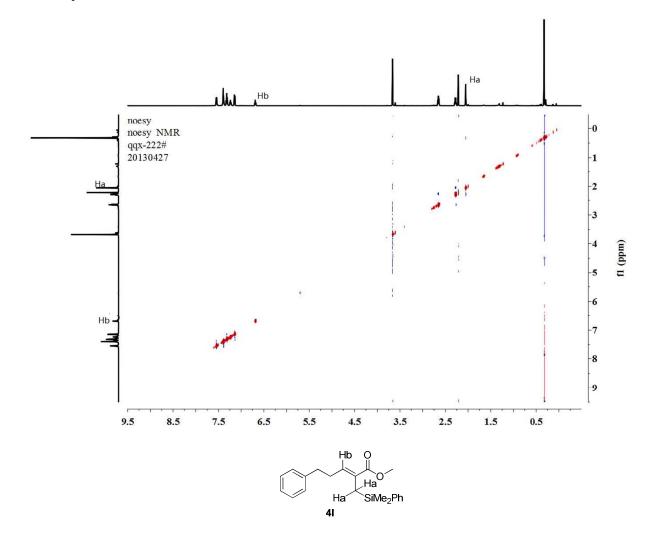


<sup>1</sup>H NMR and <sup>13</sup>C NMR of **9h** 





#### NOESY spectrum of 4l



#### NOESY spectrum of 9i

