

## Supporting Information

*Org. Commun.* **11:2 (2018) 75-79**

### Towards 3-(2-adamantylidene)diamantane derivatives through the McMurry cross coupling reaction

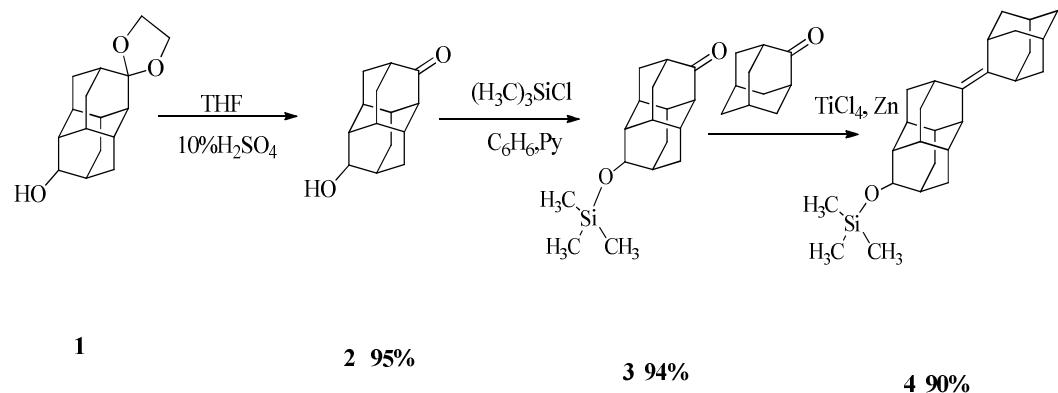
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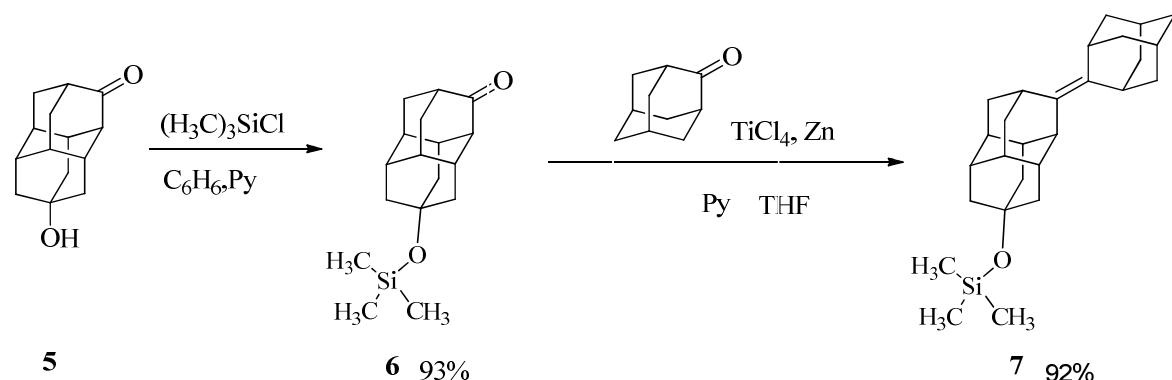
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*General Procedure for synthesis coupling :*



**Scheme 1.** Synthesis of 10-Trimethylsiloxane - 3-(2-Adamantylidene) diamantine (**4**)

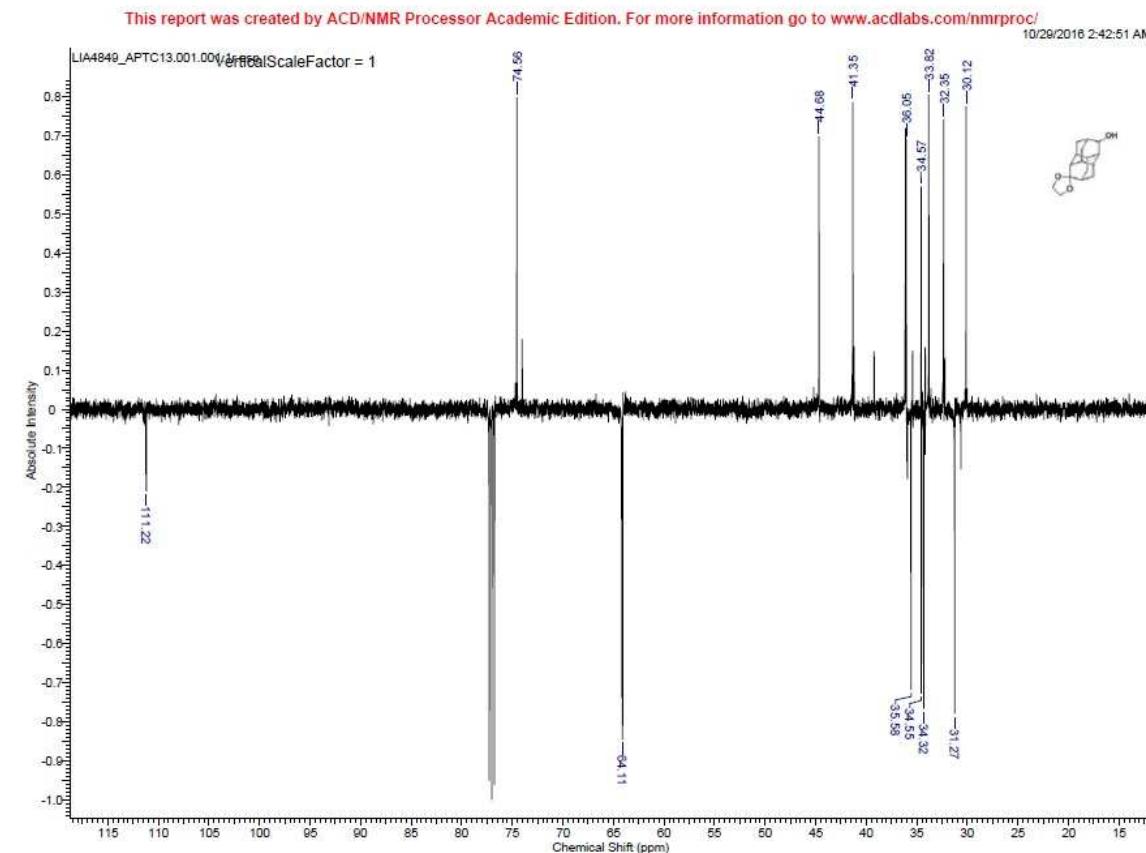
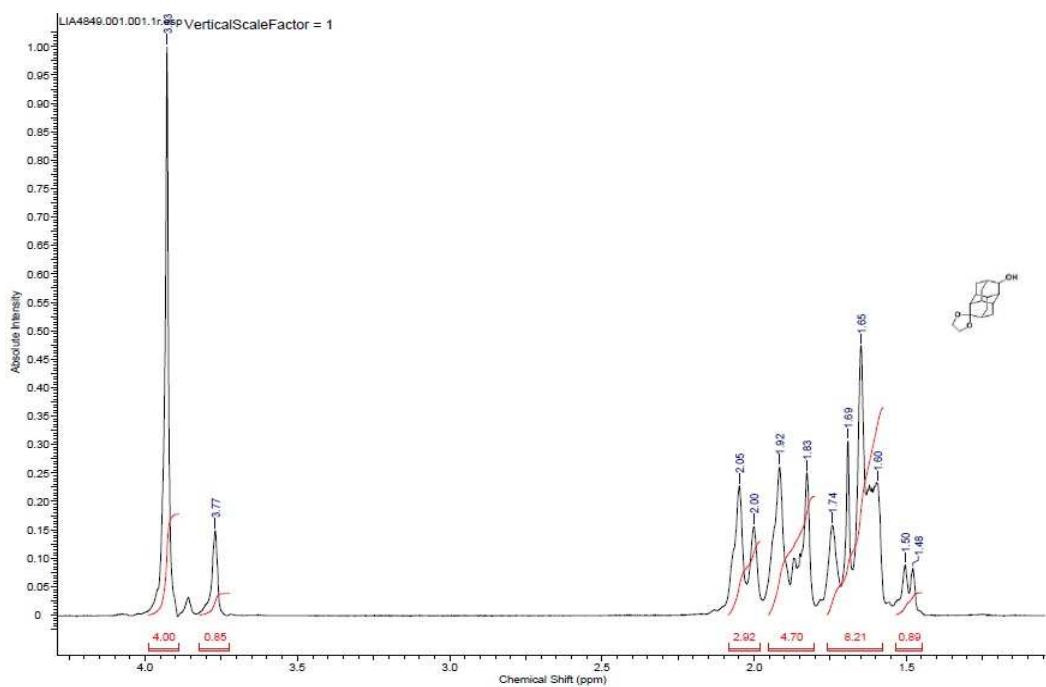


**Scheme 2.** Synthesis of 9-Trimethylsiloxane - 3-(2-Adamantylidene) diamantine (**7**)

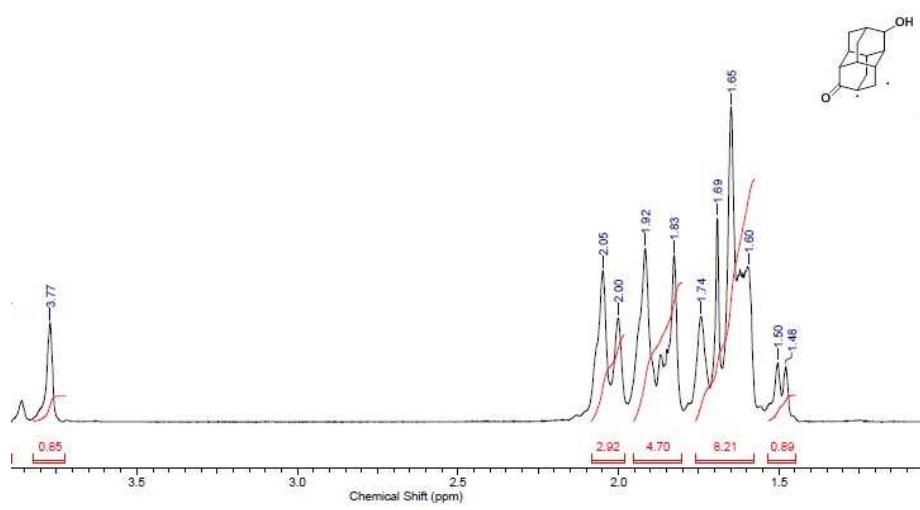
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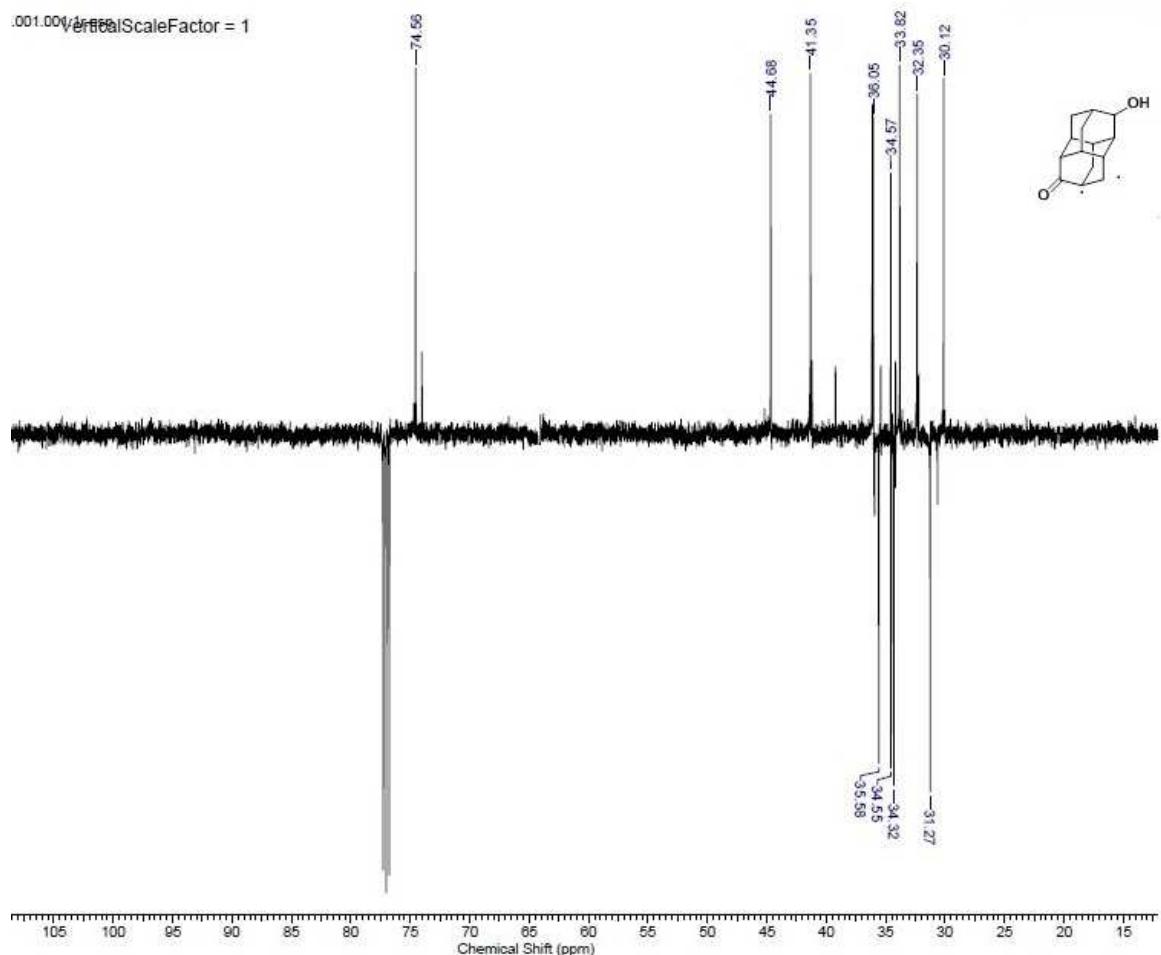


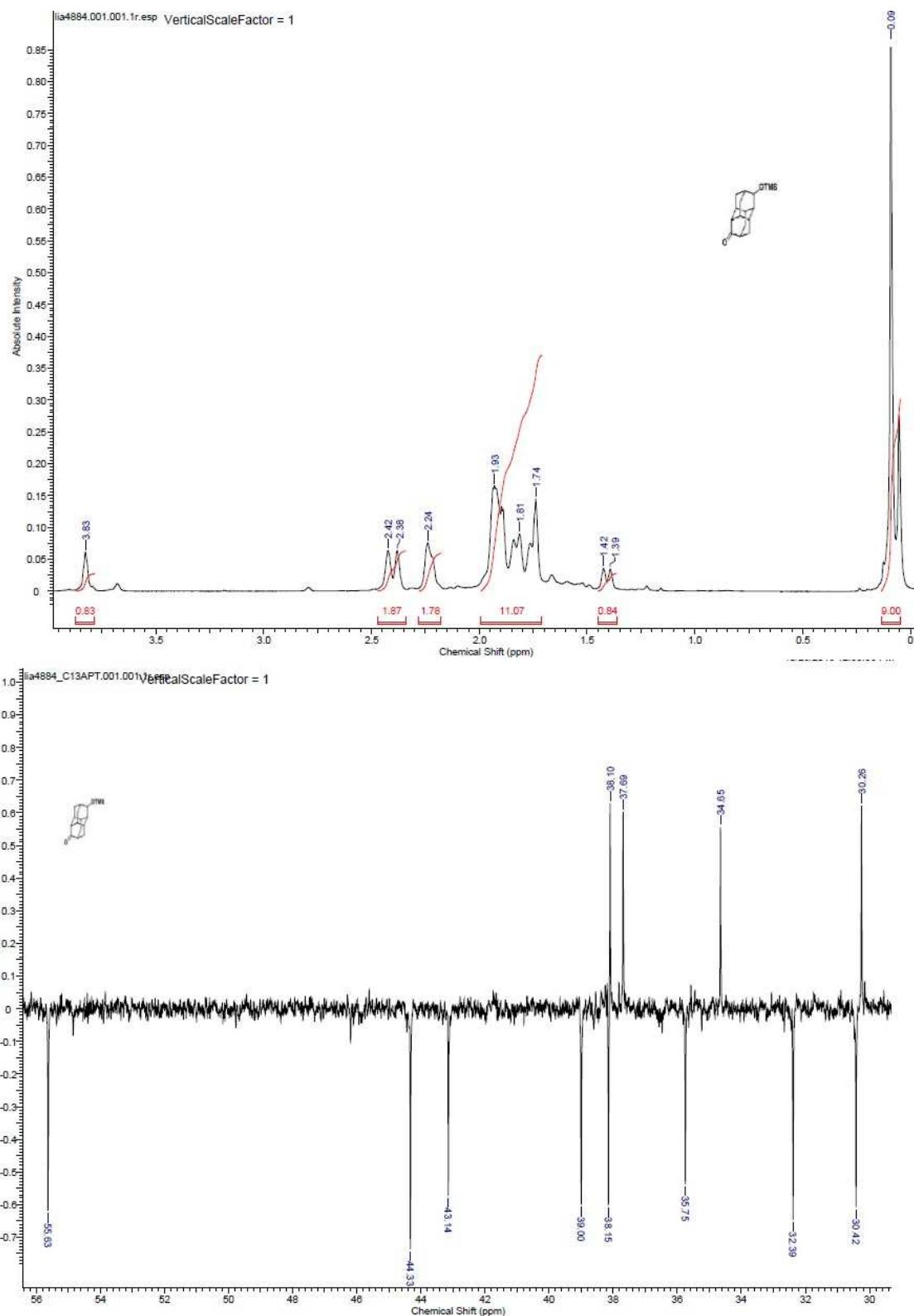
**Figure S1.**  $^1\text{H}$  NMR ,  $^{13}\text{C}$  NMR spectrum of compound *Ethylene ketal of 9-hydroxydiamantan-3-one (1)*



**Figure S2.** <sup>1</sup>H NMR , <sup>13</sup>C NMR spectrum of compound 10-Hydroxydiamantan-3-one (**2**)

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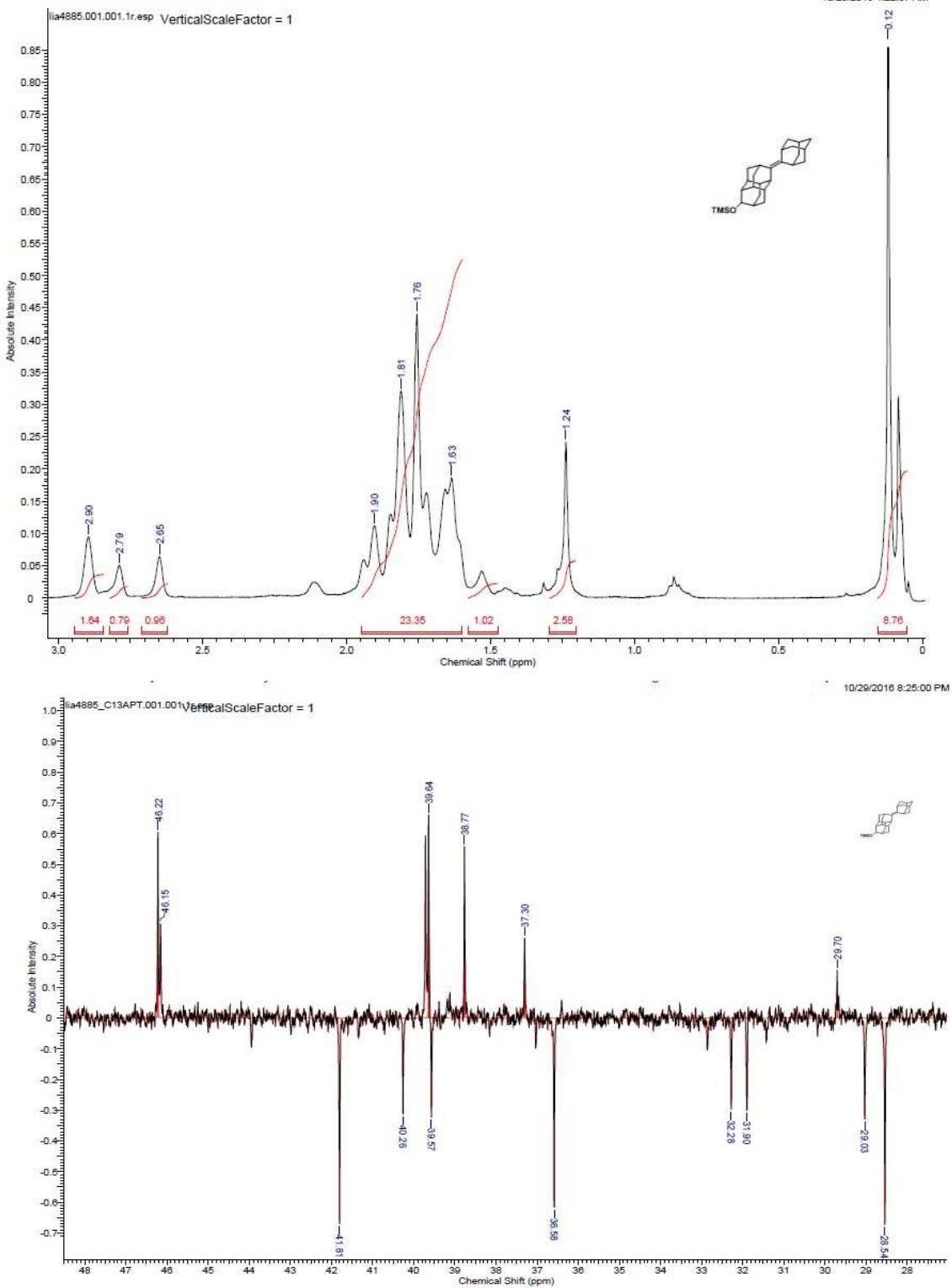




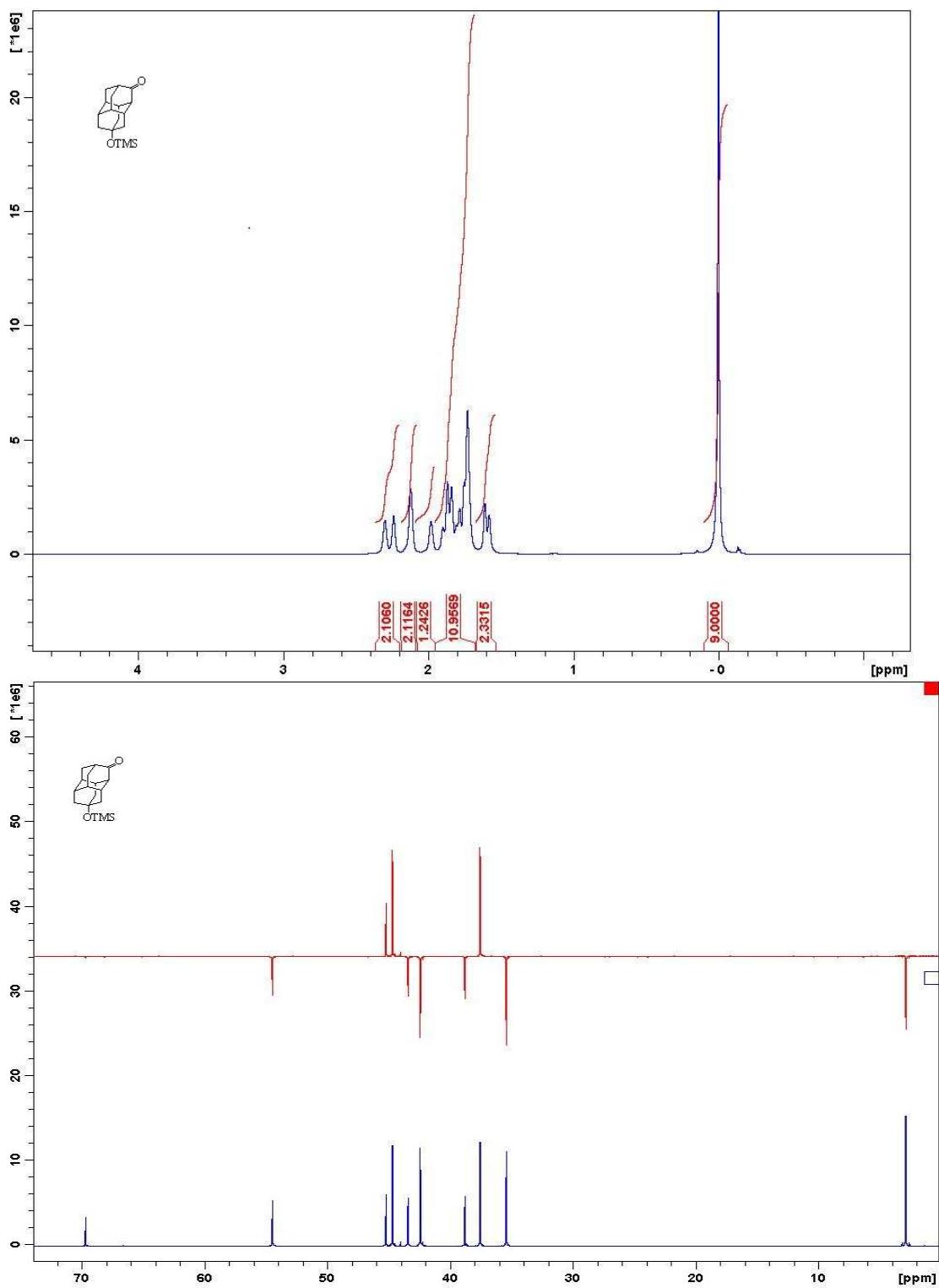
**Figure S3.** <sup>1</sup>H NMR , <sup>13</sup>C NMR spectrum of compound *10*-Trimethylsilyloxanediadamantan-3-one (**3**)

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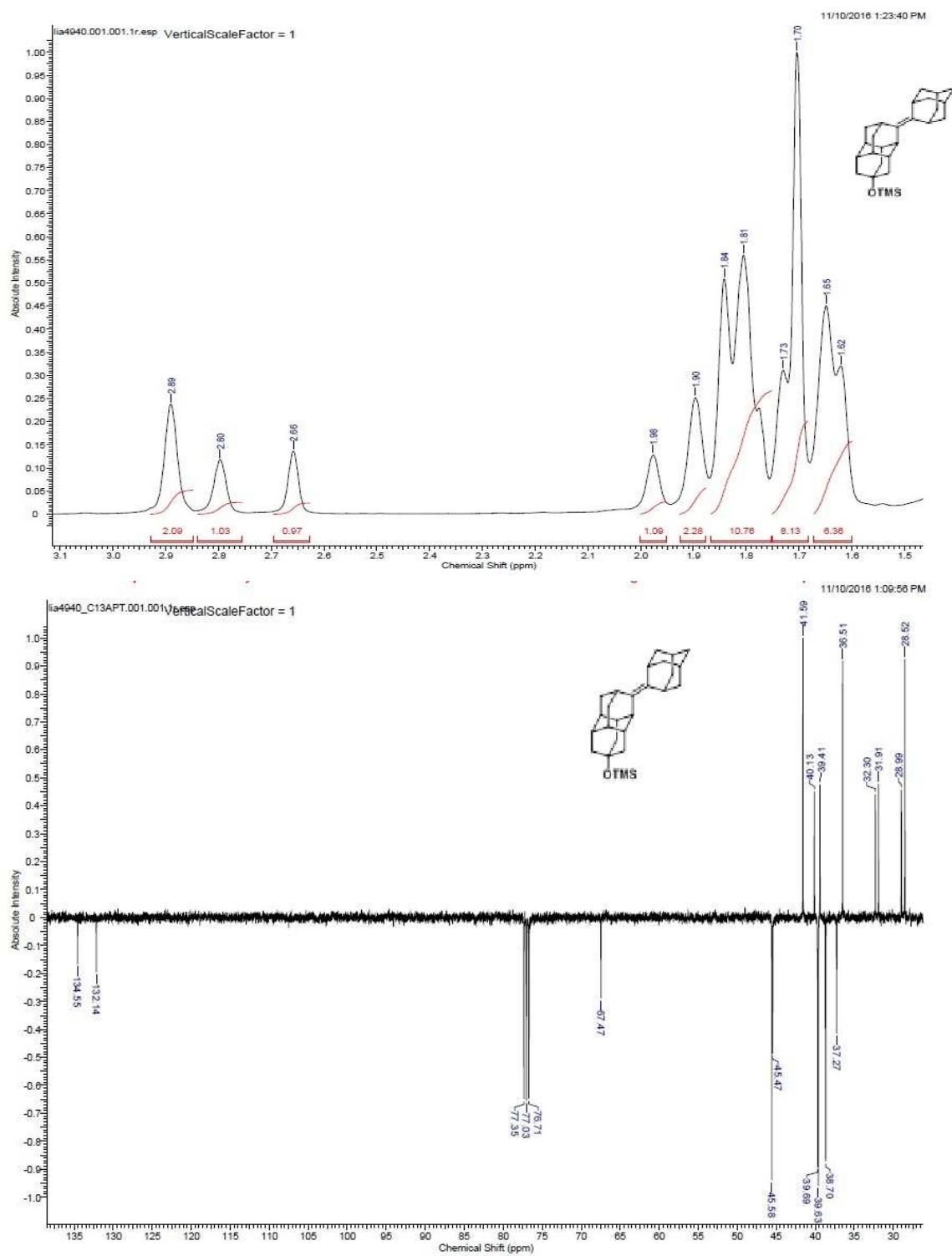
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**Figure S4.** <sup>1</sup>H NMR , <sup>13</sup>C NMR spectrum of compound *10*-Trimethylsiloxanediadamantylideneadamantane (**4**)



**Figure S5.**  $^1\text{H}$  NMR ,  $^{13}\text{C}$  NMR spectrum of compound 9-Trimethylsiloxanediabantan-3-one (**6**)



**Figure S6.**  $^1\text{H}$  NMR ,  $^{13}\text{C}$  NMR spectrum of compound 9-Trimethylsiloxanediamantylideneadamantane (7)