

Supporting Information

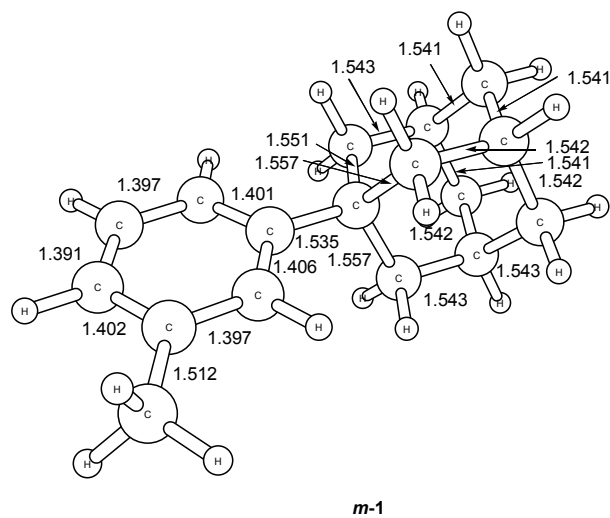
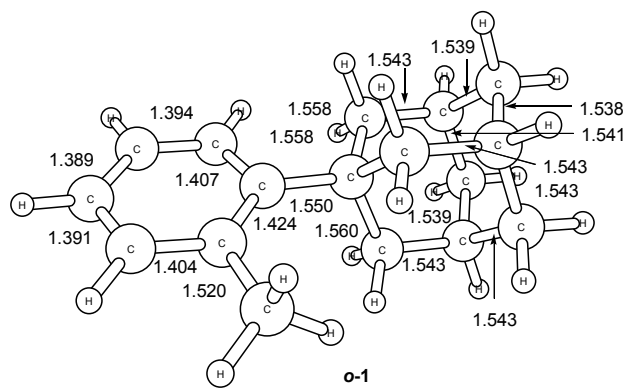
**Triflic Acid-Catalyzed Adamantylation of Aromatics in [BMIM][OTf]
Ionic Liquid; Synthetic Scope and Mechanistic Insight⁺**

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| Fig S1. B3LYP/6-31G(d) optimized geometries and bond lengths, Å, for <i>o</i> -1, <i>m</i> -1, <i>p</i> -1, <i>o</i> -2, <i>m</i> -2, <i>p</i> -2, <i>o</i> -3, <i>p</i> -3, <i>m</i> -3, <i>o</i> -1H ⁺ , <i>m</i> -1H ⁺ , <i>p</i> -1H ⁺ , <i>o</i> -2H ⁺ , <i>m</i> -2H ⁺ , <i>p</i> -2H ⁺ , <i>o</i> -3H ⁺ , <i>p</i> -3H ⁺ , <i>m</i> -3H ⁺ , 4H ⁺ and 5H ⁺ . | S2 |
| Fig S2. HF/6-31G(d) optimized geometries and bond lengths, Å, for <i>o</i> -1H ⁺ , <i>m</i> -1H ⁺ , <i>p</i> -1H ⁺ , <i>o</i> -2H ⁺ , <i>m</i> -2H ⁺ , and <i>p</i> -2H ⁺ . | S9 |

Electronic Supplementary Material for Organic & Biomolecular Chemistry
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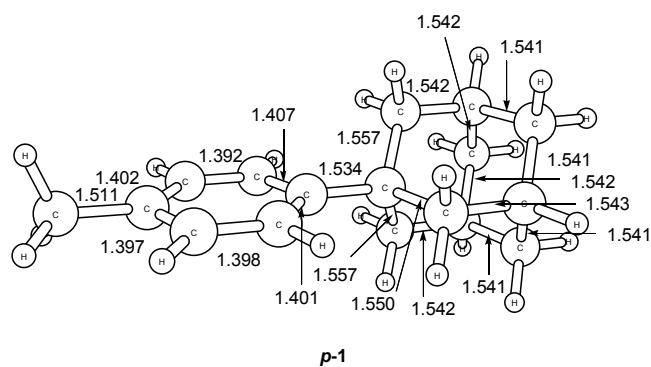
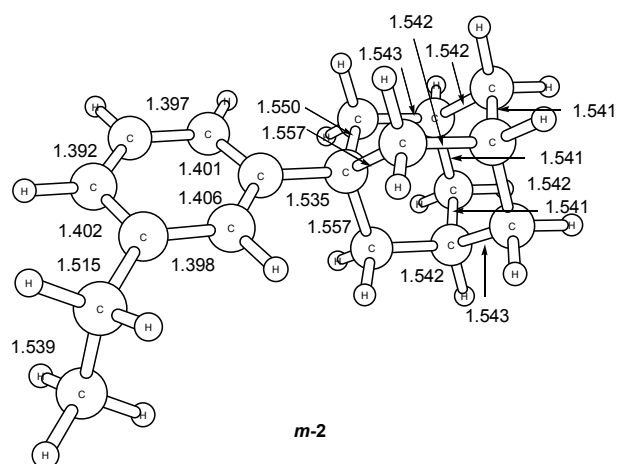
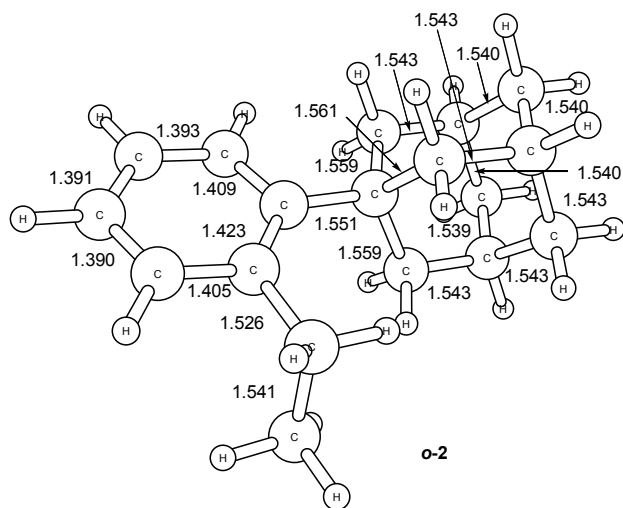


Fig S1. B3LYP/6-31G(d) optimized geometries and bond lengths, Å, for *o-1*, *m-1*, *p-1*, *o-2*, *m-2*, *p-2*, *o-3*, *p-3*, *m-3*, *o-1H⁺*, *m-1H⁺*, *p-1H⁺*, *o-2H⁺*, *m-2H⁺*, *p-2H⁺*, *o-3H⁺*, *p-3H⁺*, *m-3H⁺*, *4H⁺* and *5H⁺*.



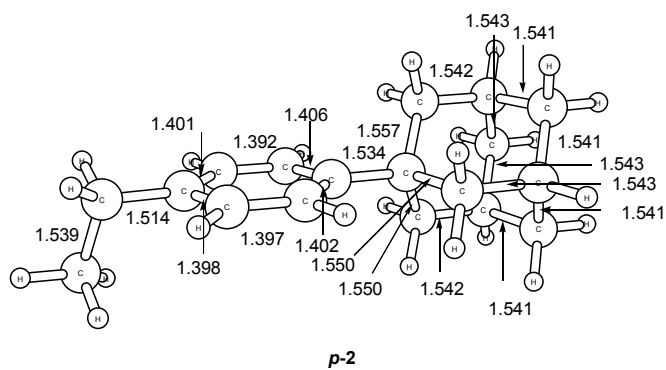
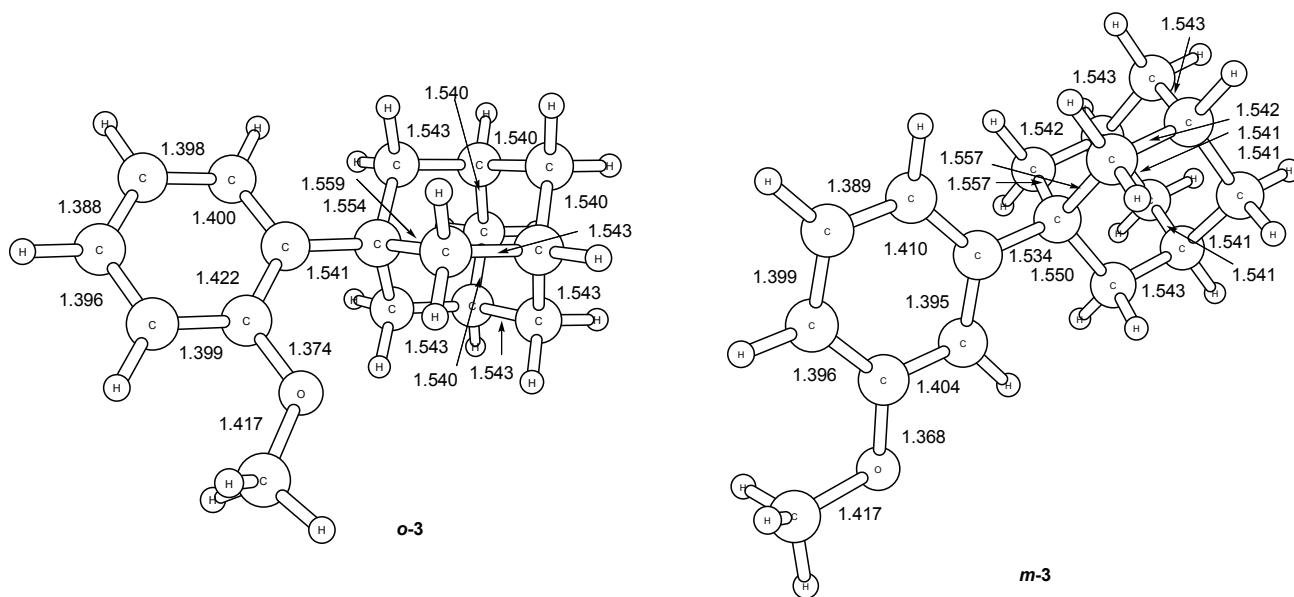
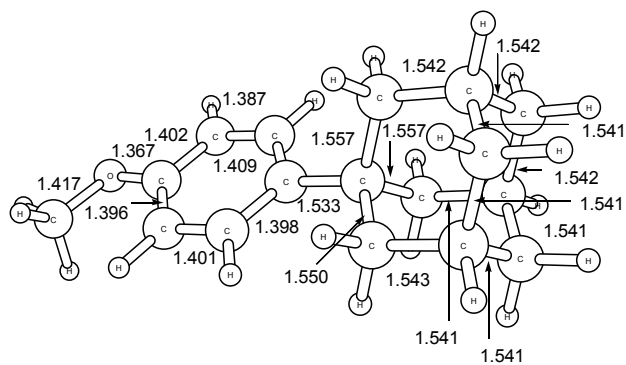


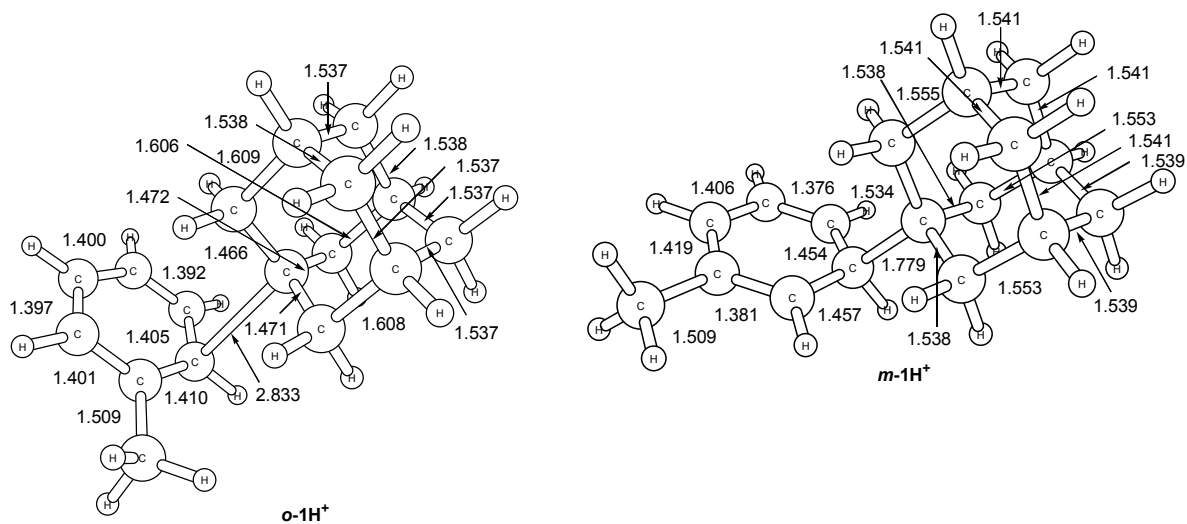
Fig S1 (continued).





p-3

Fig S1 (continued).



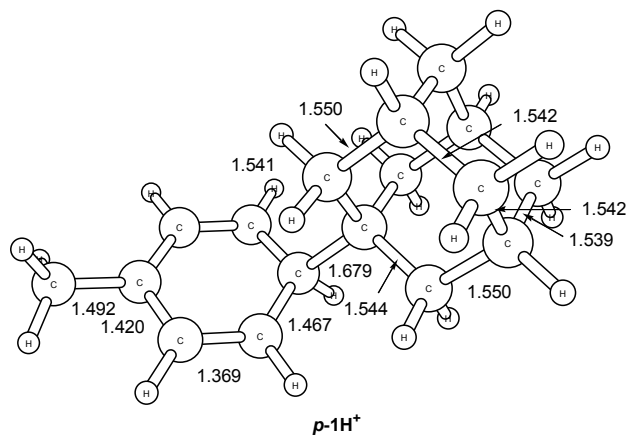
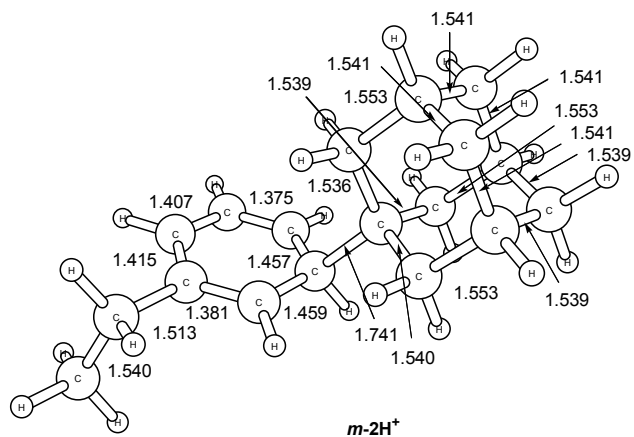
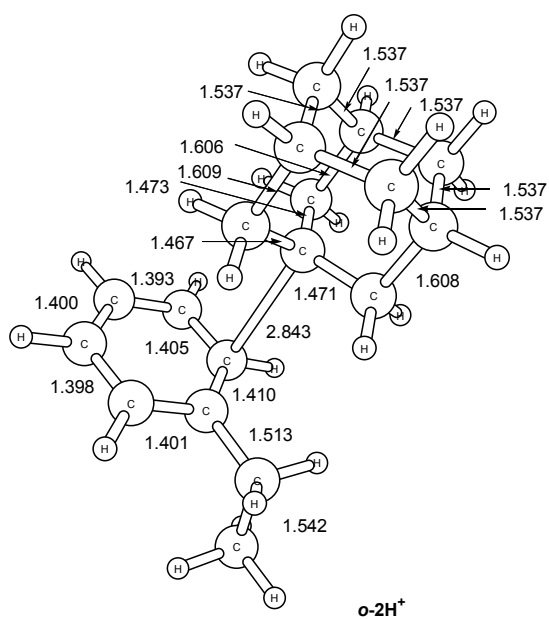


Fig S1 (continued).



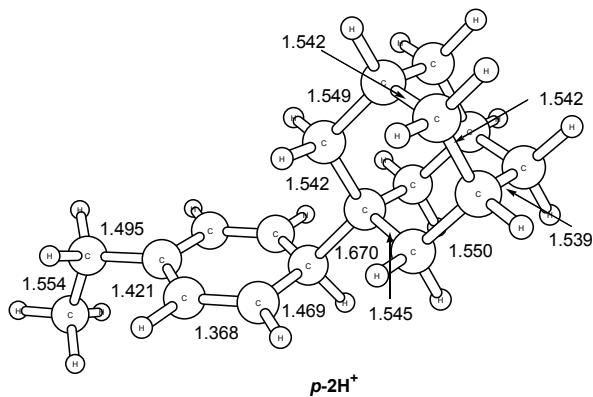
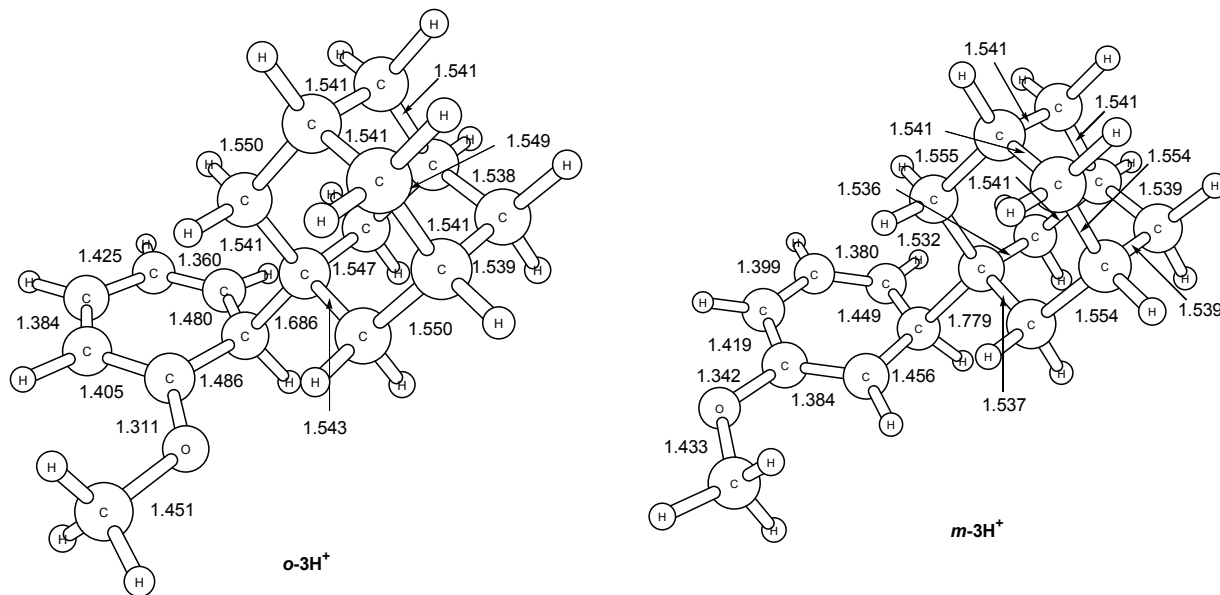


Fig S1 (continued).



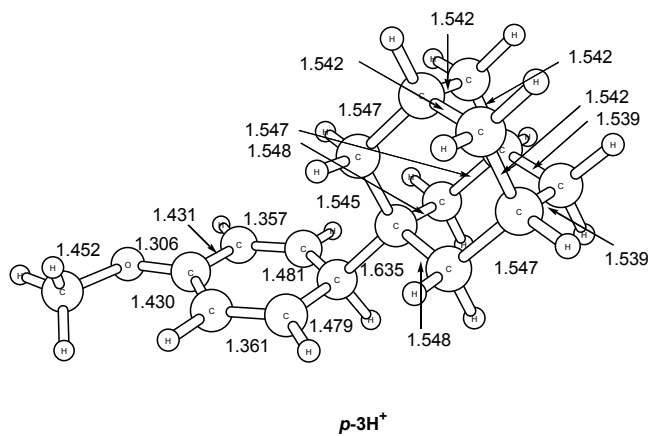
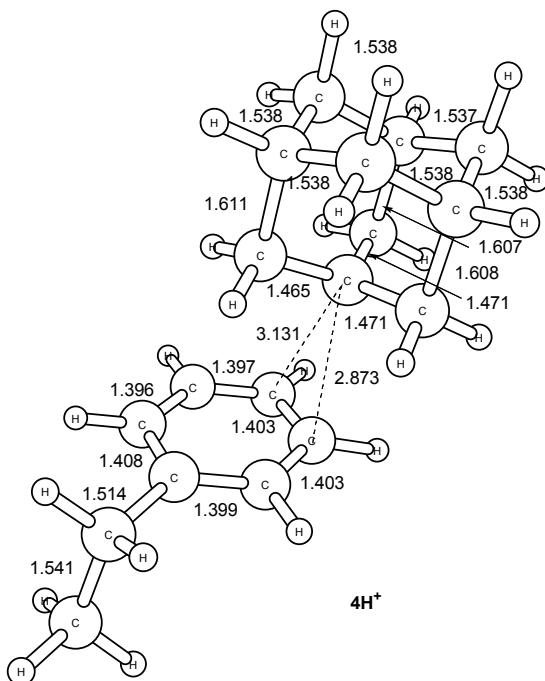


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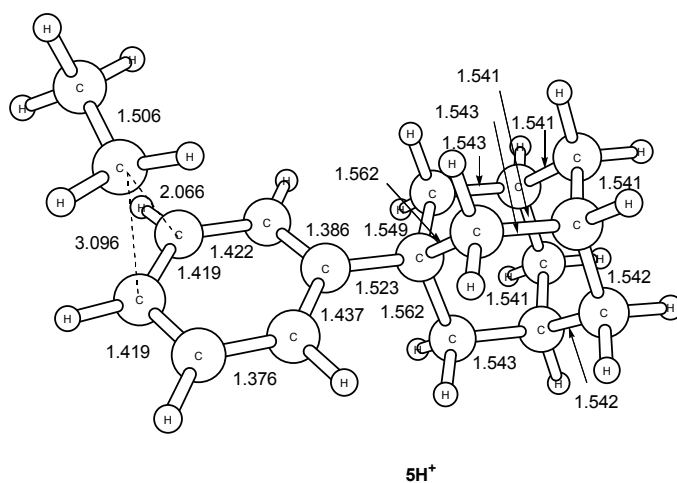
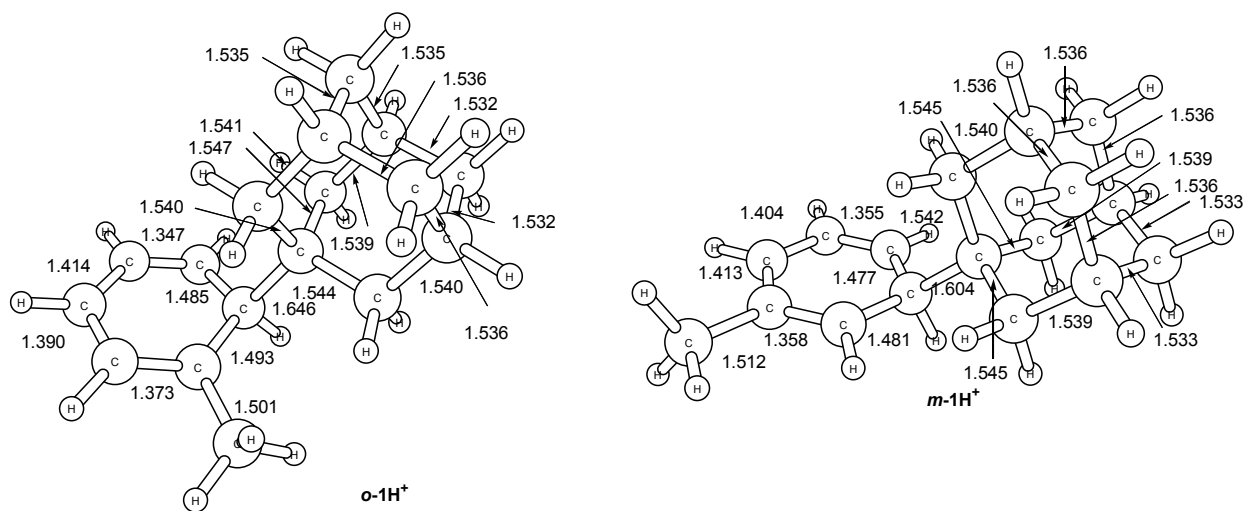


Fig S1 (continued).



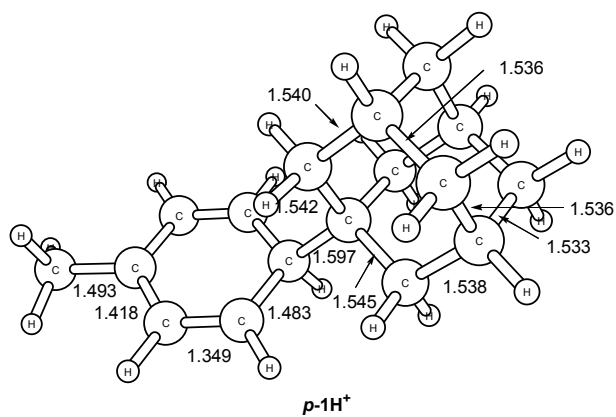
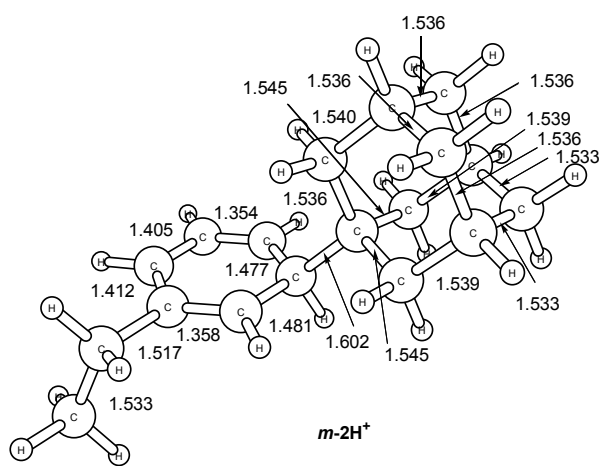
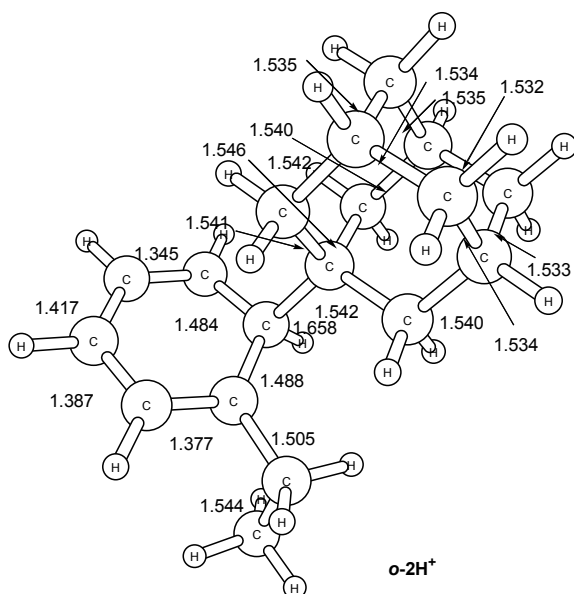


Fig S2. HF/6-31G(d) optimized geometries and bond lengths, Å, for $o\text{-}1\text{H}^+$, $m\text{-}1\text{H}^+$, $p\text{-}1\text{H}^+$, $o\text{-}2\text{H}^+$, $m\text{-}2\text{H}^+$, and $p\text{-}2\text{H}^+$.



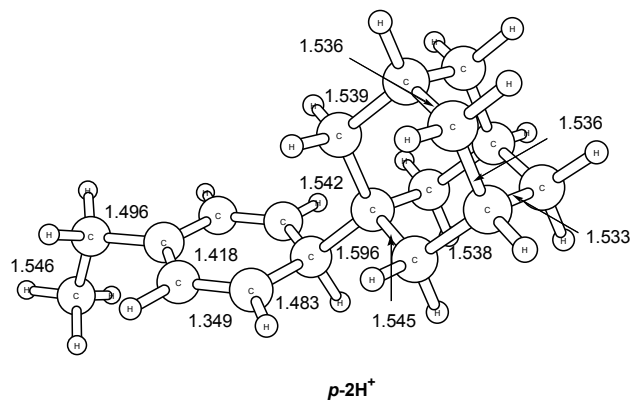


Fig S2 (continued).