Supplementary Information of

Positive and Negative Photoion Spectroscopy Study of Monochlorothiophenes

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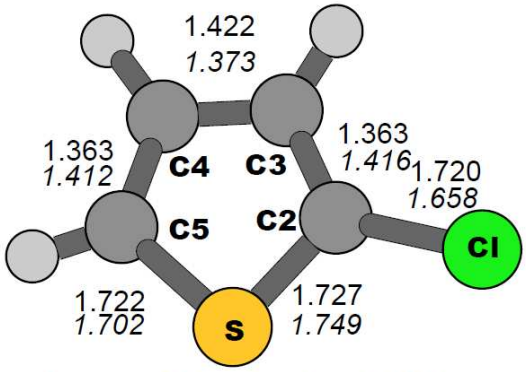
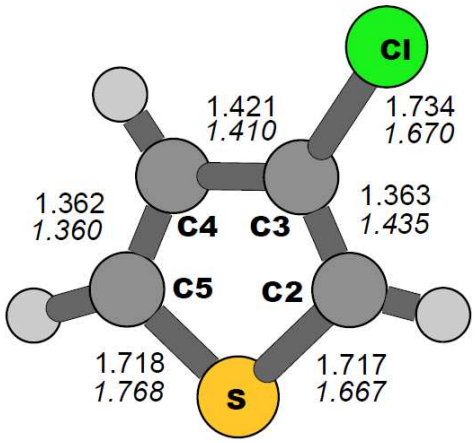


Neutral: E+ZPVE=-1012.659205 H
Cation: E+ZPVE=-*1012.347909* H



Neutral: E+ZPVE=-1012.663172 H
Cation: E+ZPVE=-*1012.344974* H

Figure S1. Optimized geometrical parameters (bond lengths in angstrom) and energies (in Hartree) of the neutral (normal) and cationic (italic) monochlorothiophenes.

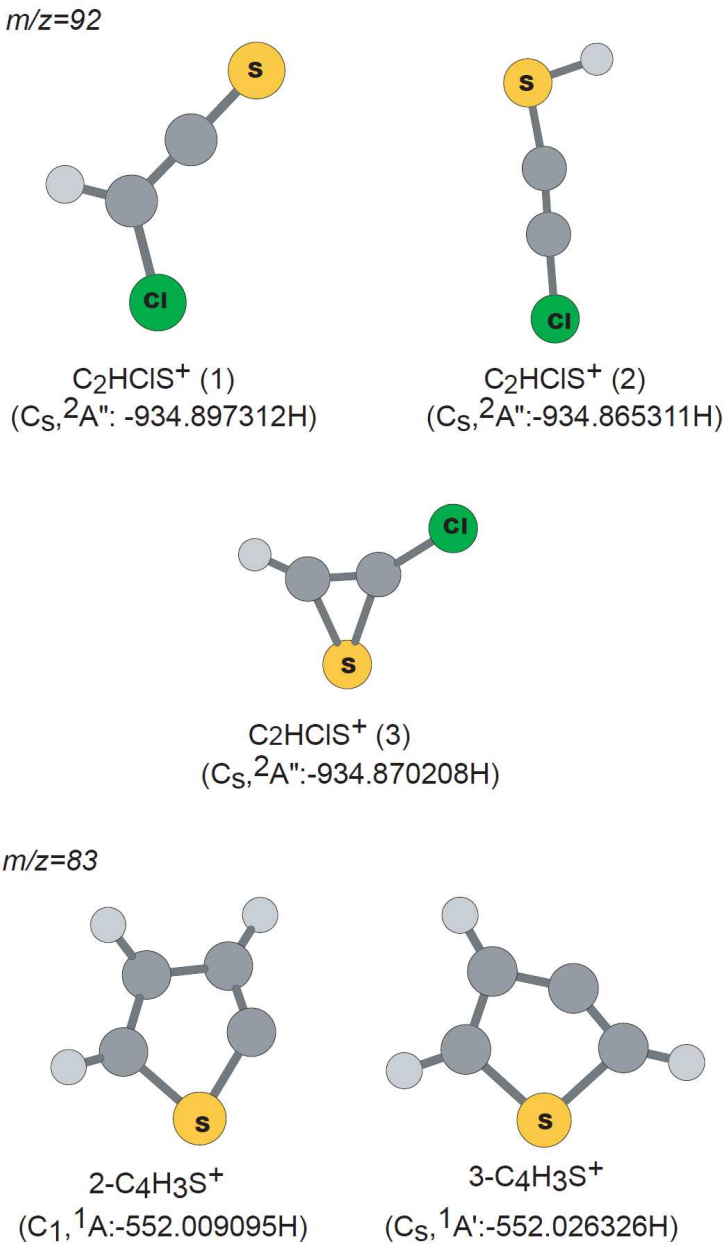


Figure S2. Optimized geometries of some predominant daughter cations with *m/z* =92 and 83 (the total energies in Hartree).

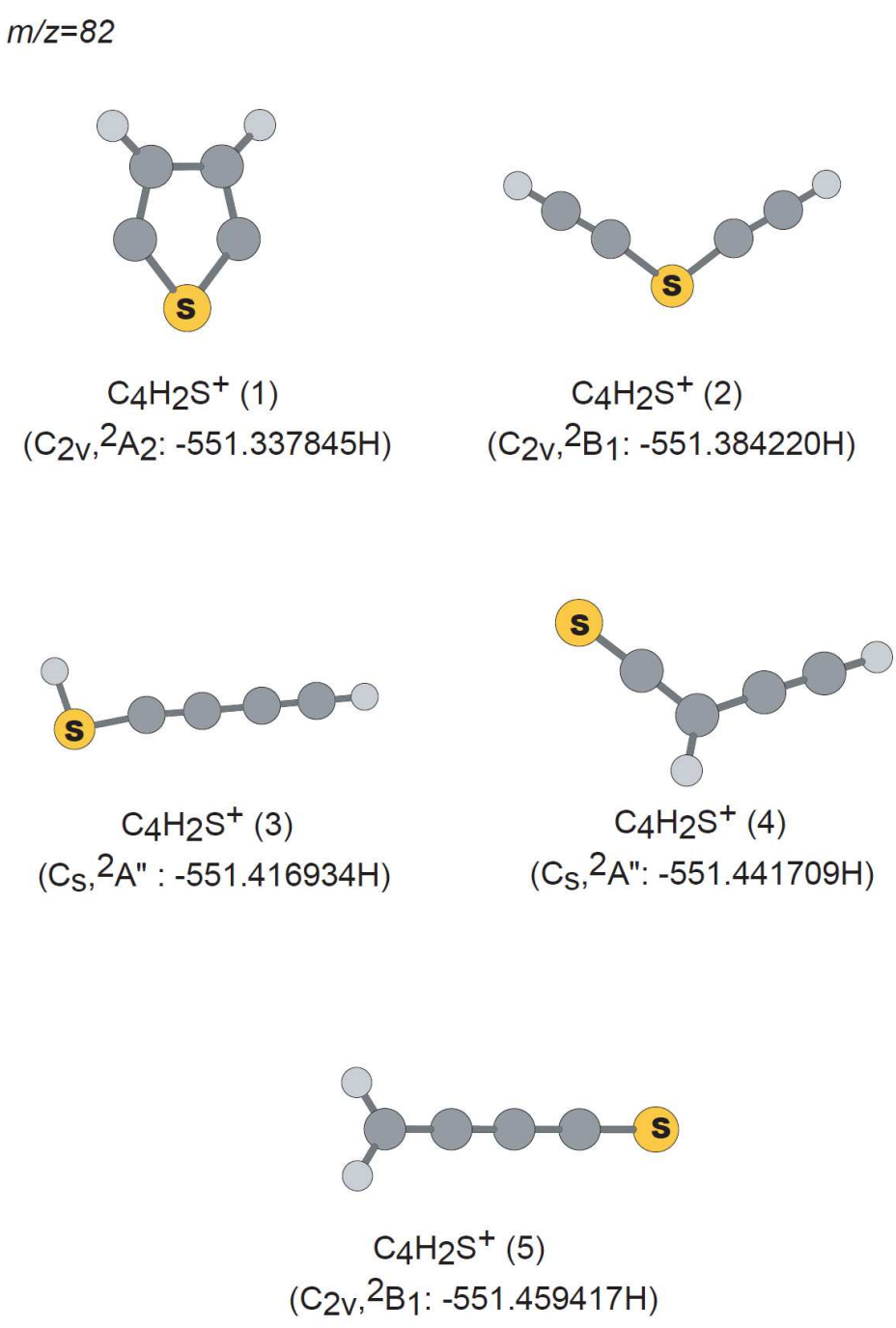


Figure S3. Optimized geometries of some predominant daughter cations with *m/z* =82 (the total energies in Hartree).

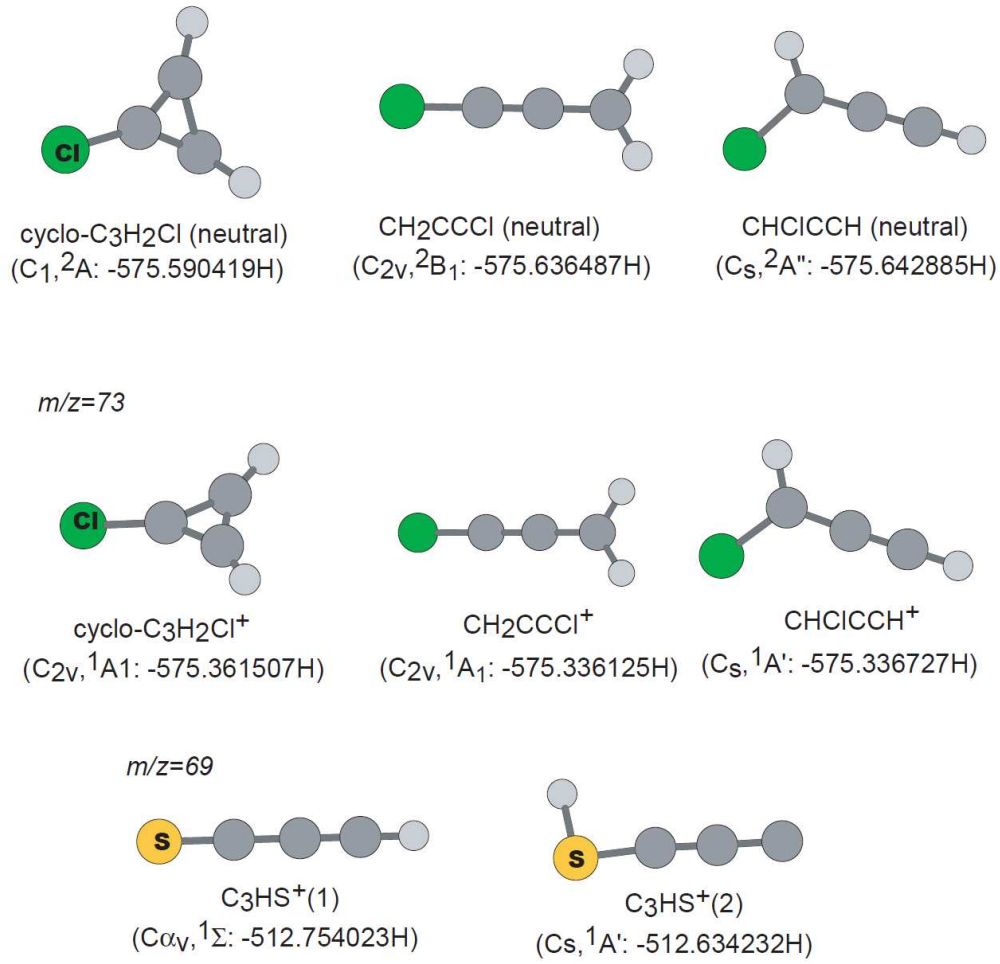


Figure S4. Optimized geometries of some predominant daughter cations with *m/z* =73 and 69 and the neutral fragments (at the top panels), all energies in Hartree.

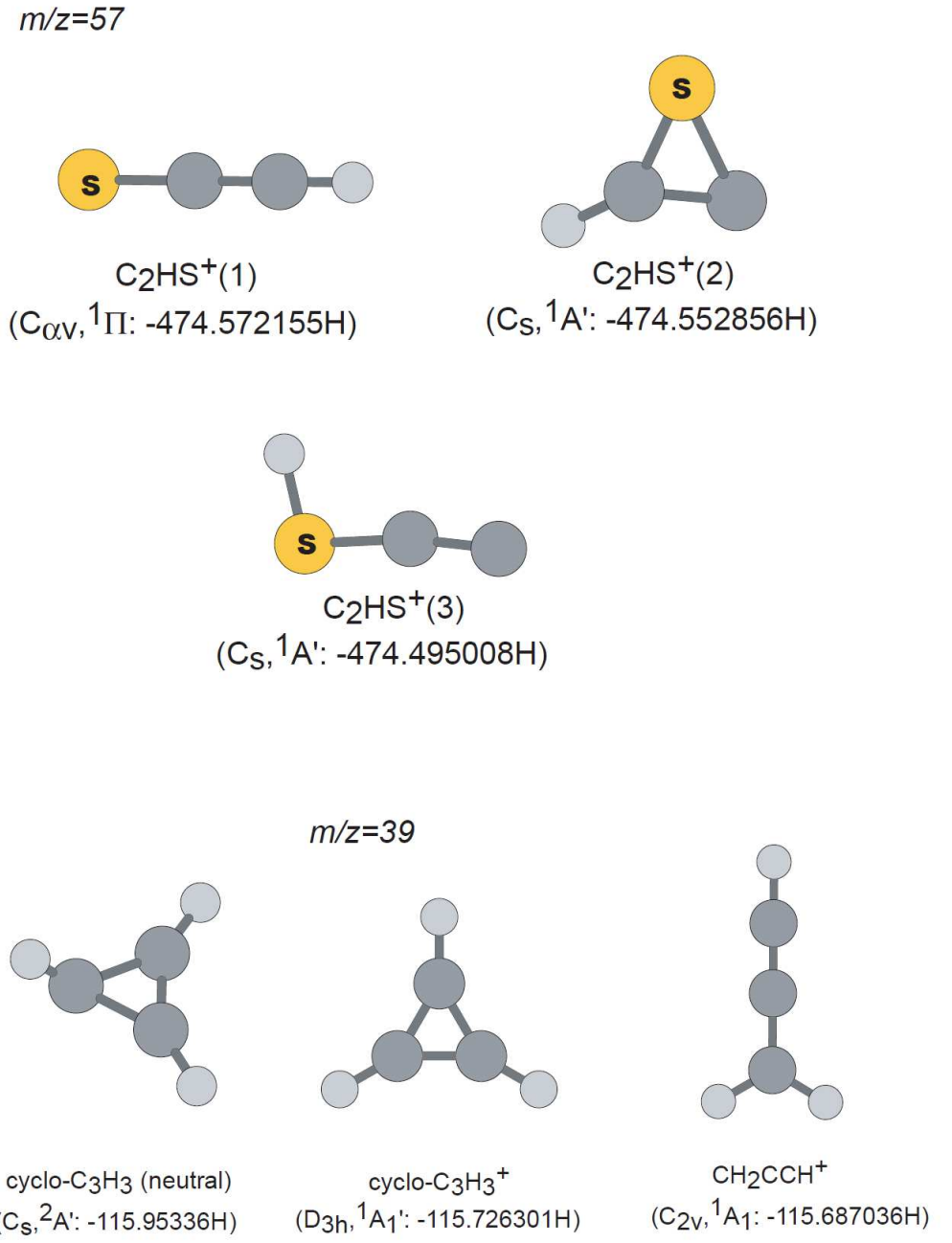


Figure S5. Optimized geometries of some predominant daughter cations with *m/z* =57 and 39 and the neutral fragment cyclo-C_3H_3, all energies in Hartree