

# SYNTHESIS AND OPTICAL PROPERTIES OF AZULENO[1,2-*b*]BENZOTHIOPHENE AND SELENOPHENE

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1. Crystal data of azuleno[1,2-*b*]benzoselenophene **4**.

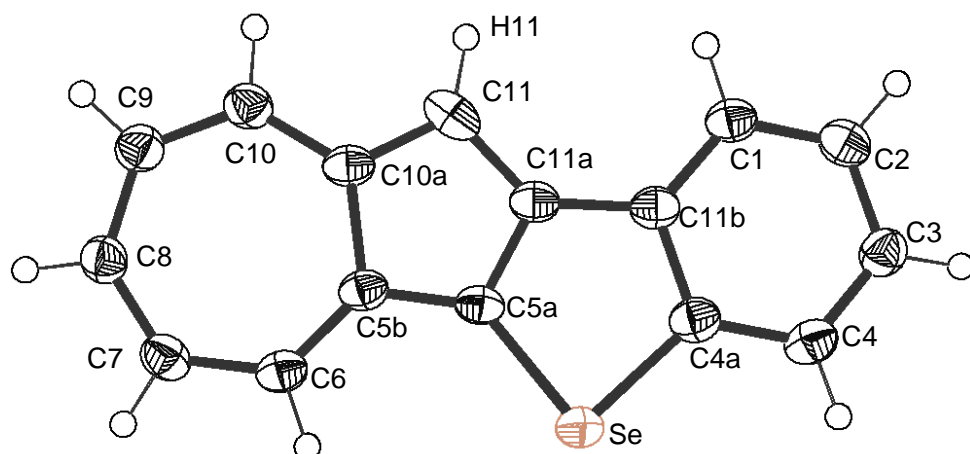


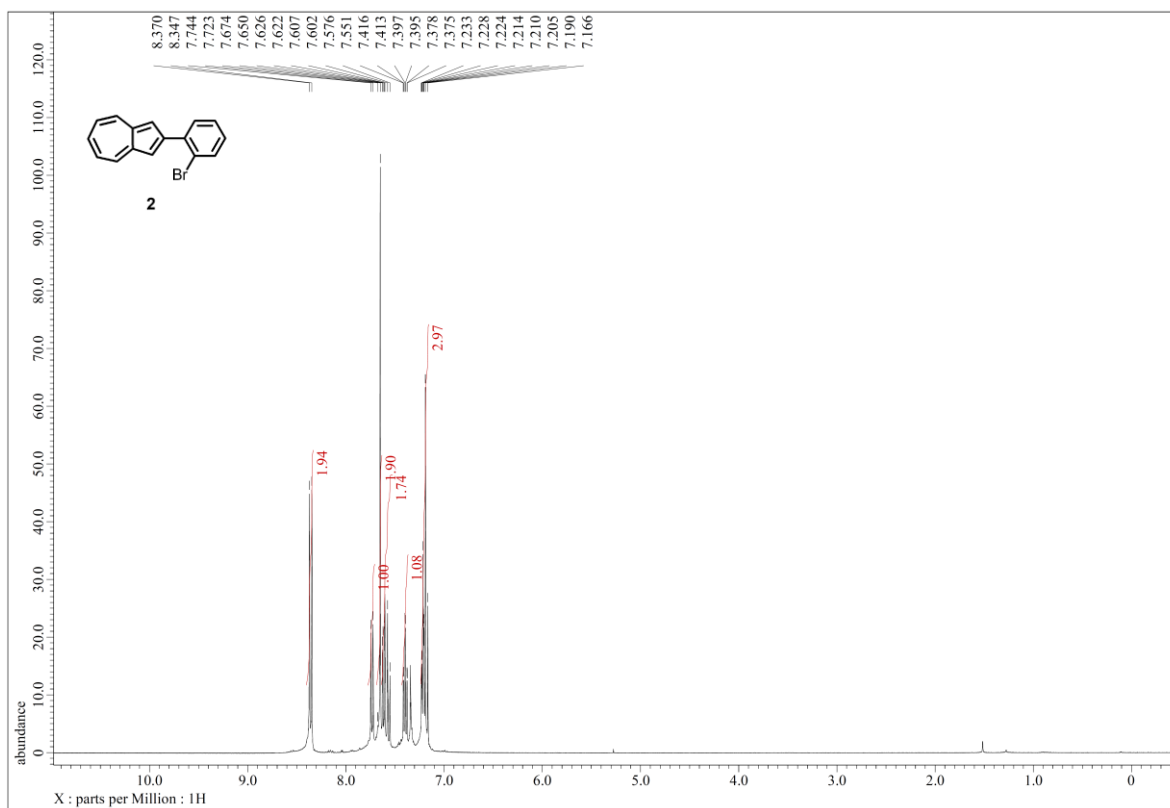
Figure S1. Xray crystal sturcture of **4**.

Table S1. Selected bond lengths of **4** [Å].

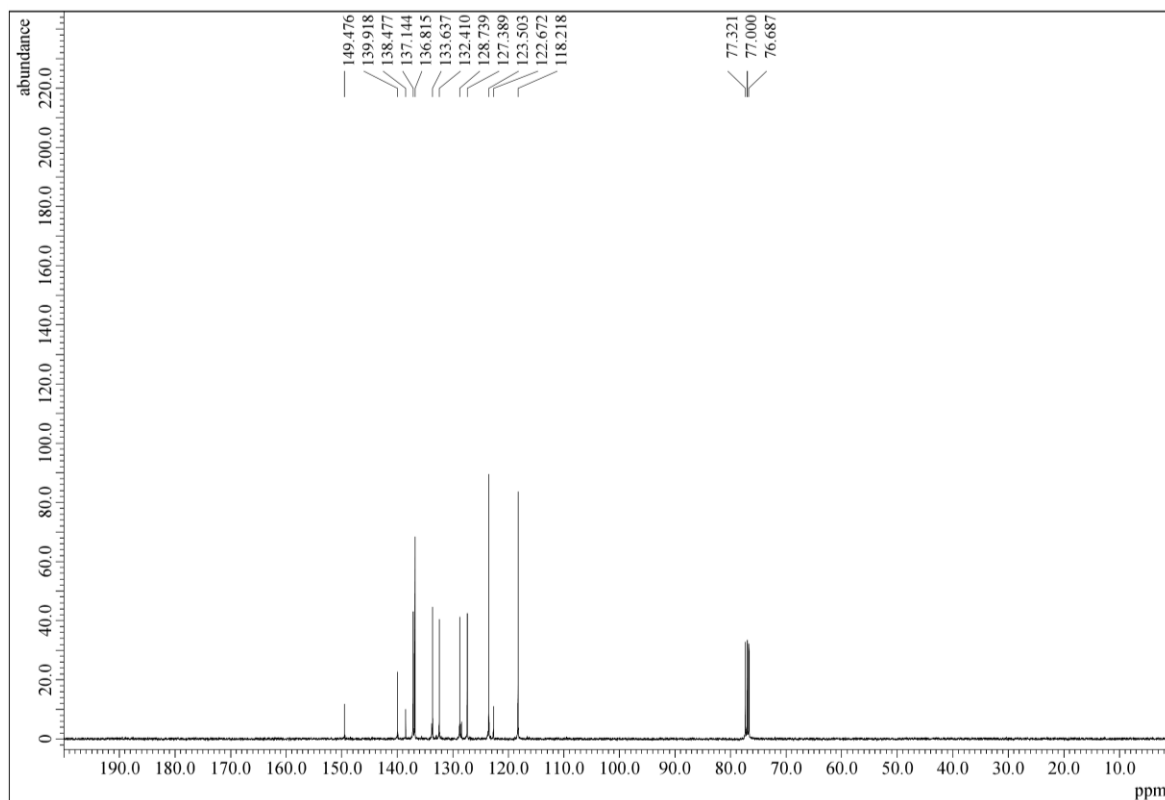
C5a-C5b	1.404(6)	C1-C2	1.387(6)
C5b-C6	1.384(6)	C2-C3	1.391(6)
C6-C7	1.402(6)	C3-C4	1.378(7)
C7-C8	1.381(7)	C4-C4a	1.413(6)
C8-C9	1.403(6)	C4a-C11b	1.429(6)
C9-C10	1.392(6)	C1-C11b	1.392(6)
C10-C10a	1.398(6)	Se-C4a	1.889(5)
C10a-C11	1.382(6)	Se-C5a	1.894(4)
C11-C11a	1.436(7)	C11a-C11b	1.446(6)
C5a-C11a	1.403(6)		
C5b-C10a	1.506(6)		

## 2. NMR spectra of novel compounds.

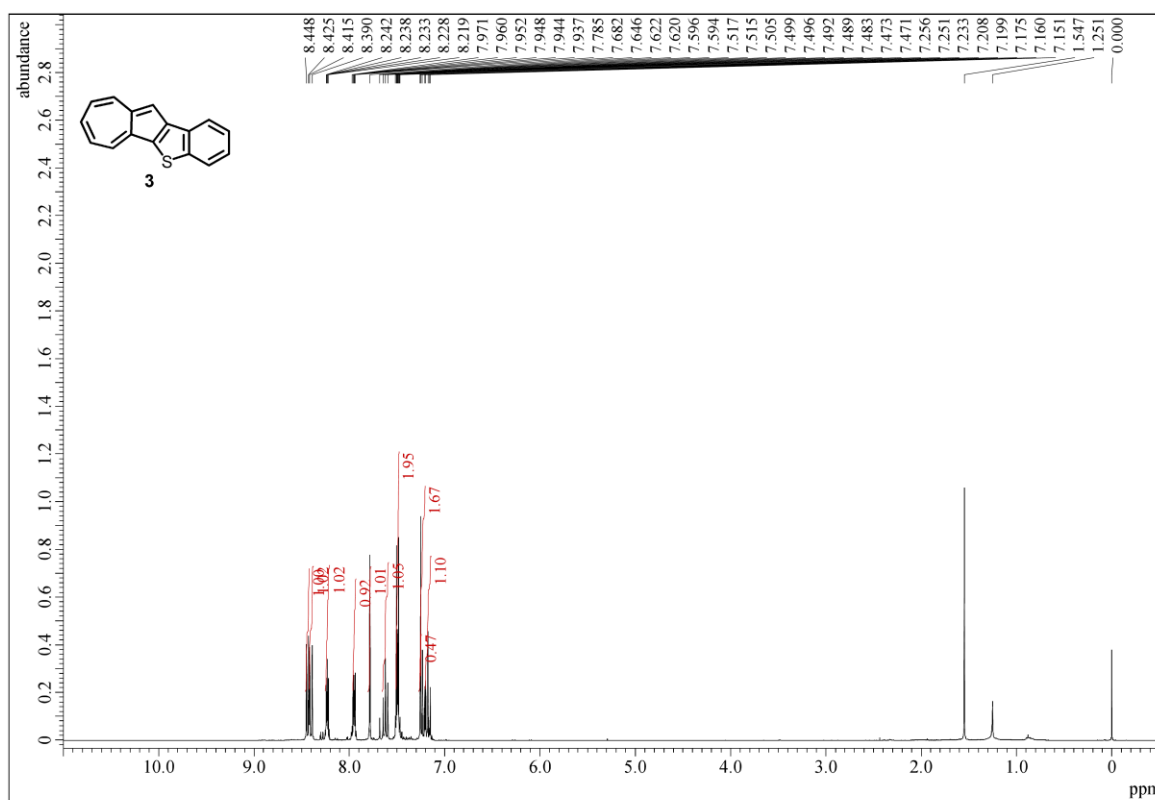
### <sup>1</sup>H NMR of compound 2.



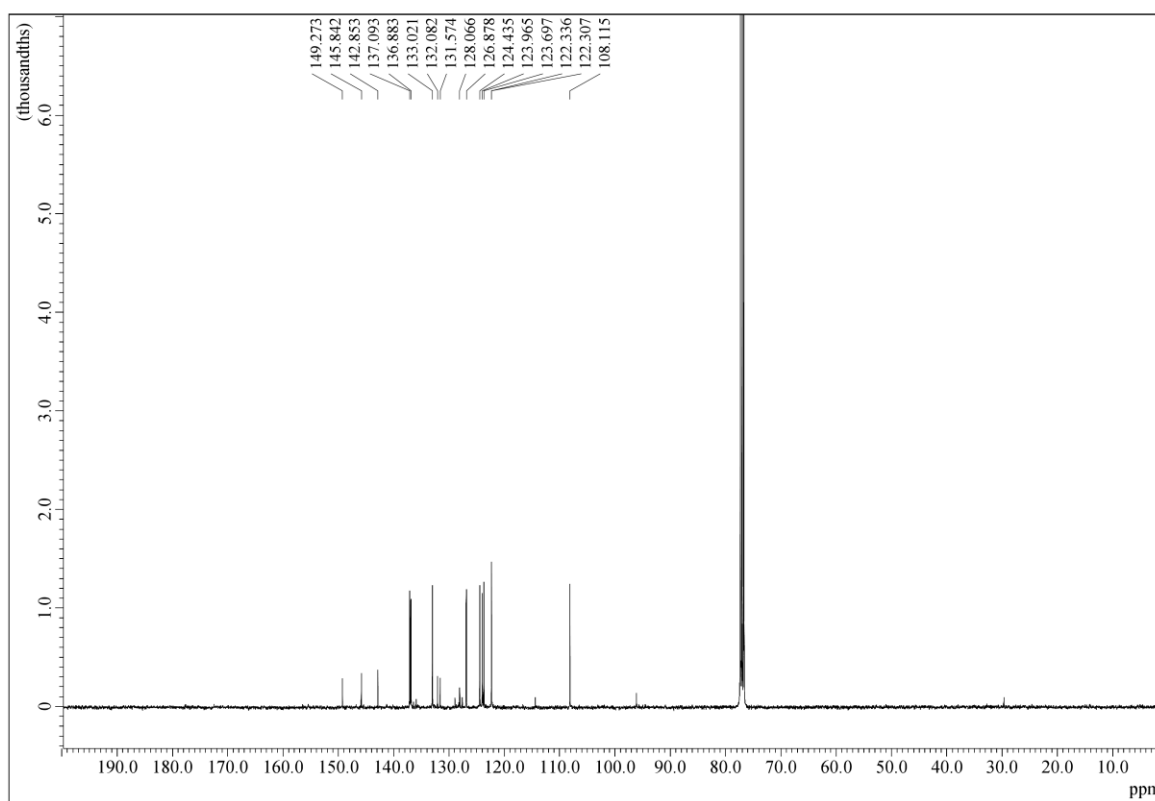
### <sup>13</sup>C NMR of compound 2.



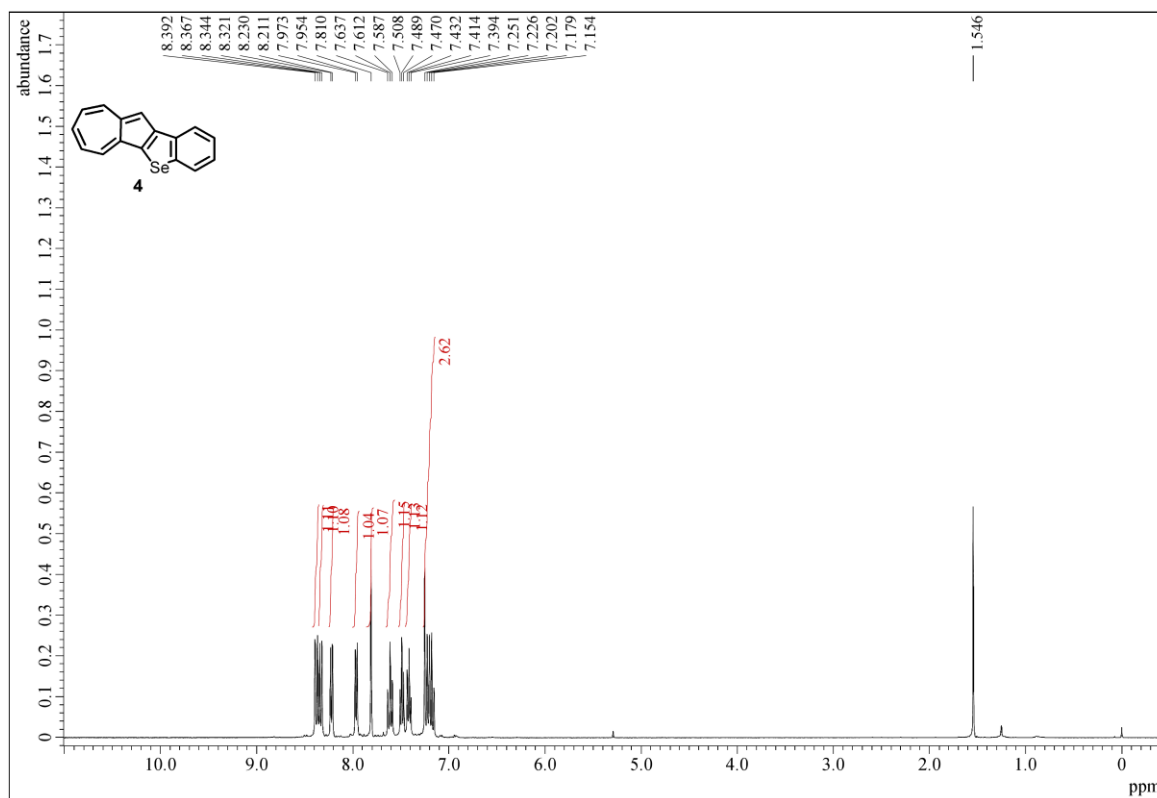
<sup>1</sup>H NMR of compound 3.



<sup>13</sup>C NMR of compound 3.



<sup>1</sup>H NMR of compound 4.



<sup>13</sup>C NMR of compound 4.

