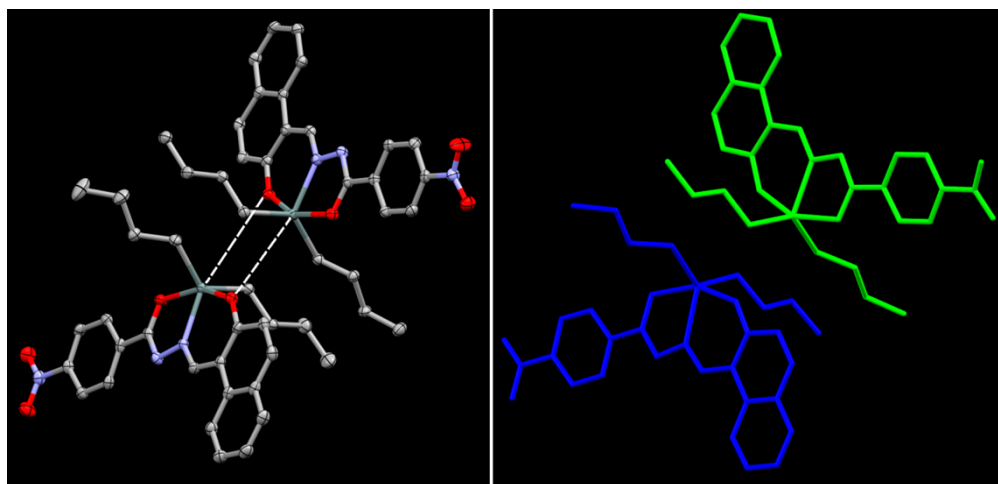


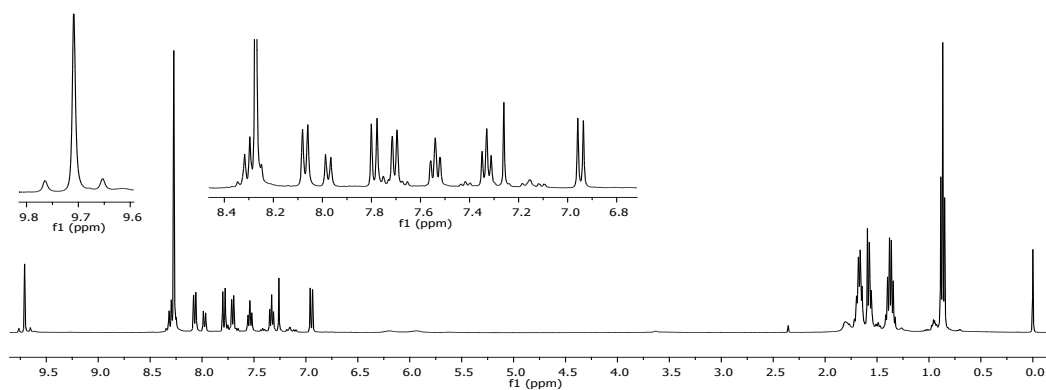
## Electronic Supplementary Information

New Application of Fluorescent Organotin Compounds Derived from Schiff Bases: Synthesis, X-ray Structures, Photophysical Properties, Cytotoxicity and Fluorescent Bioimaging

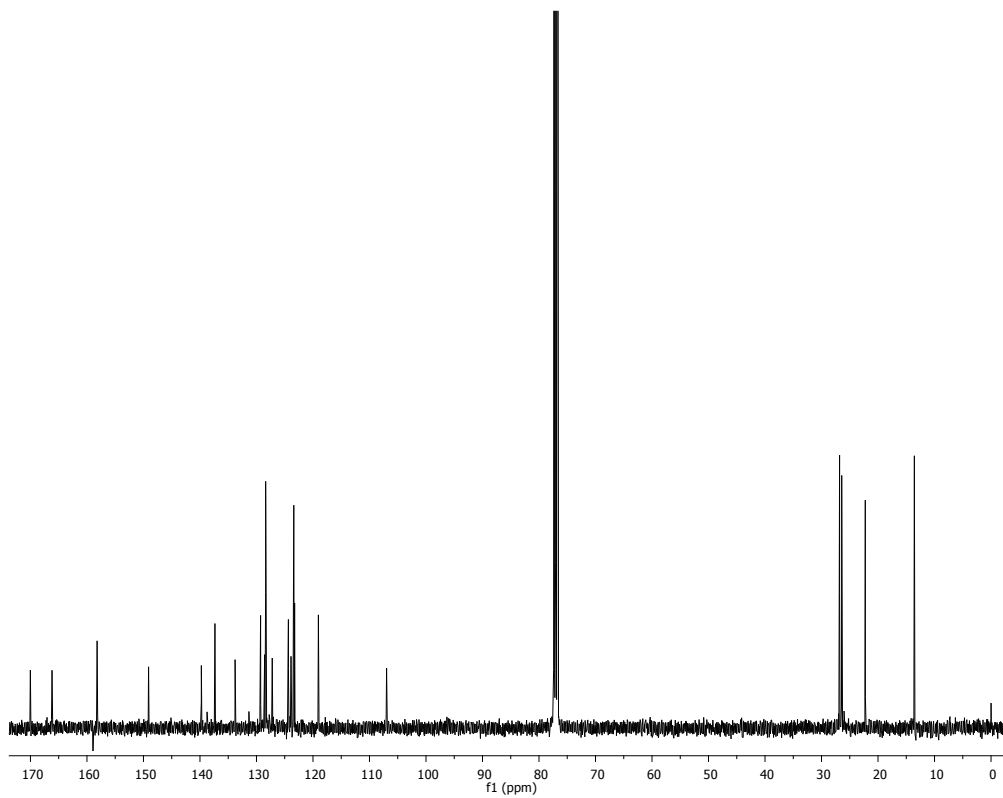
Víctor M. Jiménez-Pérez,\* María C. García-López, Blanca M. Muñoz-Flores, Rodrigo Chan-Navarro, Jessica Berrones, H. V. Rasika Dias, Ivana Moggio, Eduardo Arias, Jesús A. Serrano, Rosa Santillán, María E. Ochoa, and Arturo Chavez-Reyes.\*



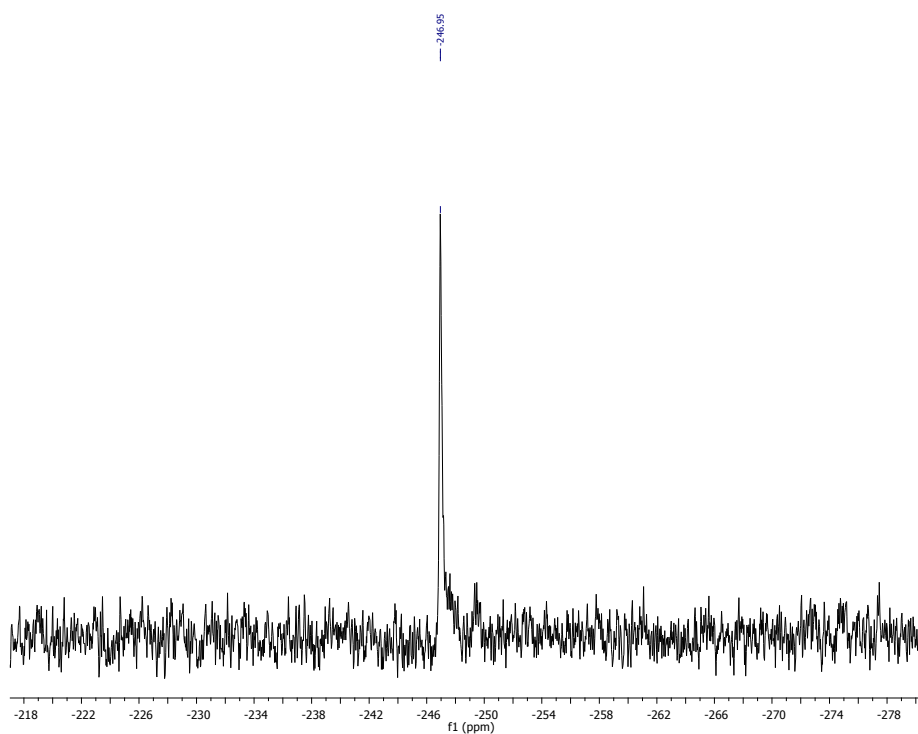
**Figure S1.** Intermolecular interaction of compound 1.



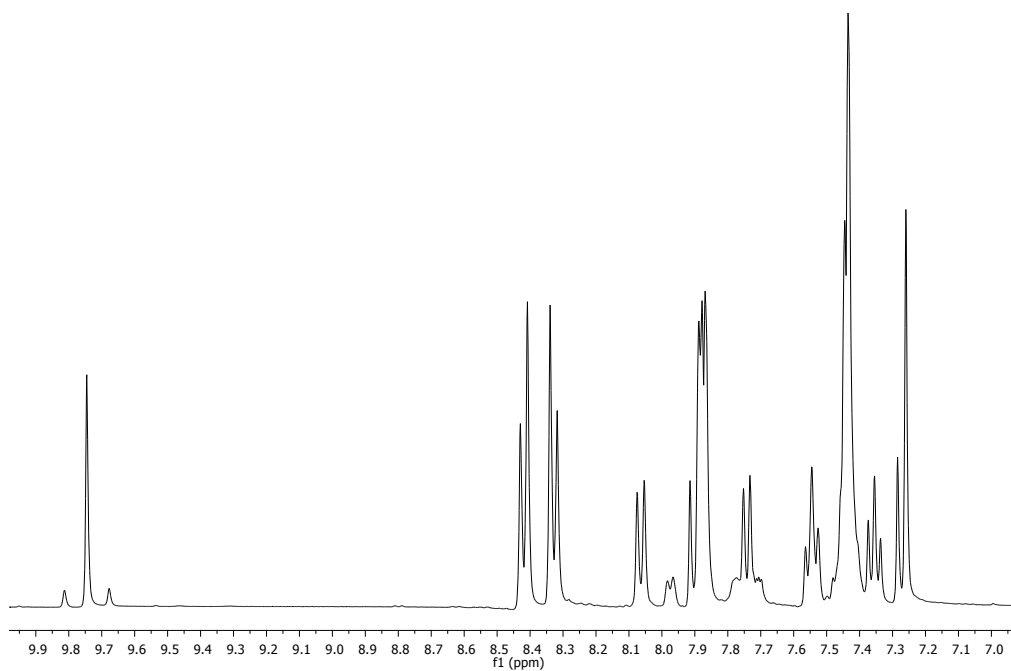
**Fig. S2.**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ ) spectrum of compound 1.



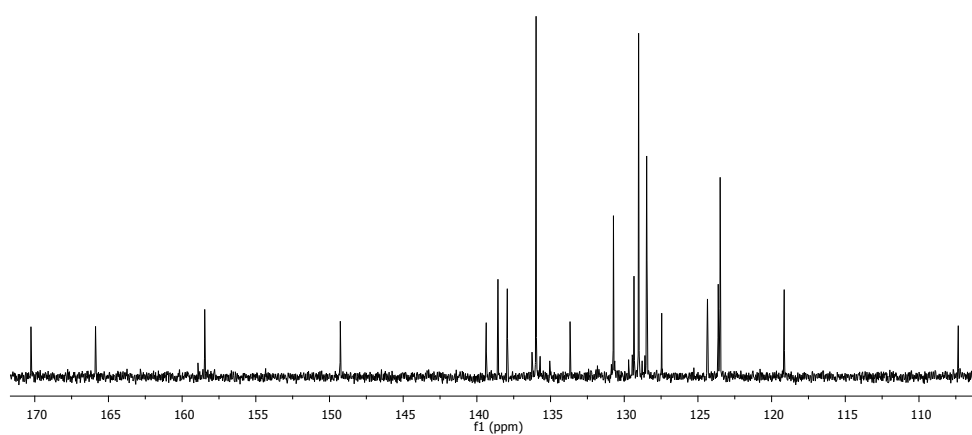
**Fig. S3.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **1**.



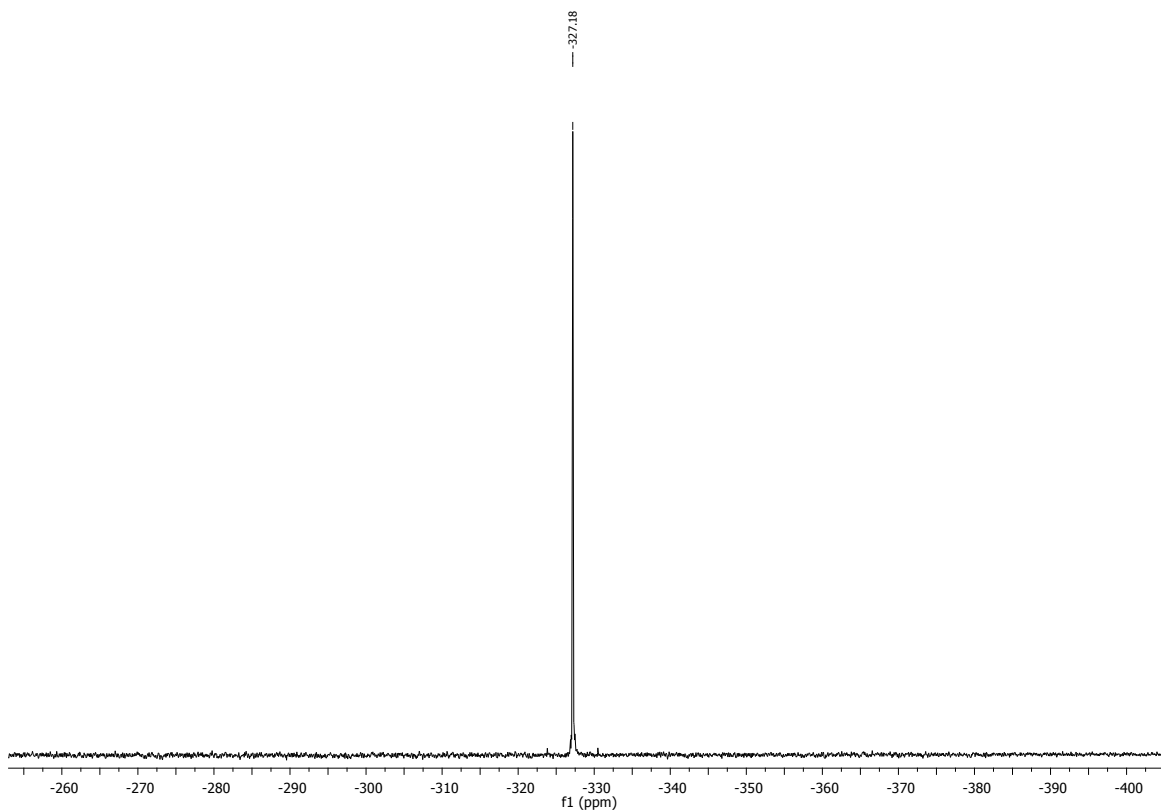
**Fig. S4.**  $^{119}\text{Sn}$  NMR spectrum of compound **1**.



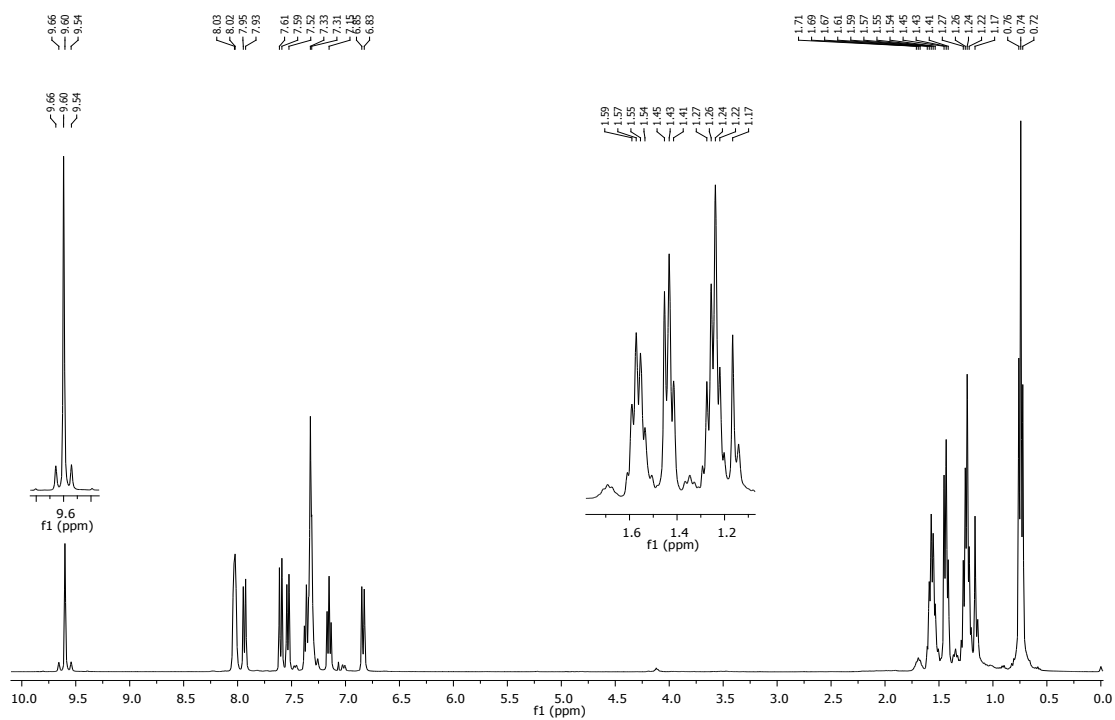
**Fig. S5.**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ ) spectrum of compound **2**.



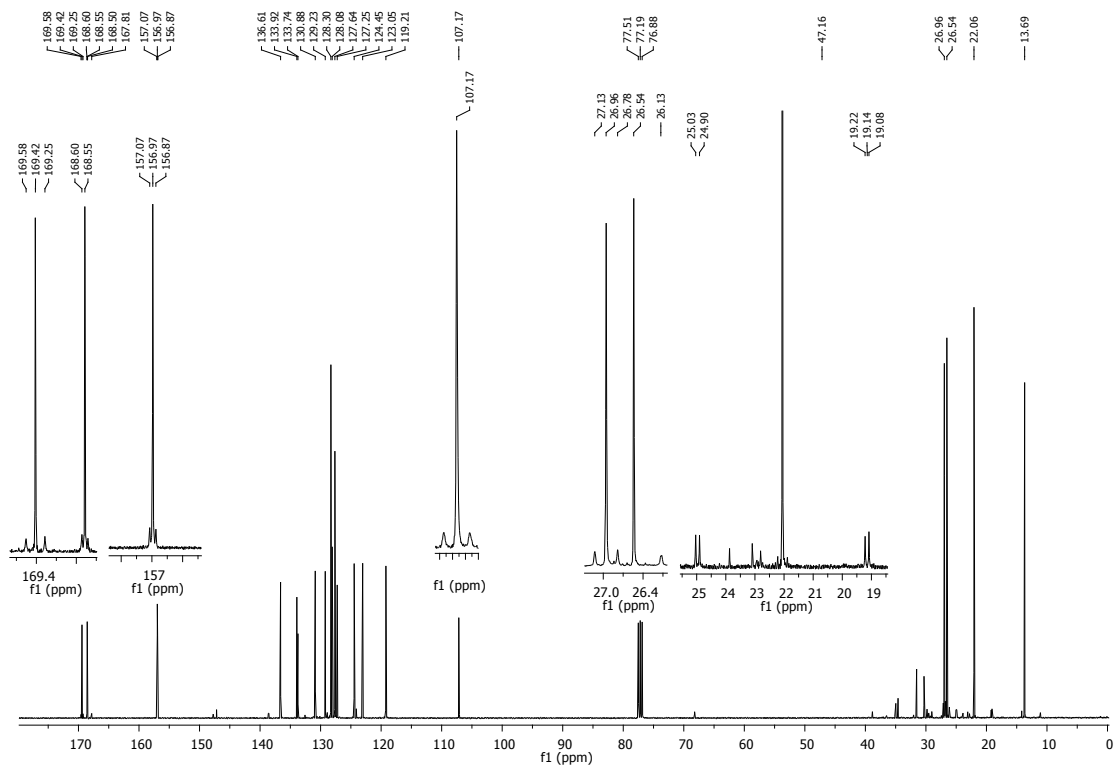
**Fig. S6.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **2**.



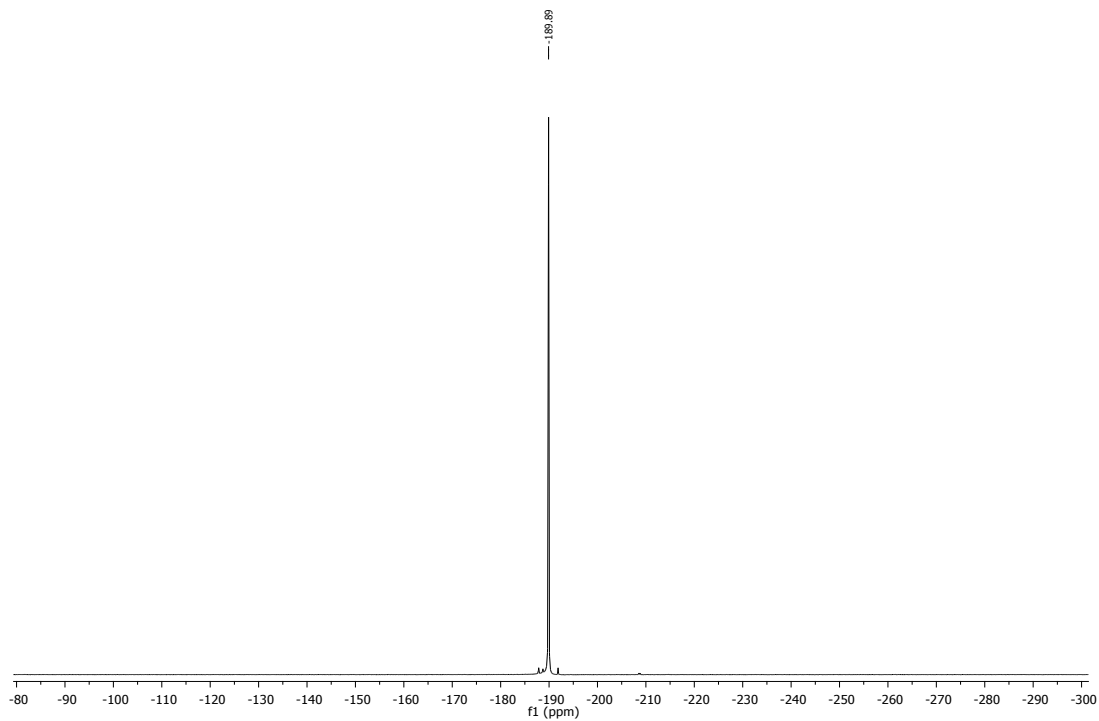
**Fig. S7.**  $^{119}\text{Sn}$  NMR spectrum of compound 2.



**Fig. S8.**  $^1\text{H}$  NMR spectrum of compound 3.



**Fig. S9.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound 3.



**Fig. S10.**  $^{119}\text{Sn}$  NMR spectrum of compound 3.

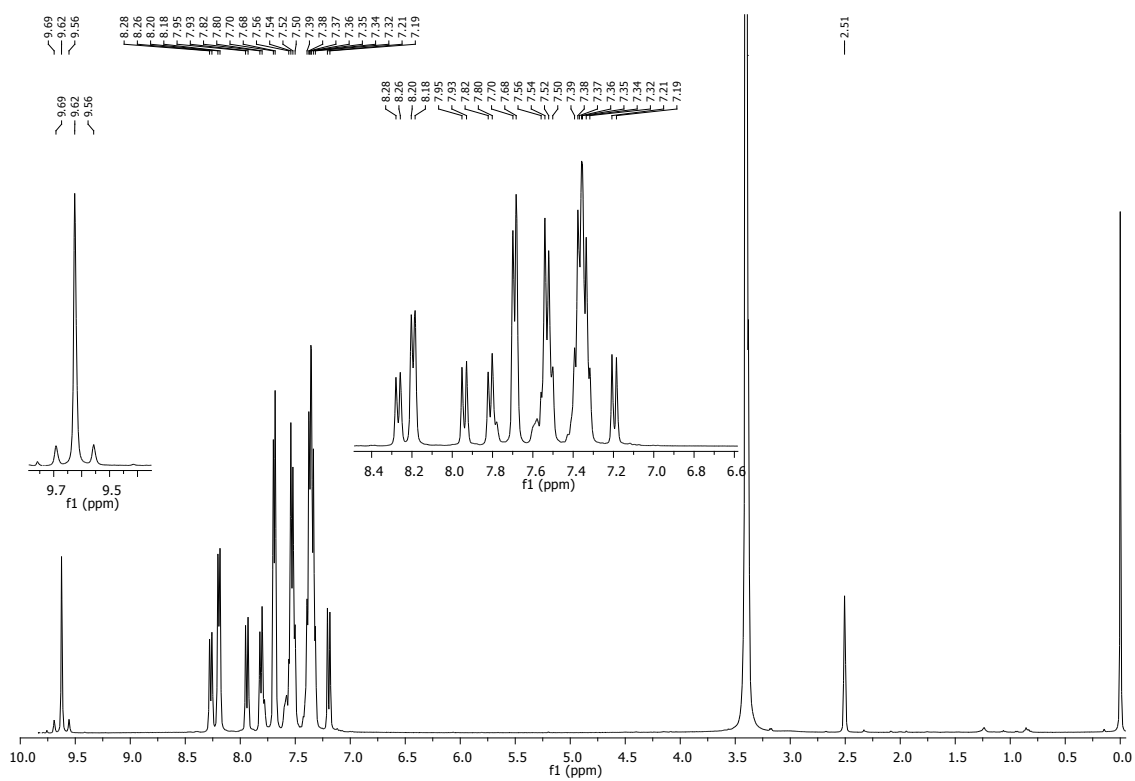


Fig. S11.  $^1\text{H}$  NMR spectrum of compound 4.

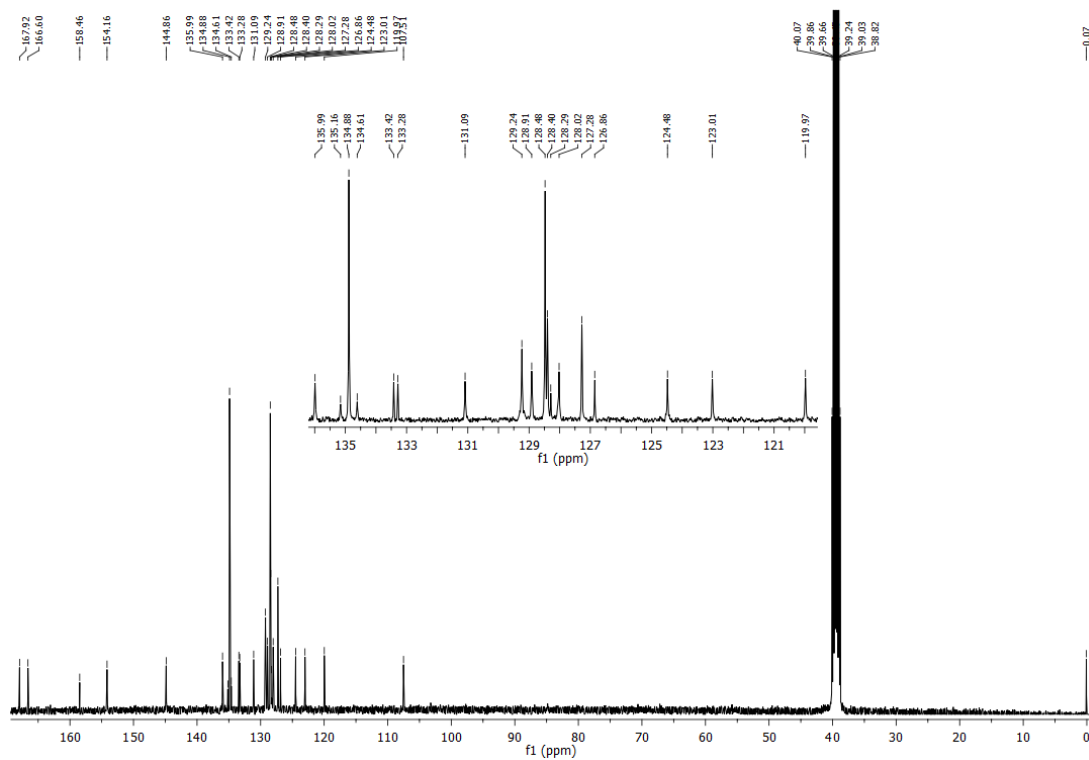
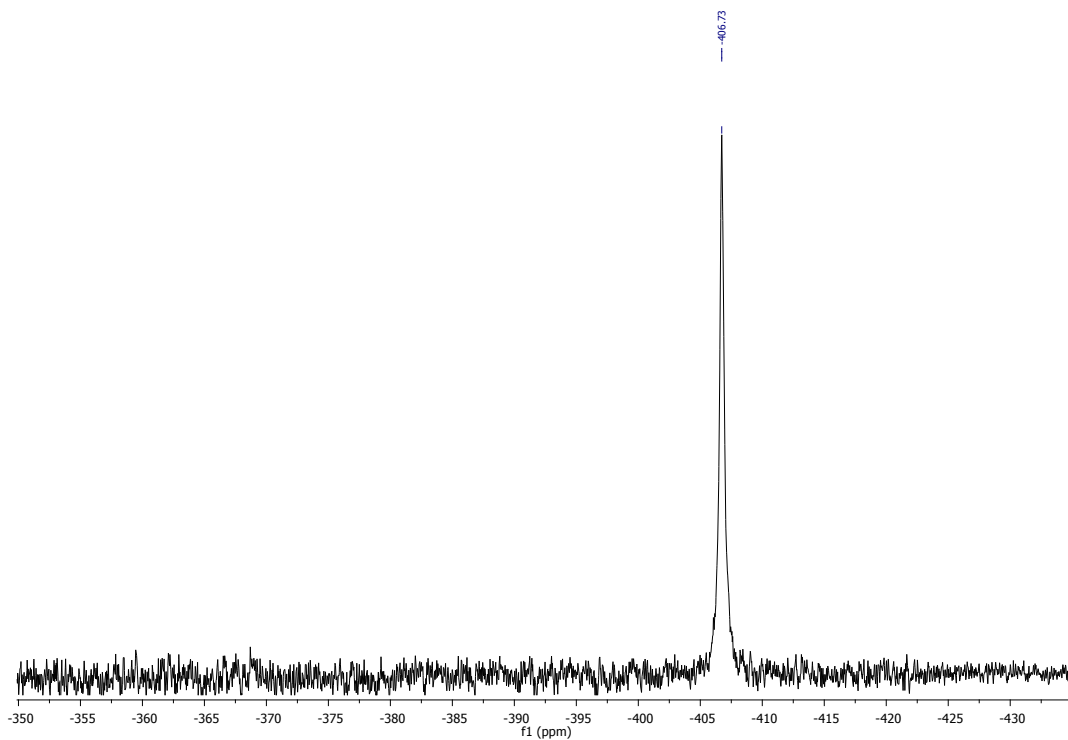
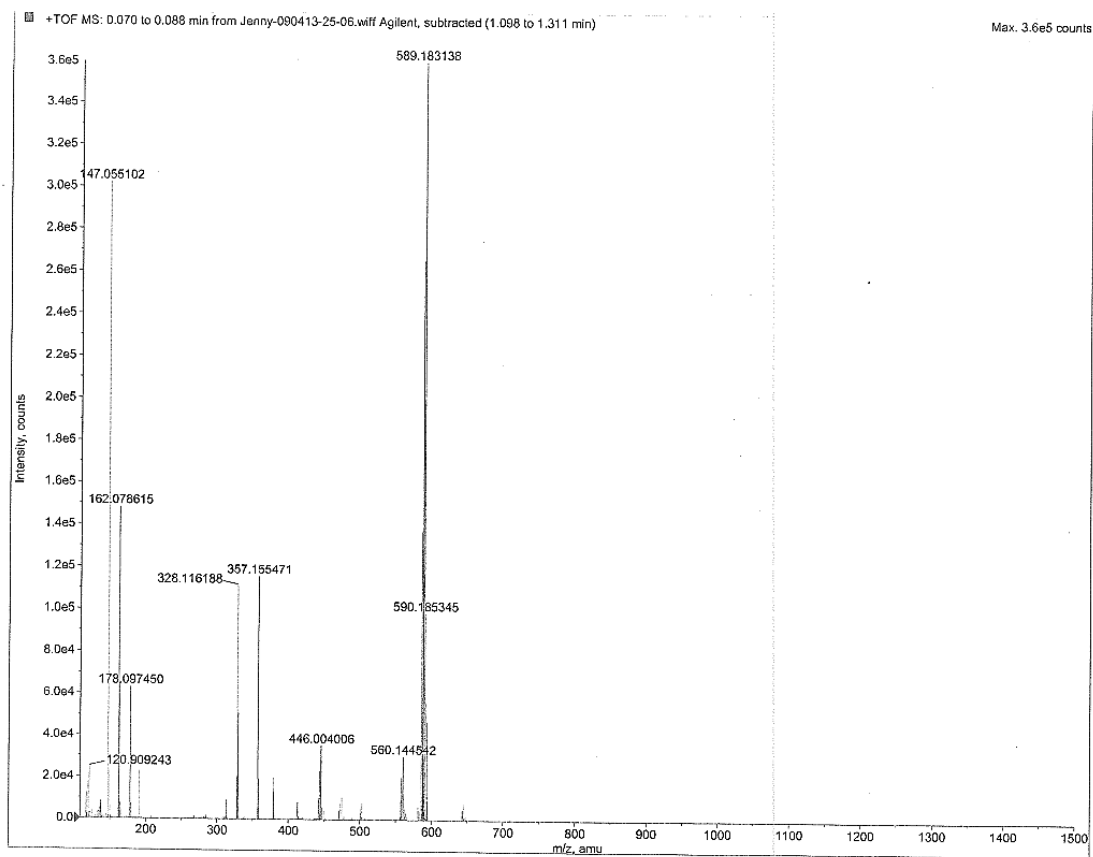


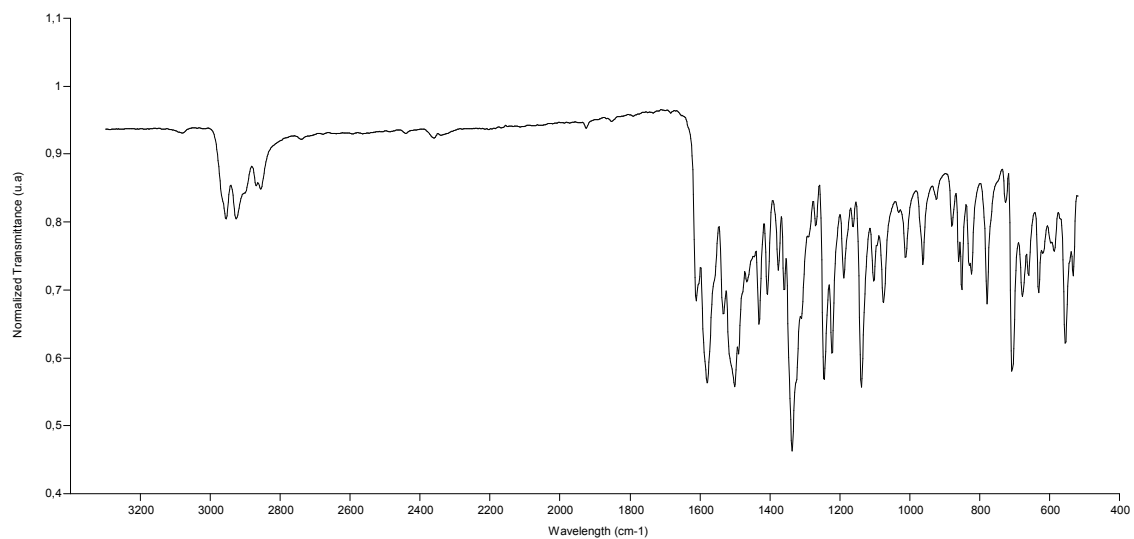
Fig. S12.  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound 4.



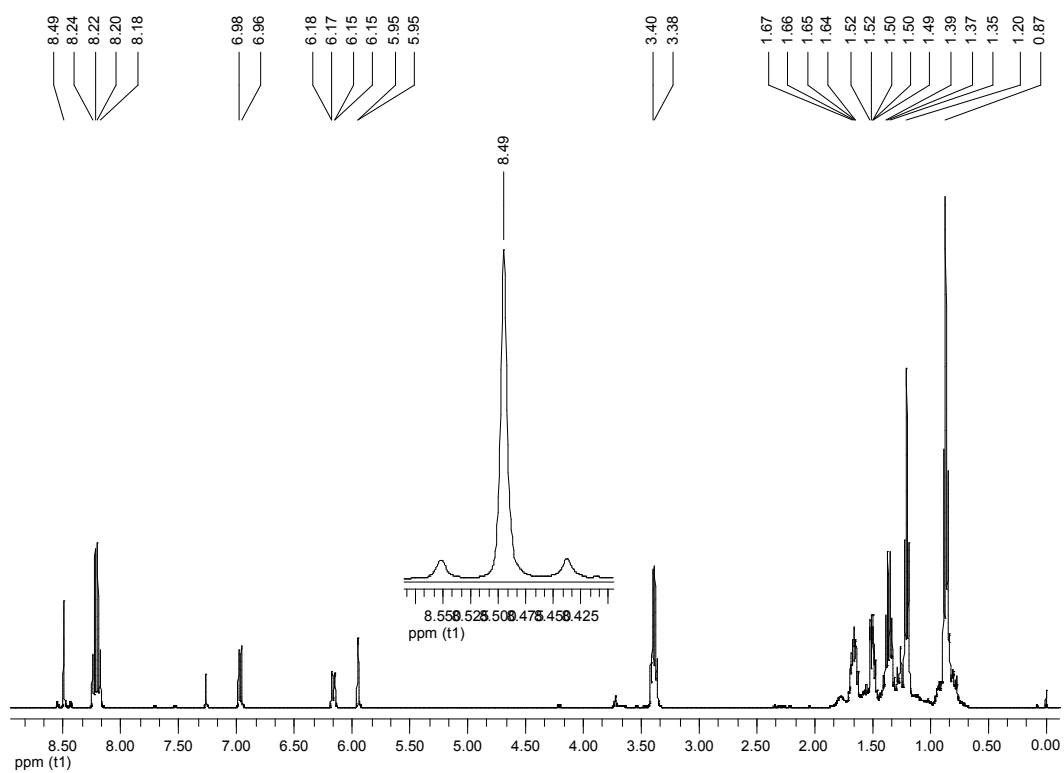
**Fig. S13.**  $^{119}\text{Sn}$  NMR spectrum of compound 4.



**Fig. S14.** Mass spectrum of compound 5.

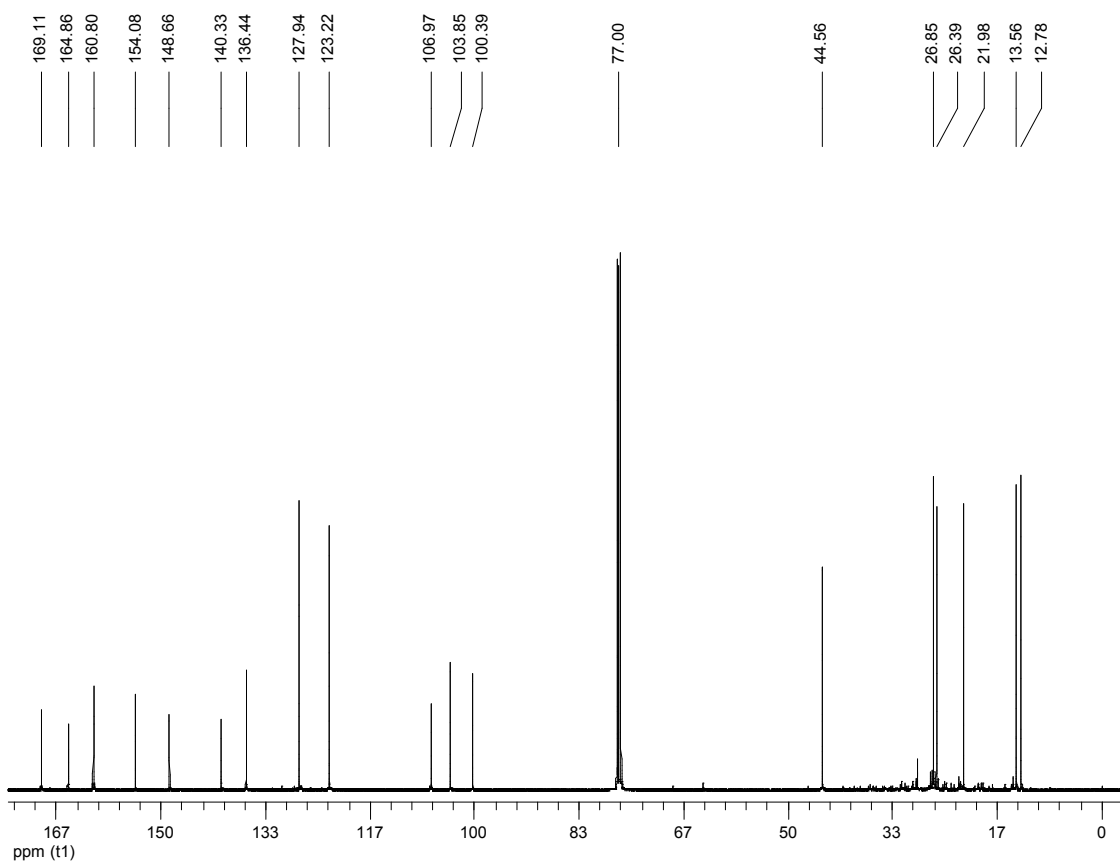


**Fig. S15.** Infrared spectrum of compound **5**.

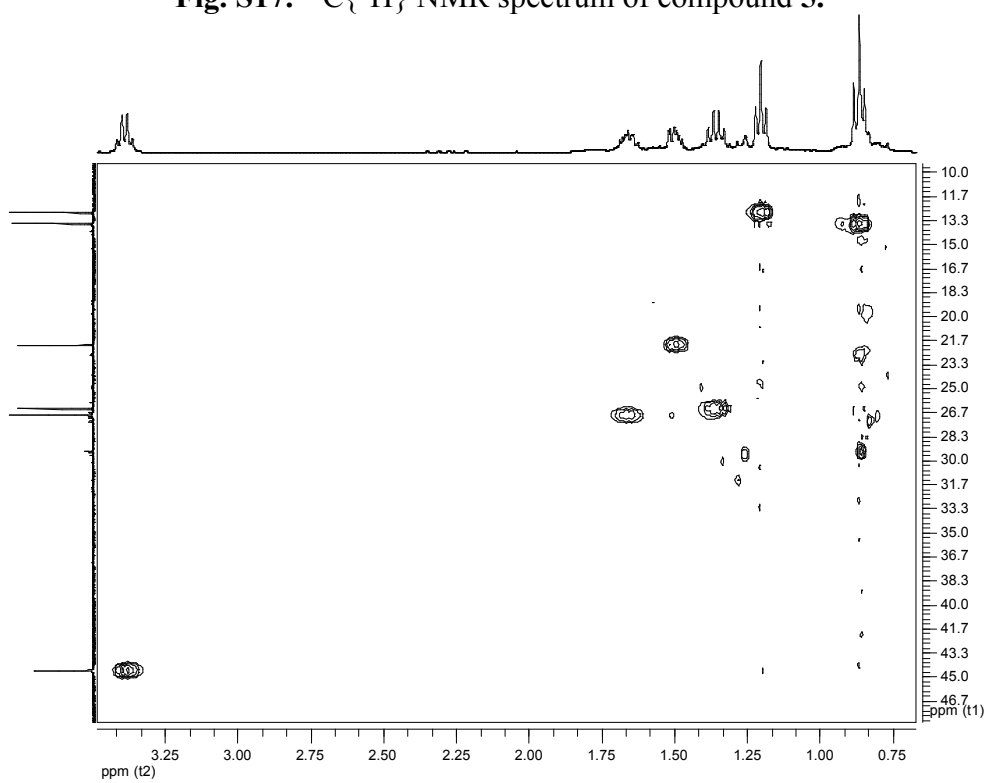


**Fig. S16.**  $^1\text{H}$  NMR spectrum of compound **5**.

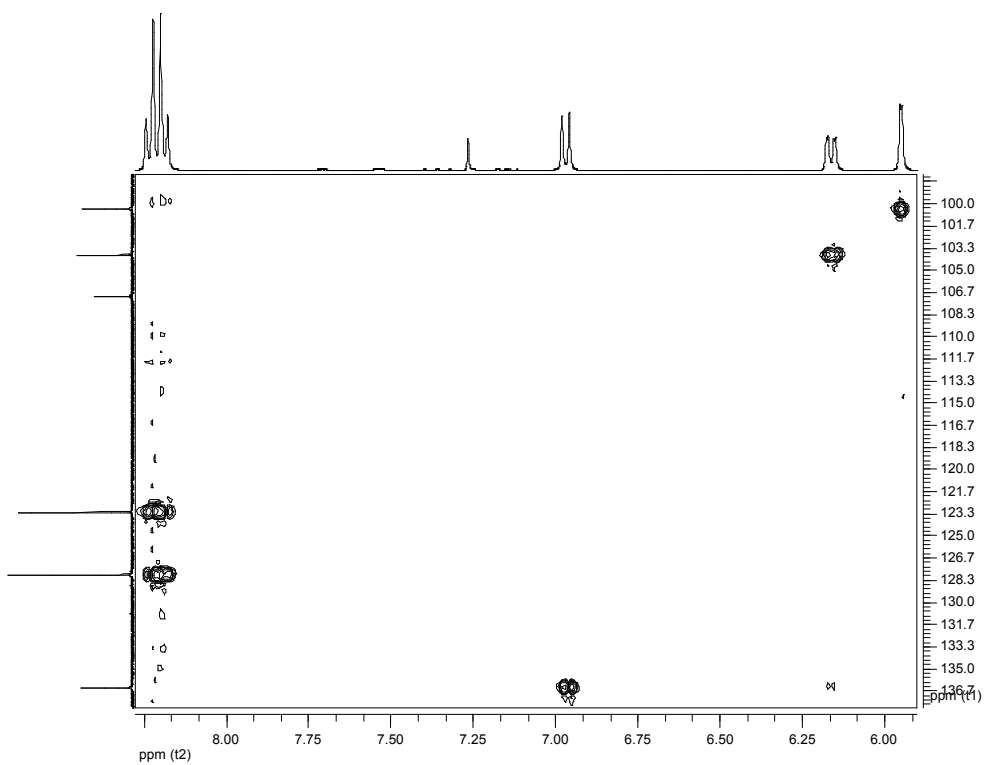




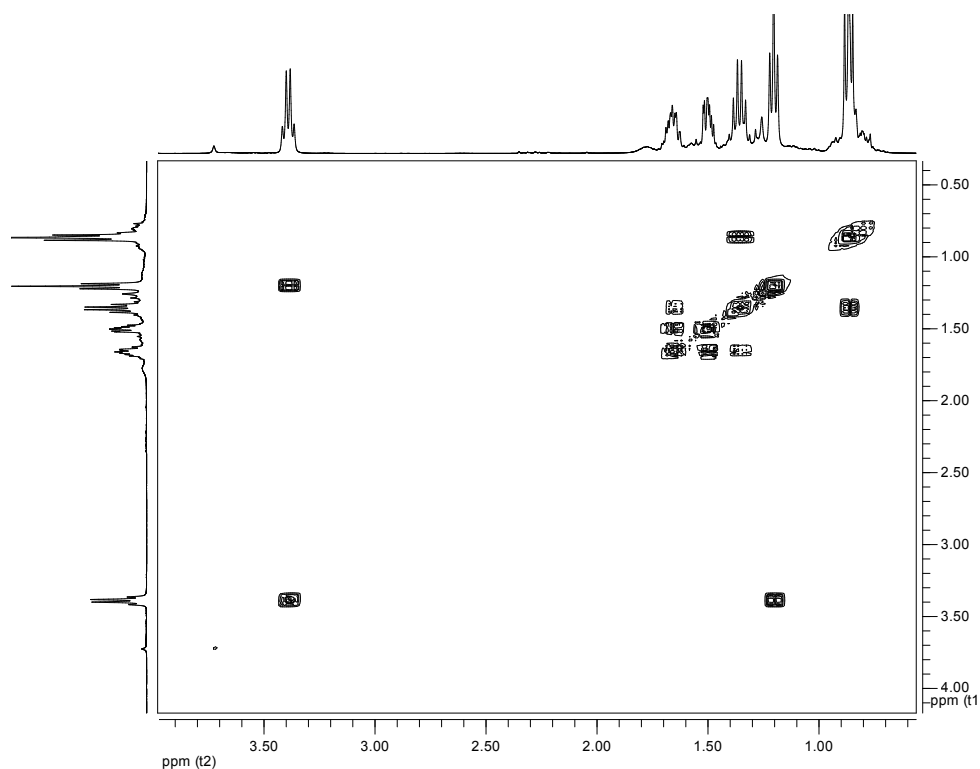
**Fig. S17.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **5**.



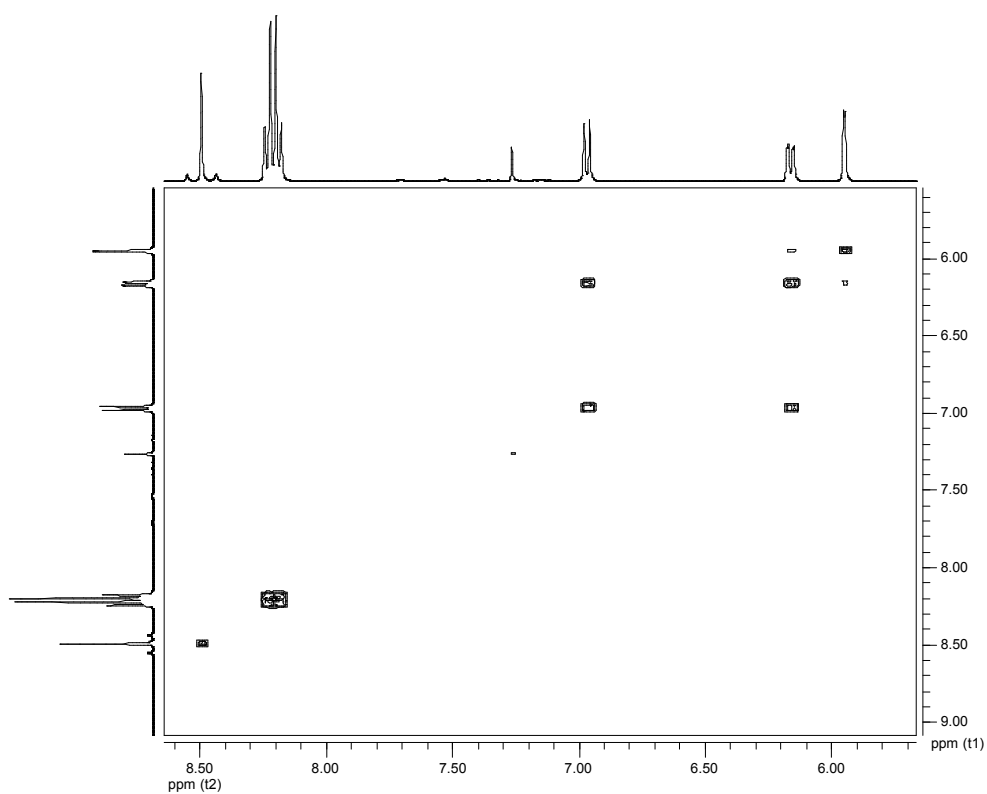
**Fig. S18.** HETCOR spectrum corresponding aliphatic region of compound **5**.



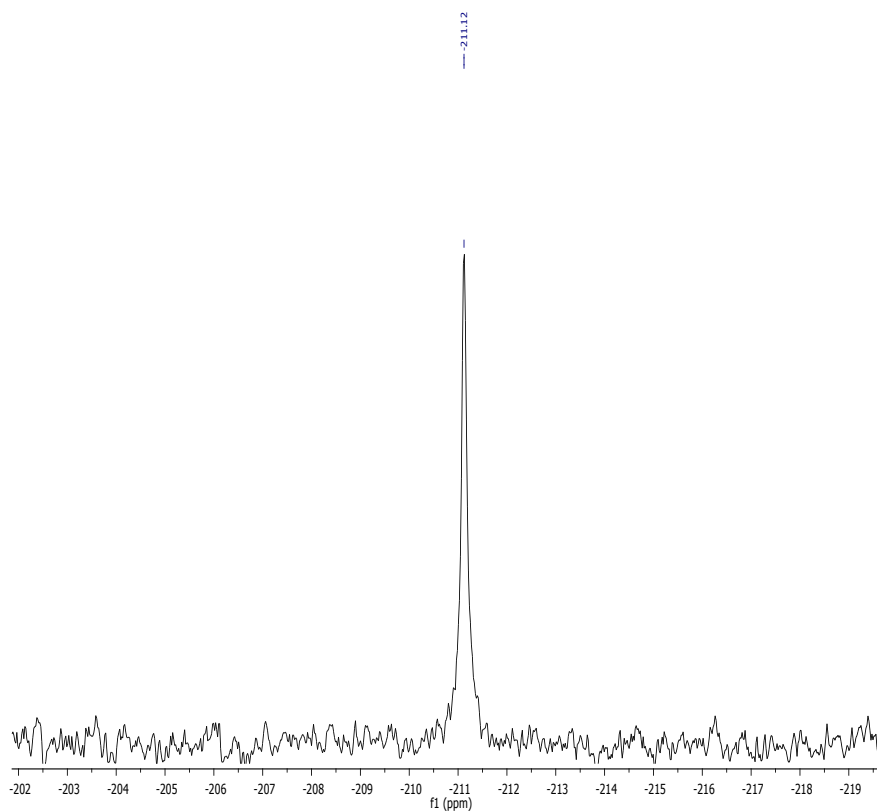
**Fig. S19.** HETCOR spectrum corresponding aromatic region of compound **5**.



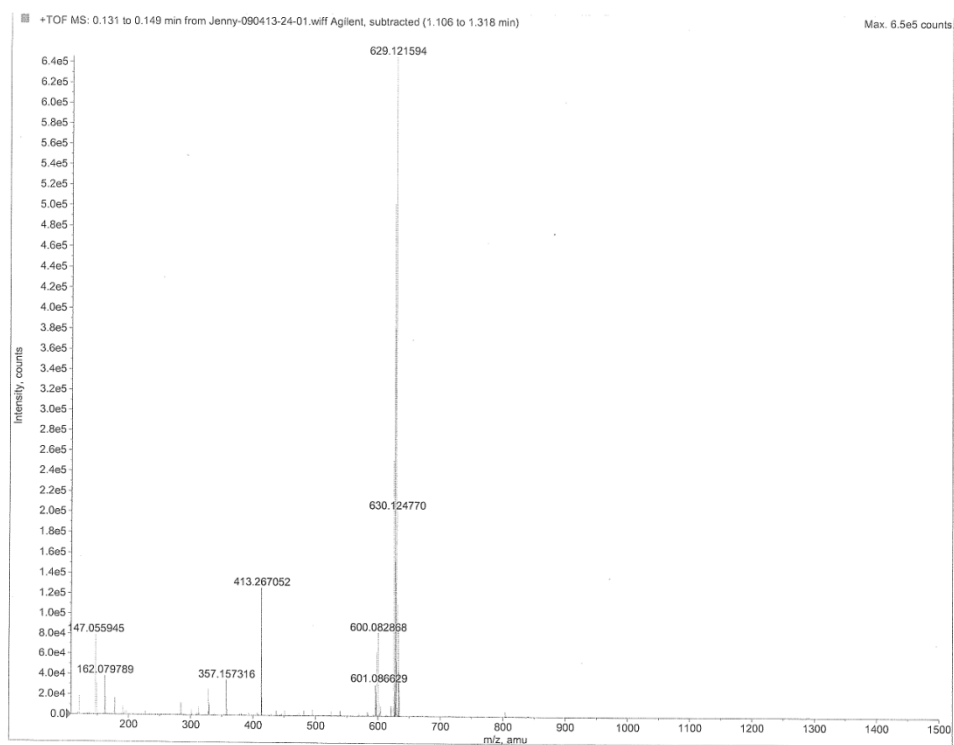
**Fig. S20.** COSY spectrum corresponding aliphatic region of compound **5**.



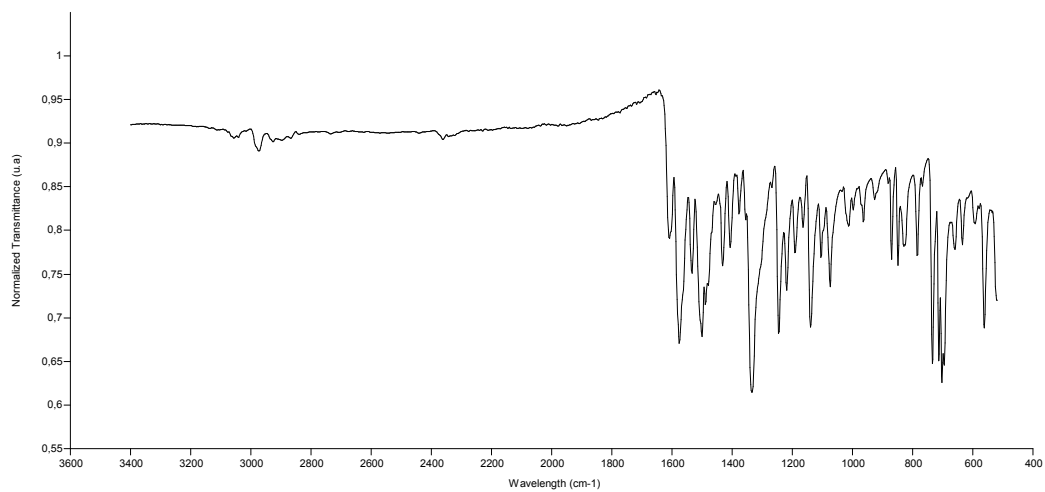
**Fig. S21.** COSY spectrum corresponding aromatic region of compound **5**.



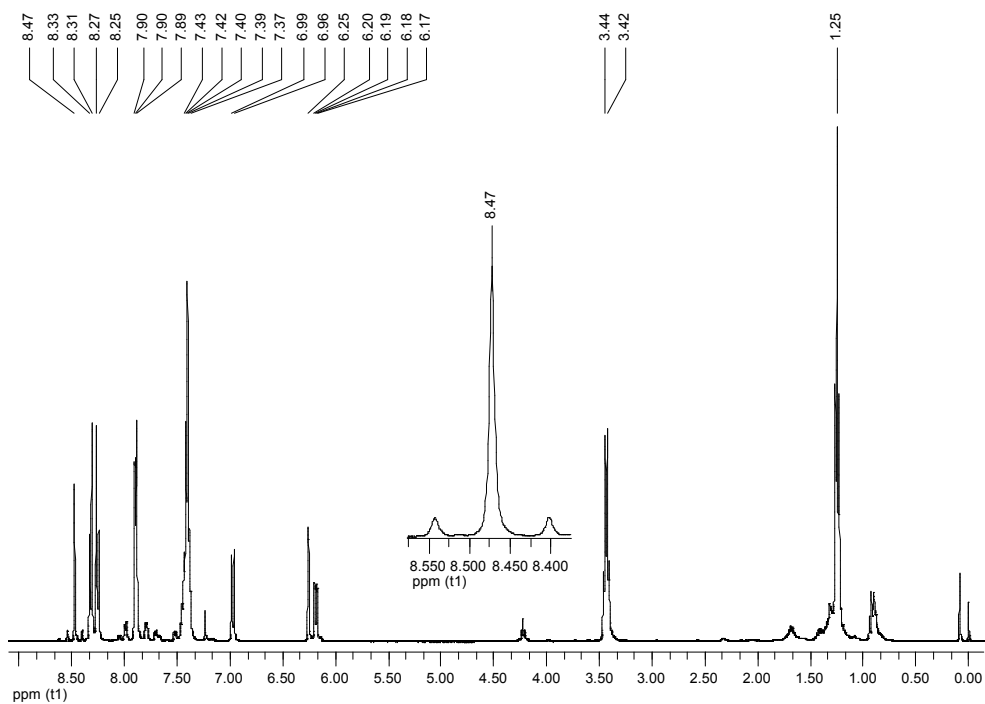
**Fig. S22.** <sup>119</sup>Sn NMR spectrum of compound **5**.



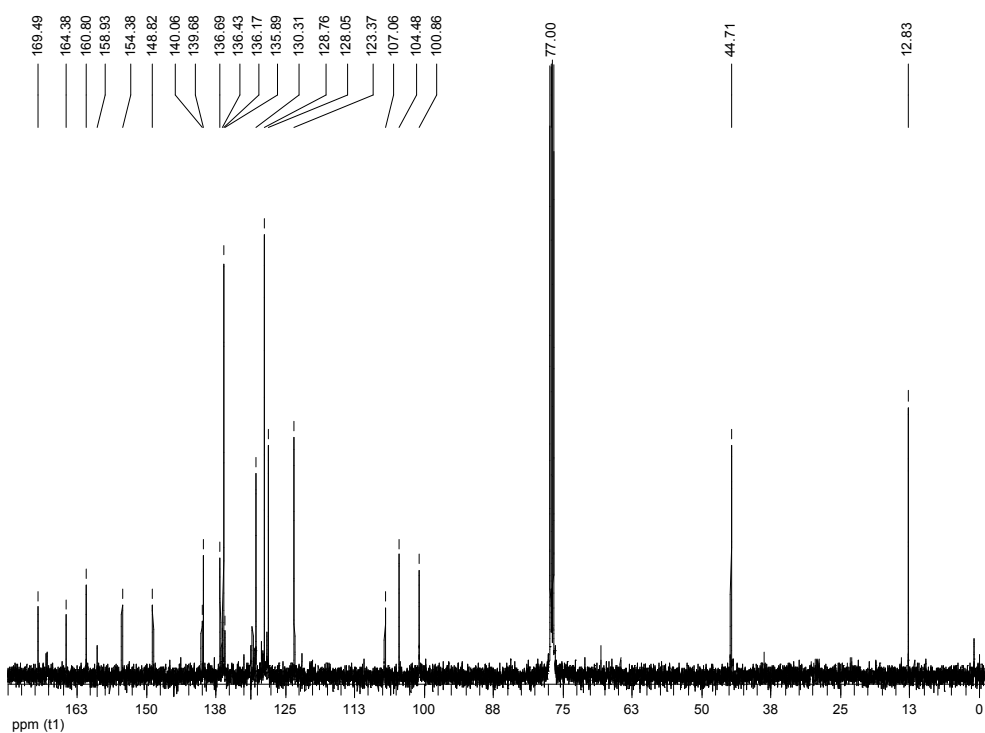
**Fig. S23.** Mass spectrum of compound **6**.



**Fig. S24.** Infrared spectrum of compound **6**.



**Fig. S25.**  $^1\text{H}$ -NMR spectrum of compound **6**.



**Fig. S26.**  $^{13}\text{C}\{^1\text{H}\}$ -NMR spectrum of compound **6**.

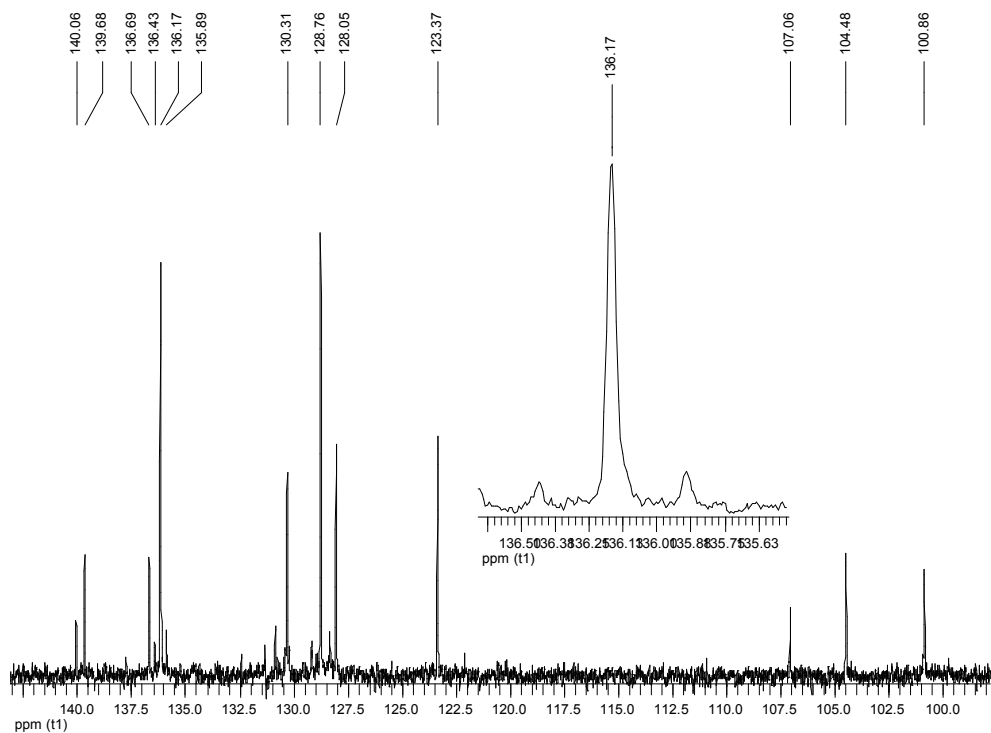


Fig. S27.  $^{13}\text{C}\{^1\text{H}\}$ -NMR spectrum corresponding aromatic region of compound 6.

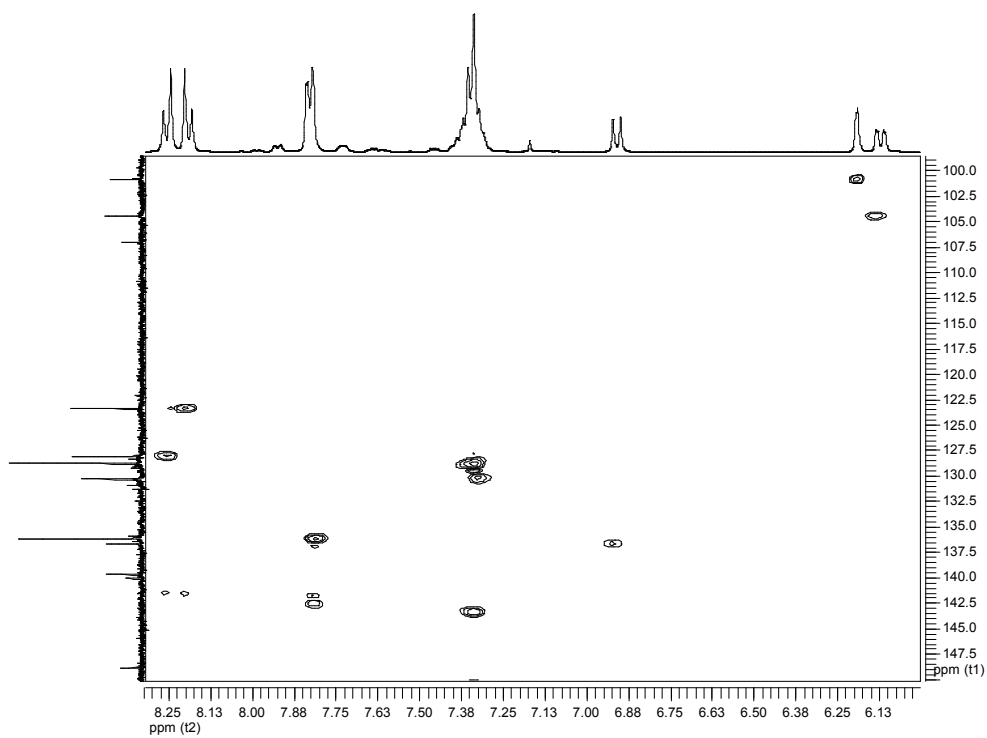
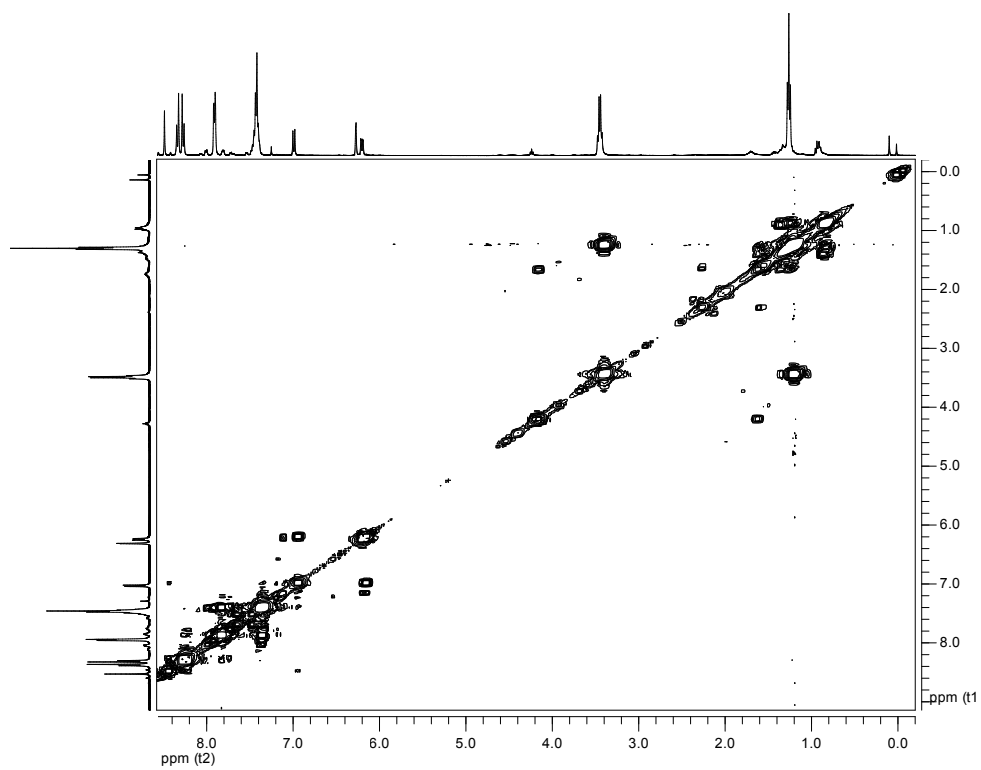
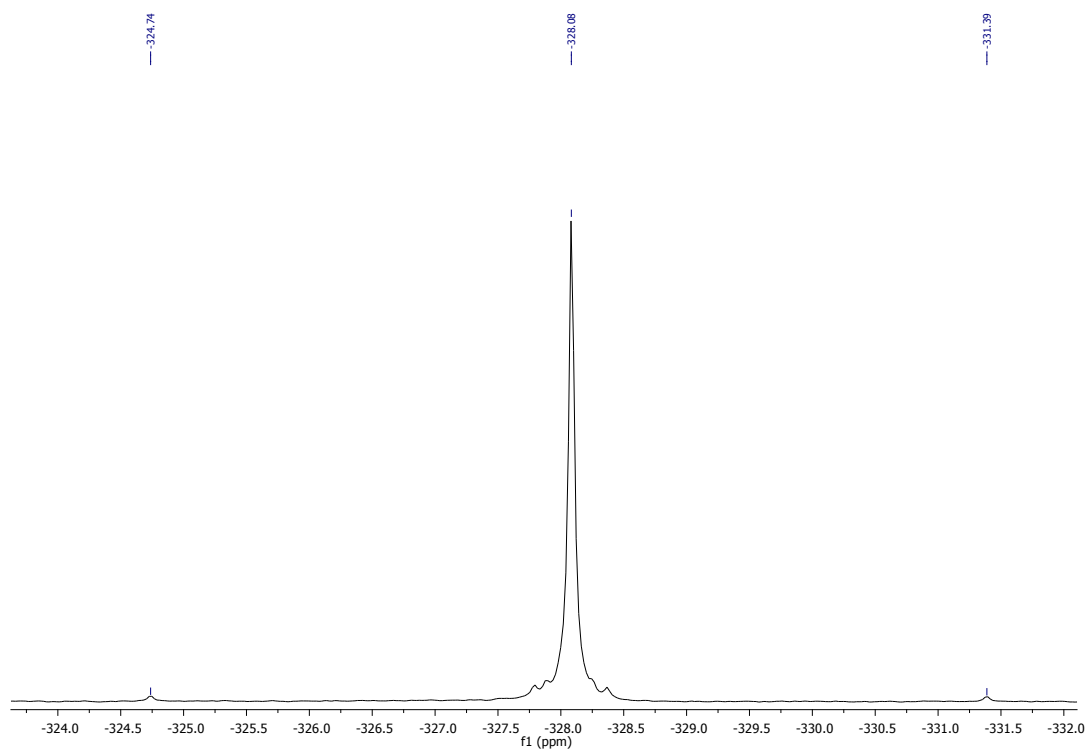


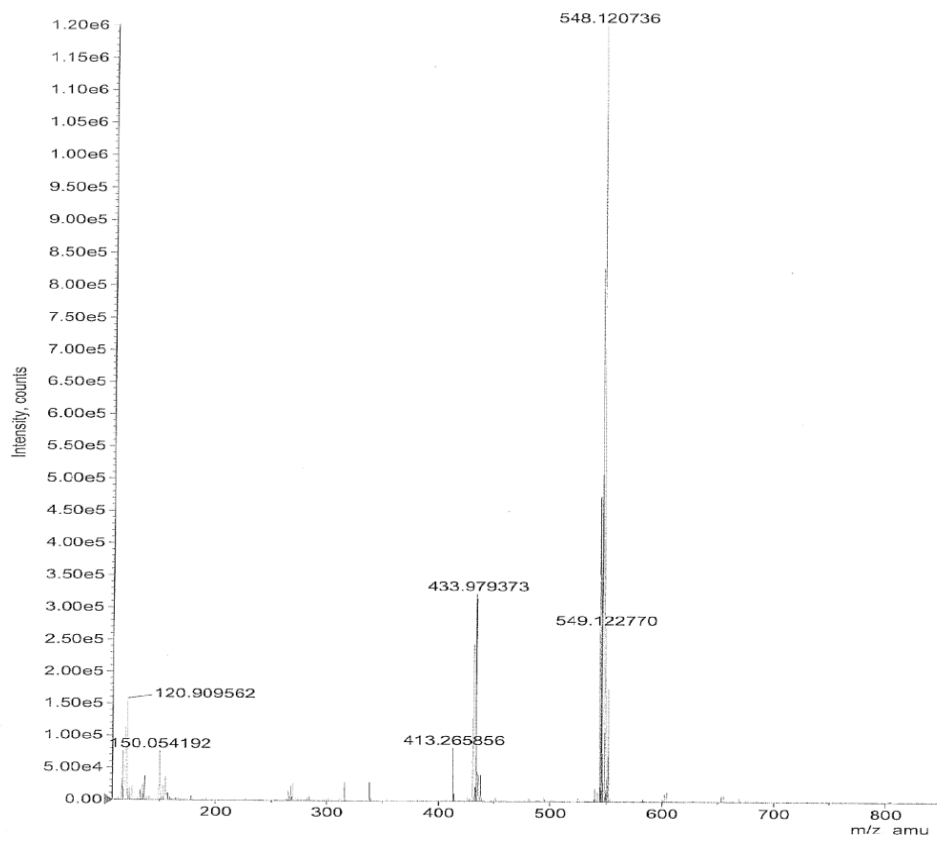
Fig. S28. HETCOR spectrum corresponding aromatic region of compound 6.



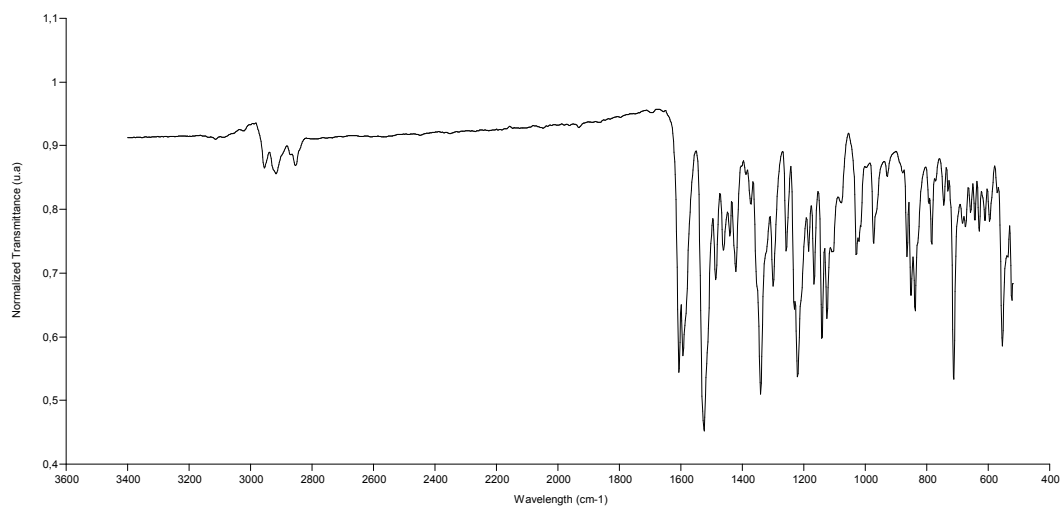
**Fig. S29.** COSY spectrum corresponding aromatic and aliphatic regions of **6**.



**Fig. S30.** <sup>119</sup>Sn NMR spectrum of compound **6**.

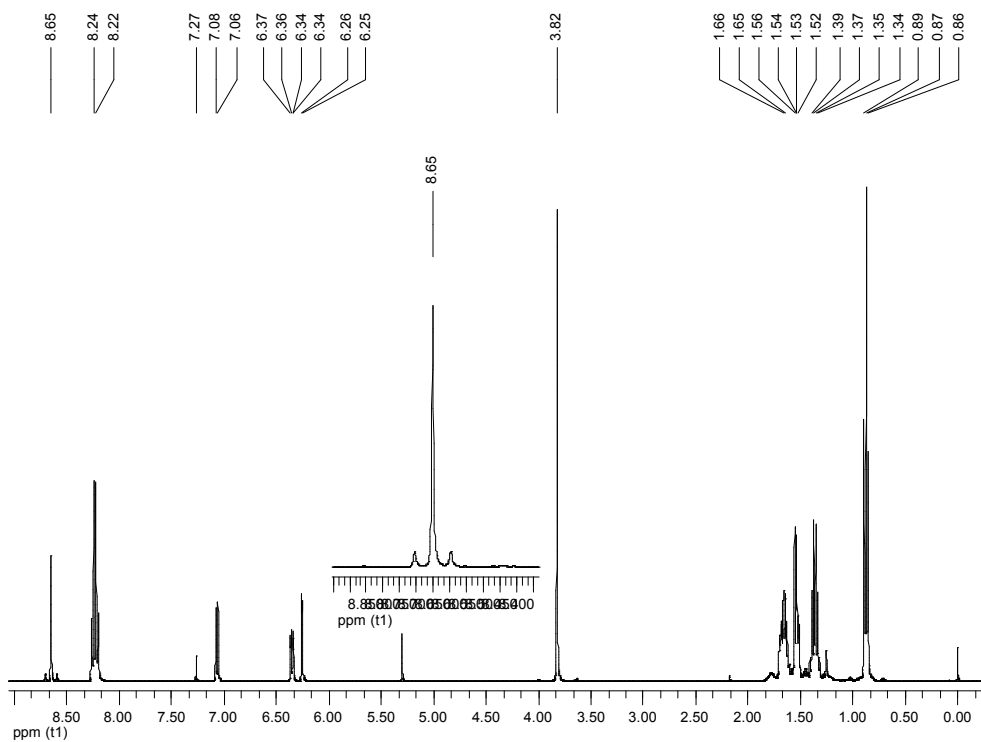


**Fig. S31.** Mass spectrum of compound 7.

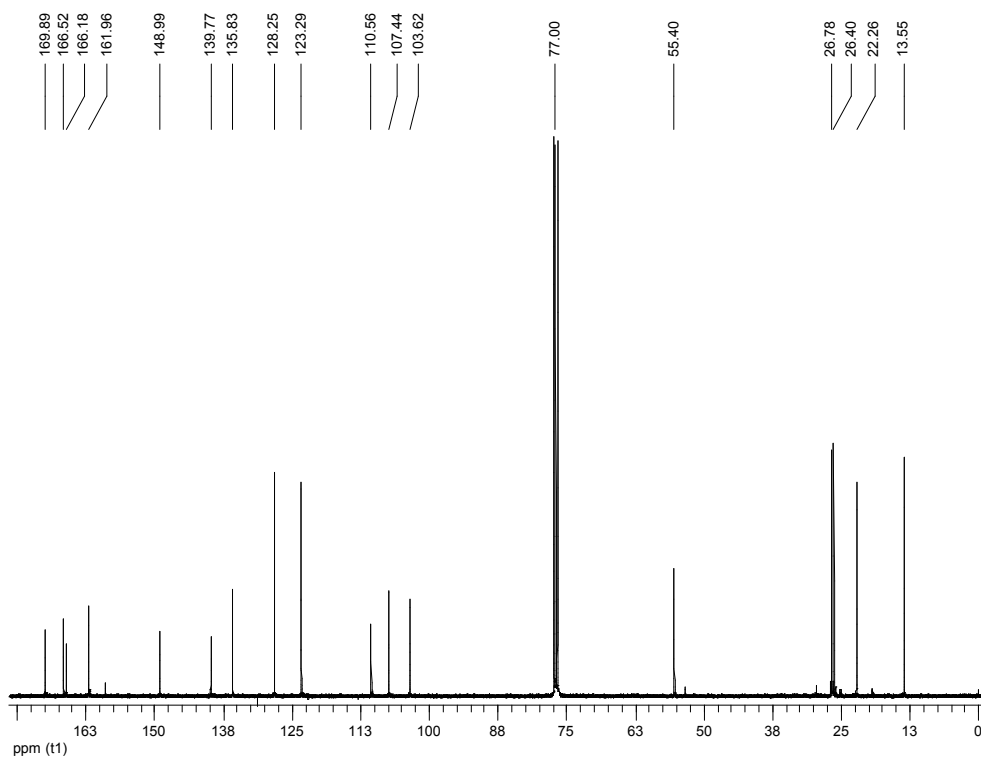


**Fig. S32.** Infrared spectrum of compound 7.

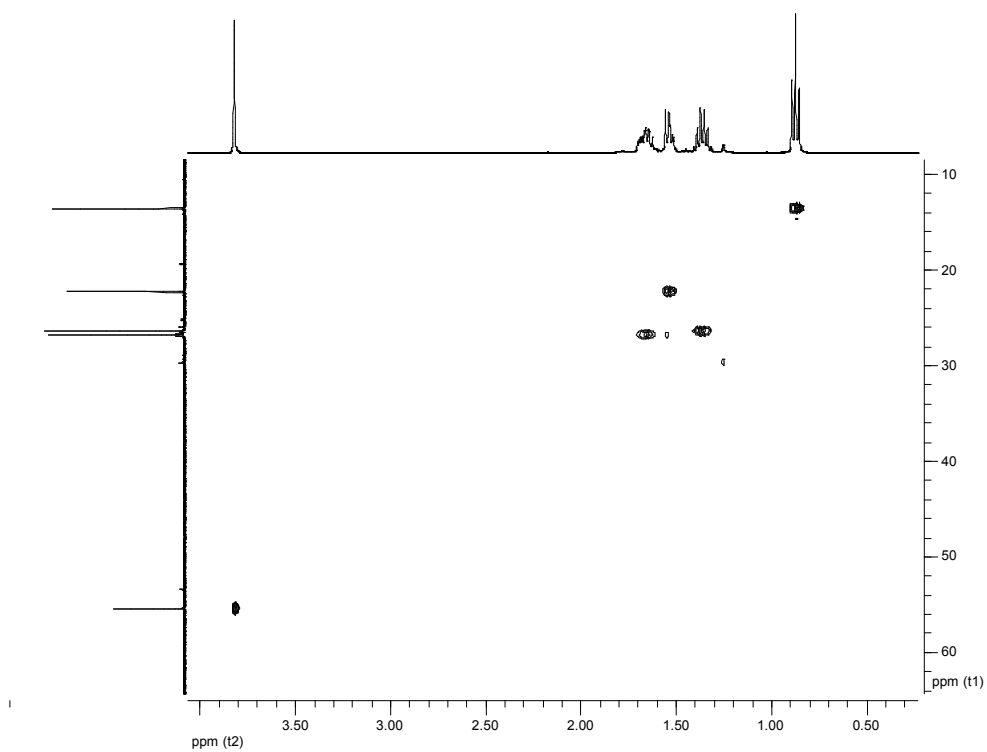




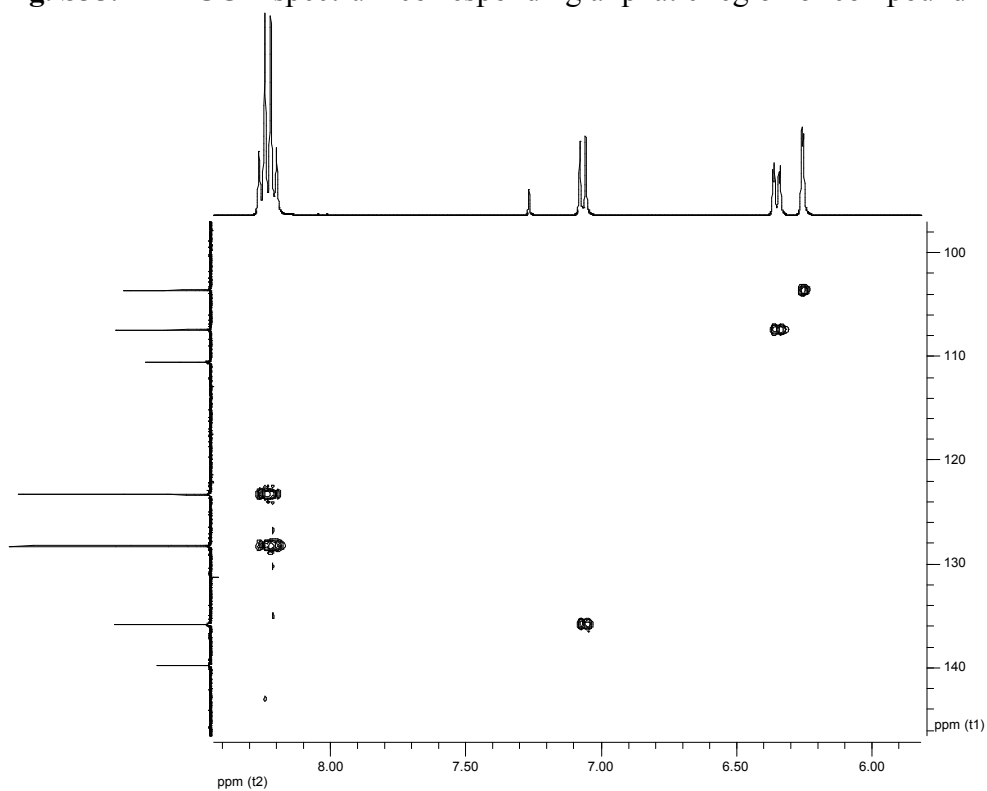
**Fig. S33.**  $^1\text{H}$  NMR spectrum of compound 7.



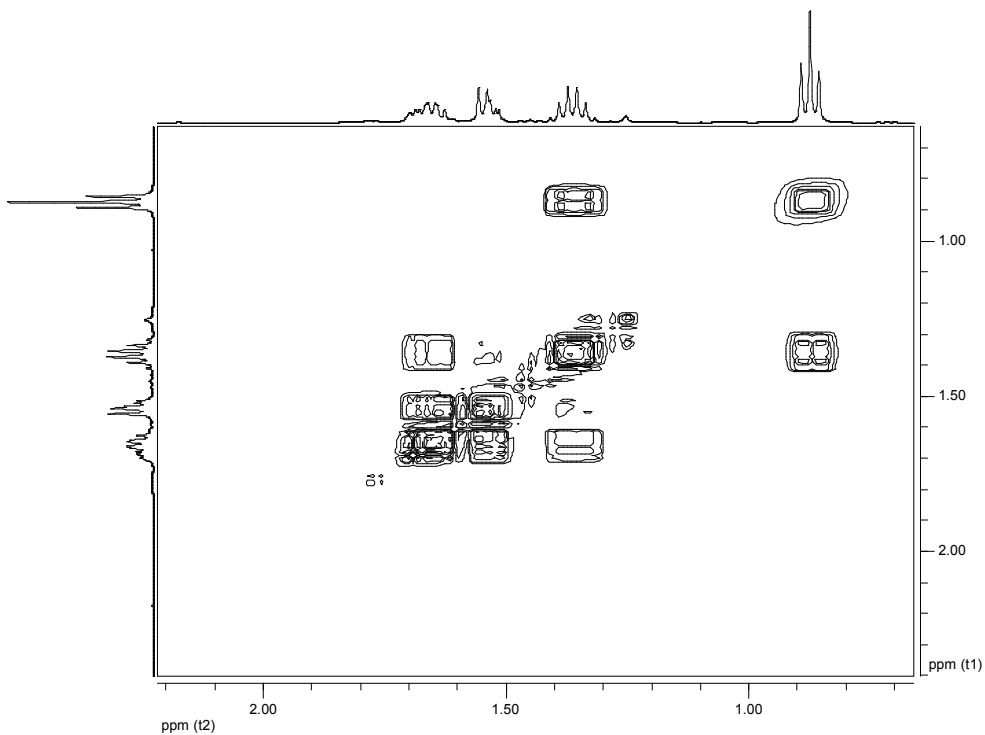
**Fig. S34.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound 7.



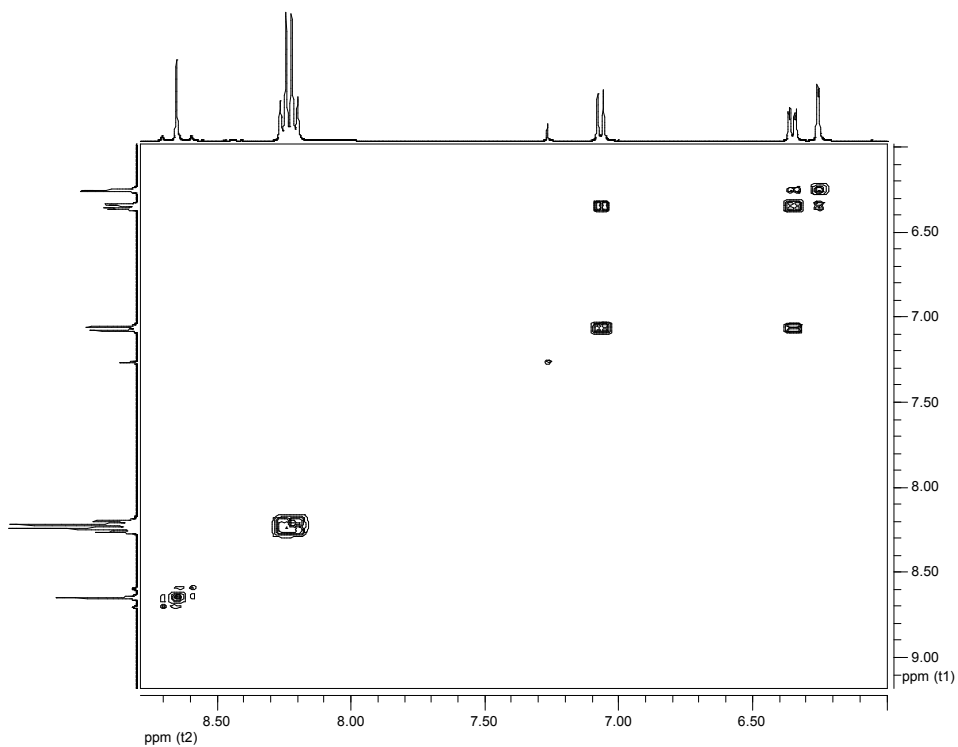
**Fig. S35.** HETCOR spectrum corresponding aliphatic region of compound **7**.



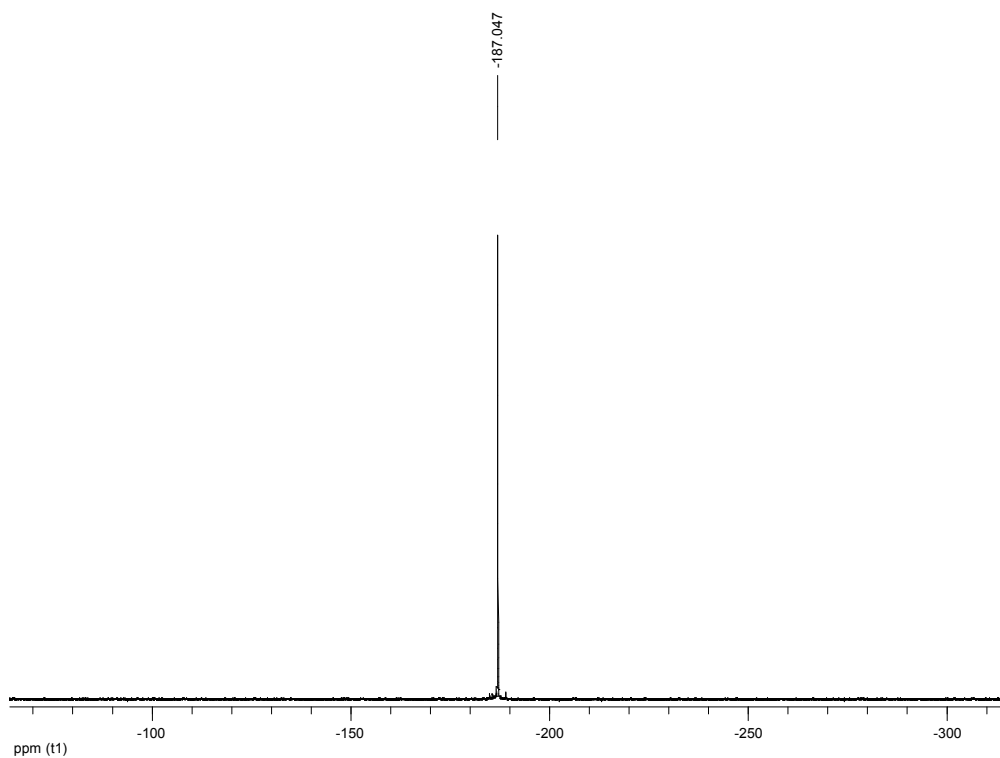
**Fig. S36.** HETCOR spectrum corresponding aromatic region of compound **7**.



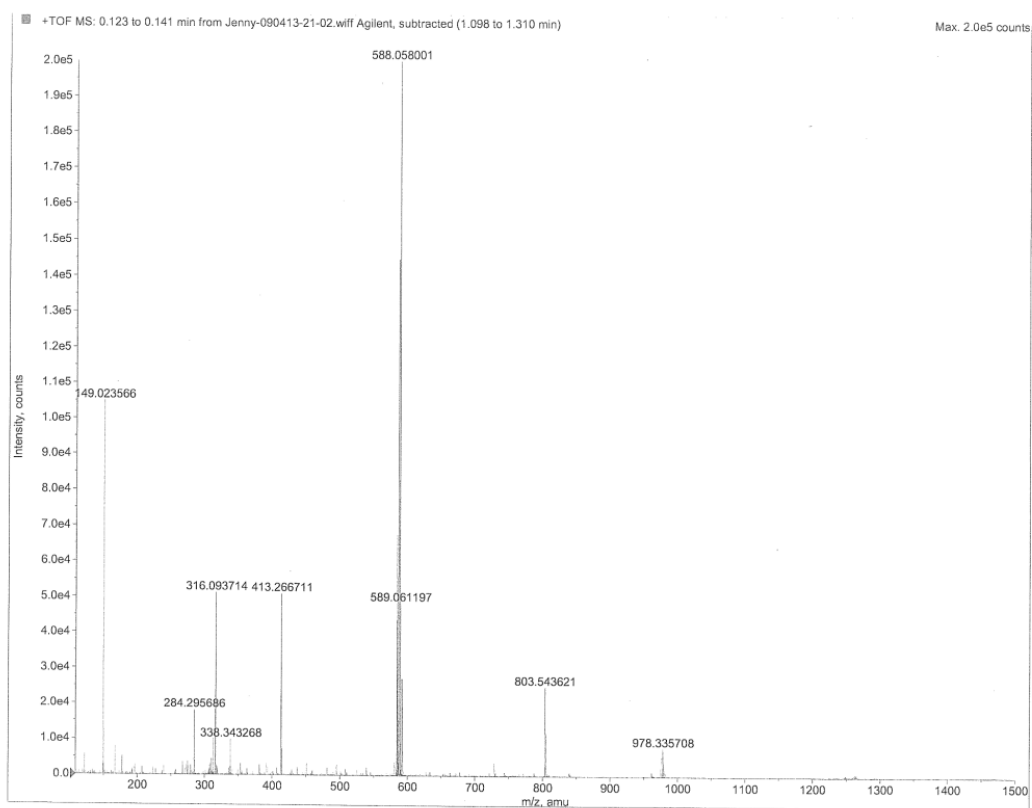
**Fig. S37.** COSY spectrum corresponding aliphatic region of compound 7.



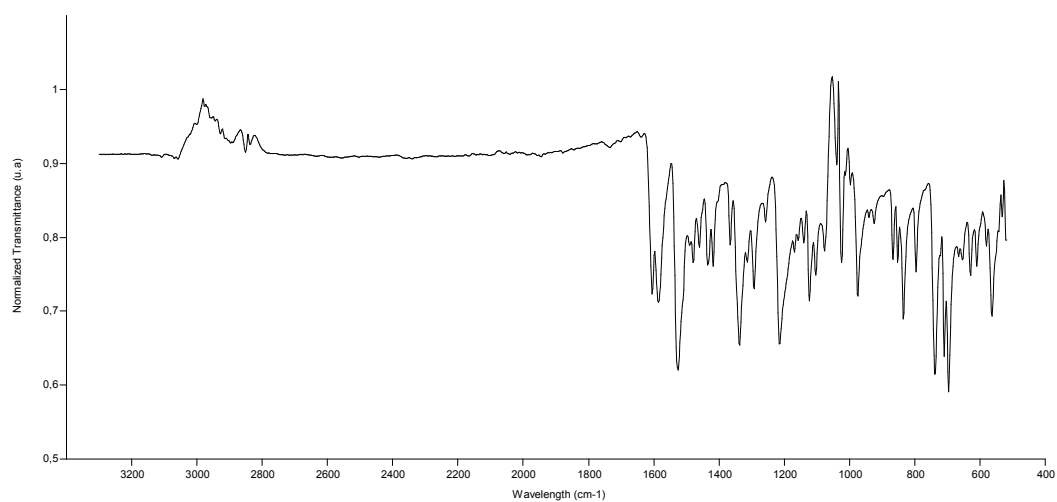
**Fig. S38.** COSY spectrum corresponding aromatic region of compound 7.



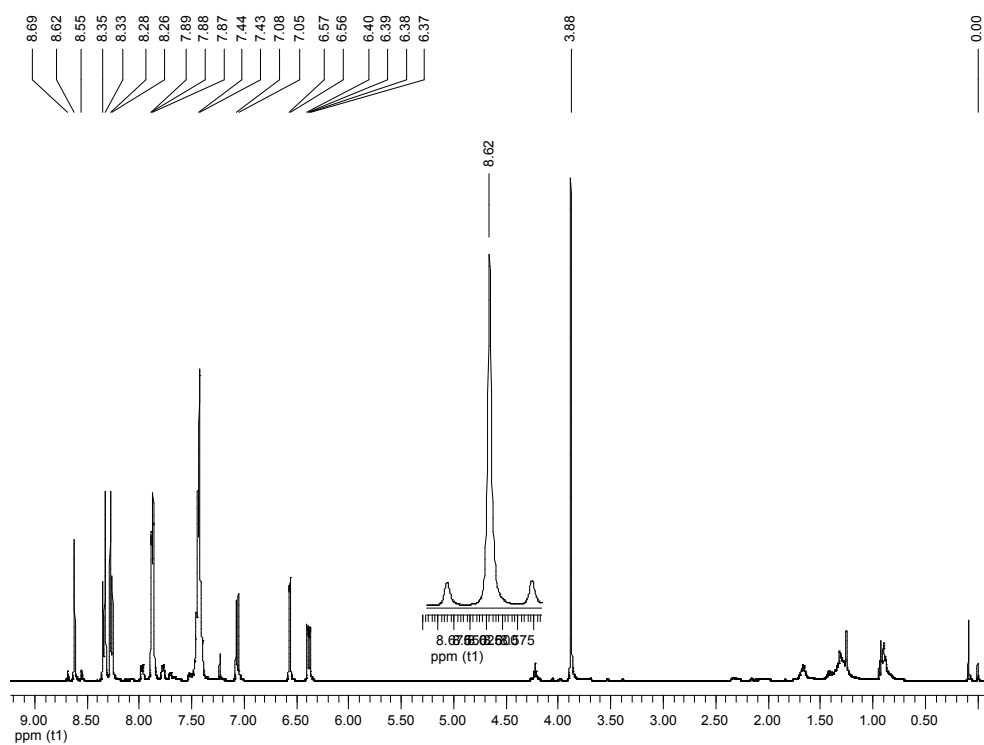
**Fig. S39.**  $^{119}\text{Sn}$  NMR spectrum of compound **7**.



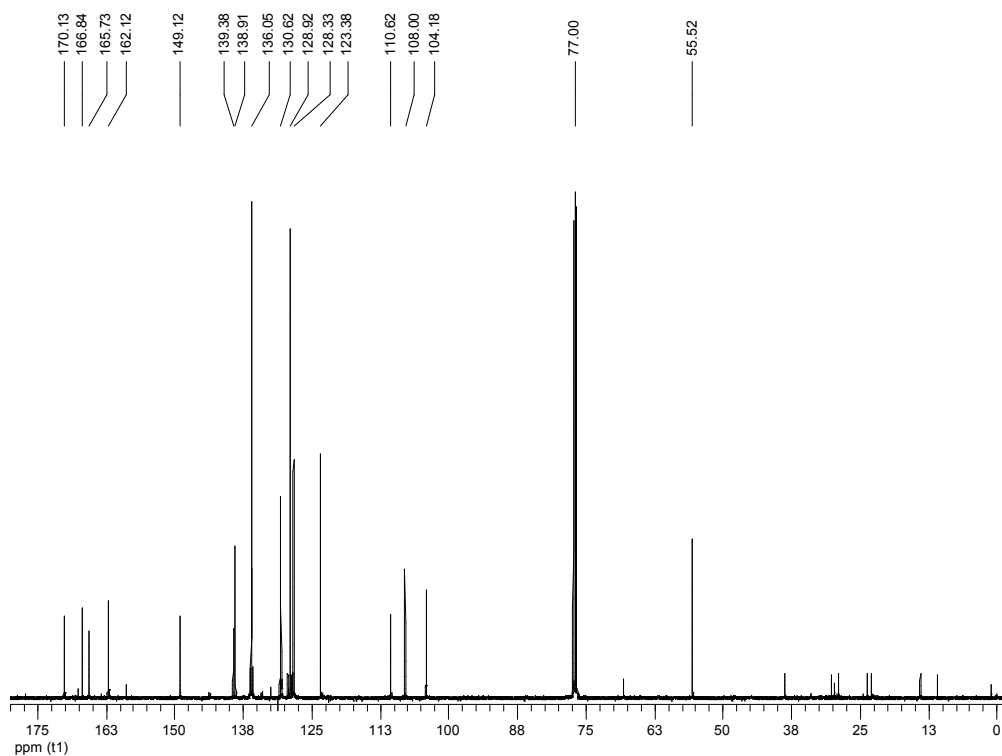
**Fig. S40.** Mass spectrum of compound **8**.



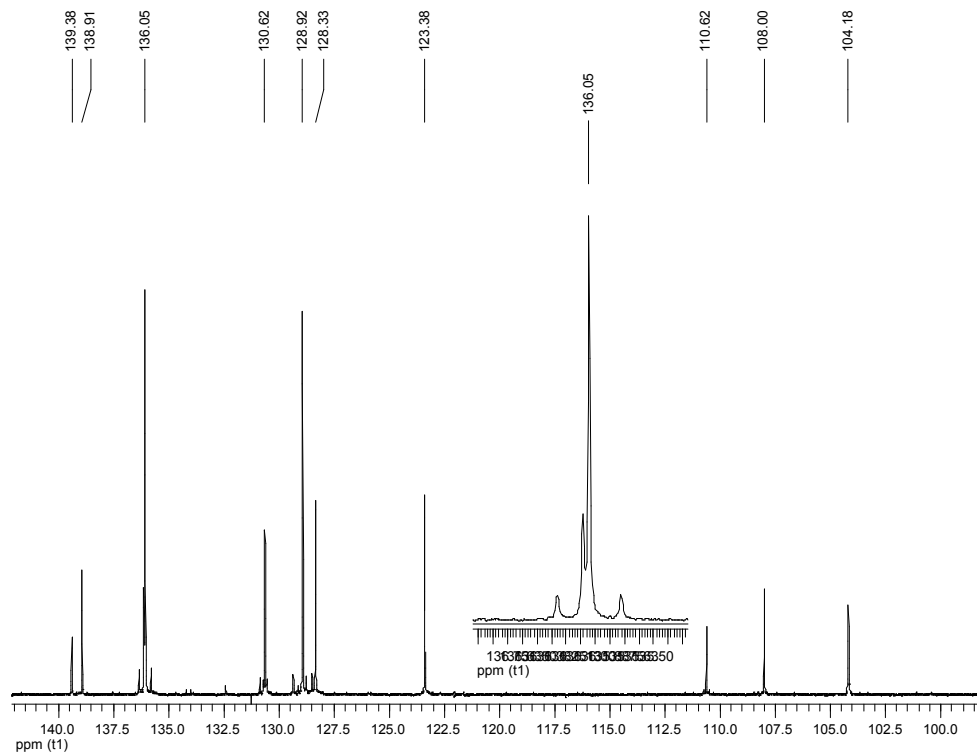
**Fig. S41.** Infrared spectrum of compound **8**.



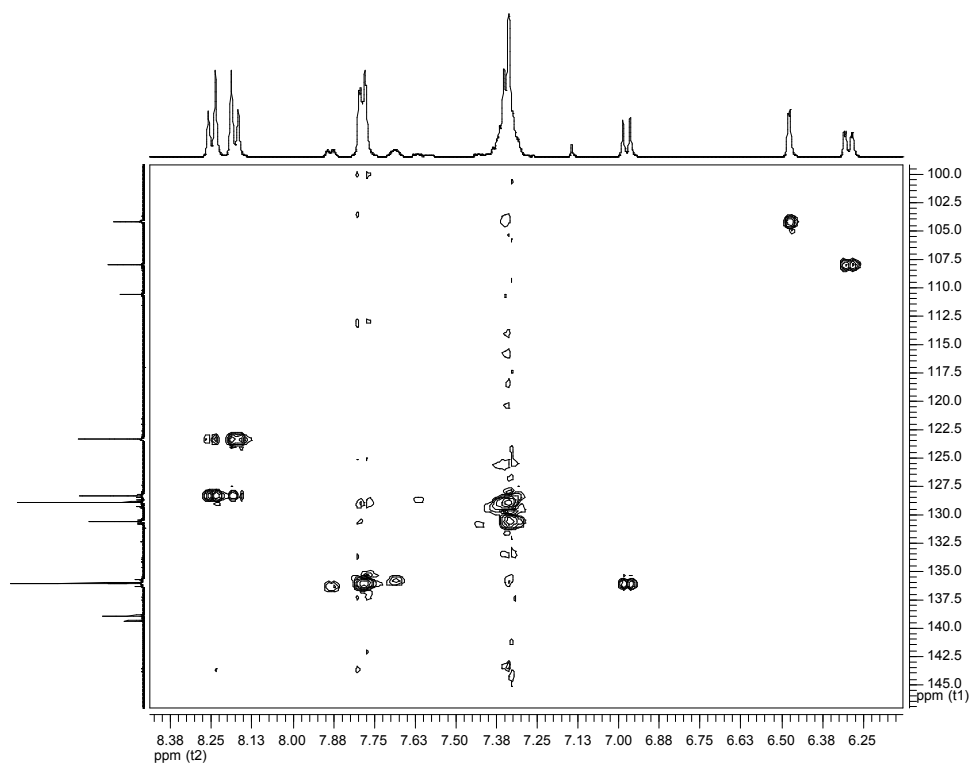
**Fig. S42.** <sup>1</sup>H NMR spectrum of compound **8**.



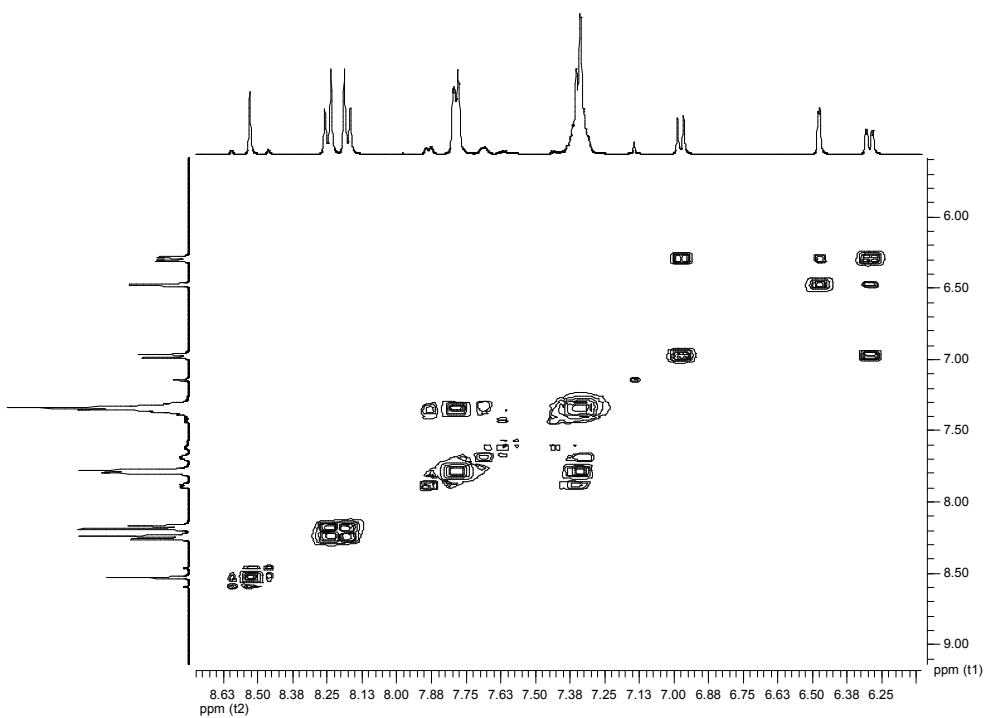
**Fig. S43.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound **8**.



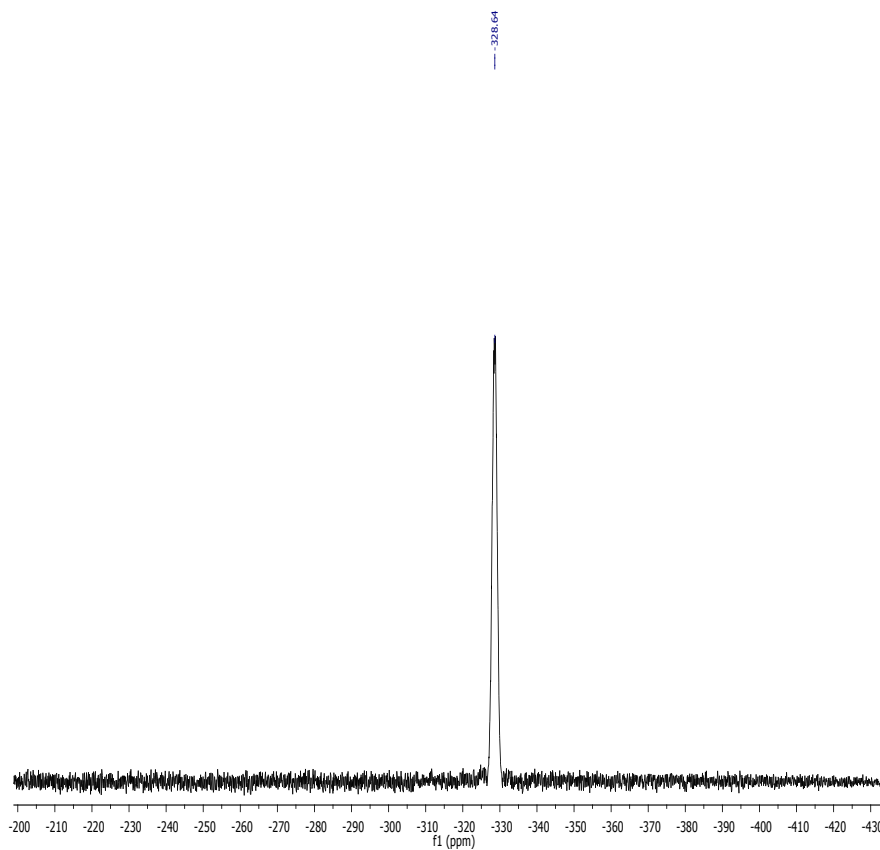
**Fig. S44.**  $^{13}\text{C}\{^1\text{H}\}$ -NMR spectrum corresponding aromatic region of compound **8**.



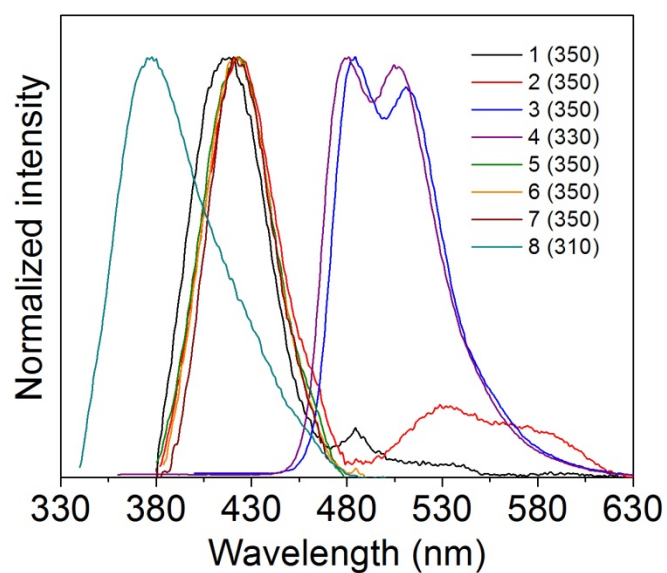
**Fig. S45.** HETCOR spectrum corresponding aromatic region of compound **8**.



**Fig. S46.** COSY spectrum corresponding aromatic region of compound **8**.

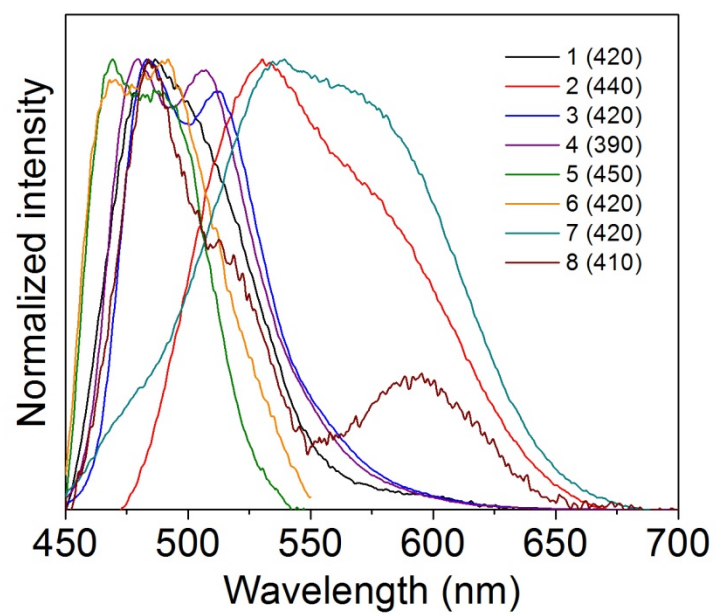


**Fig. S47.**  $^{119}\text{Sn}$  NMR spectrum of compound **8**.



**Fig. S48.** Fluorescence spectra of tin compounds by exciting at the higher energy peak (specific excitation wavelength are indicated in the Figure)





**Fig. S49.** Fluorescence spectra of tin compounds by exciting at the lower energy peak (specific excitation wavelength are indicated in the Figure)