

**Supporting Information for:**

**First Chiral Cp\*-Functionalised N-Heterocyclic Carbene and its Coordination to Iridium. Study of the Catalytic Properties**

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**Figure S-1:**  $^1\text{H}$  NMR spectrum of **1...2**

**Figure S-2:**  $^{13}\text{C}$  NMR spectrum of **1...3**

**Figure S-3:**  $^1\text{H}$ - $^{13}\text{C}$  HMQC NMR spectrum of **1...4**

**Figure S-4:**  $^1\text{H}$ - $^1\text{H}$  COSY NMR spectrum of **1...5**

**Figure S-5:**  $^1\text{H}$  NMR spectrum of **2...6**

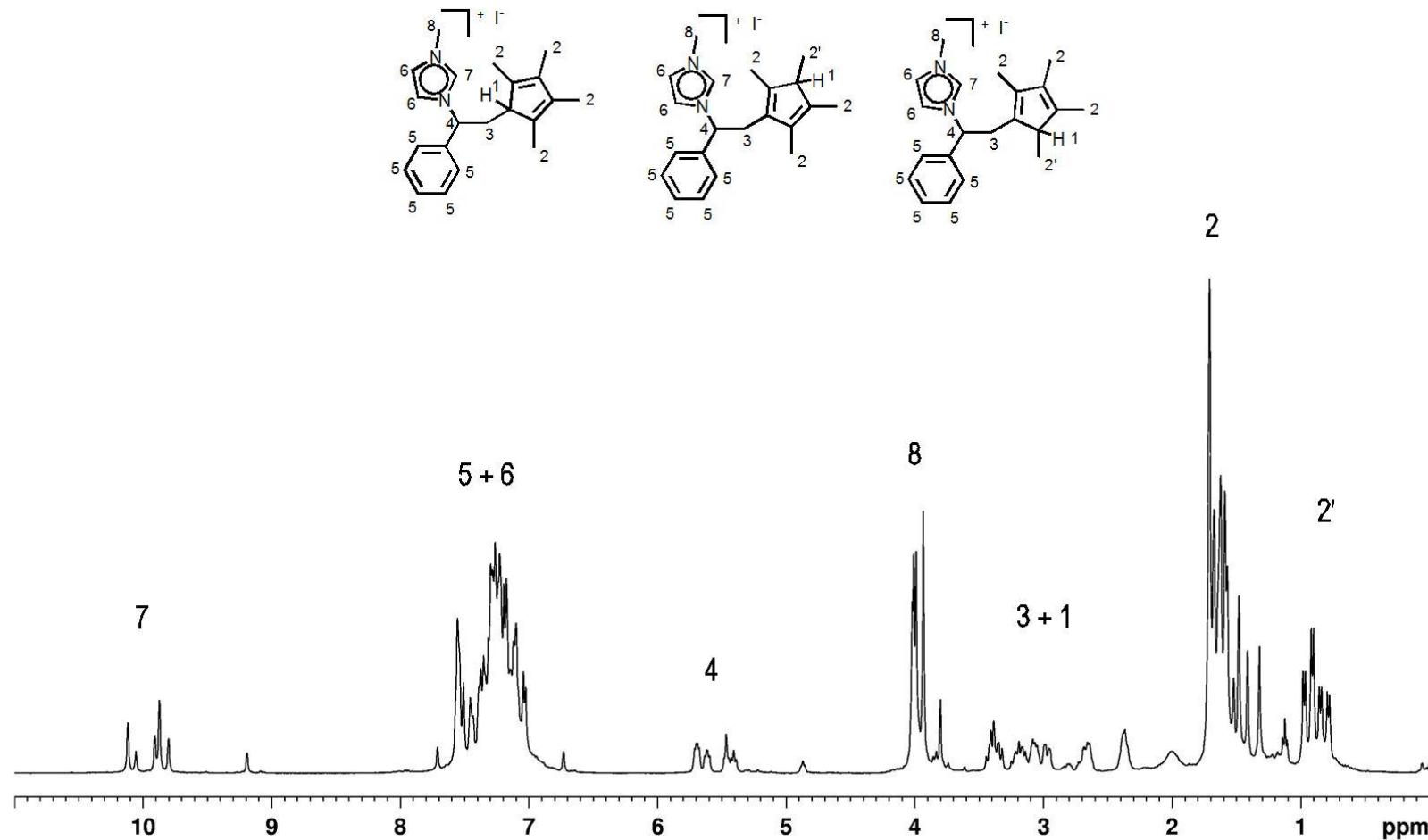
**Figure S-6:**  $^{13}\text{C}$  NMR spectrum of **2...7**

**Figure S-7:**  $^1\text{H}$ - $^{13}\text{C}$  HMQC NMR spectrum of **2...8**

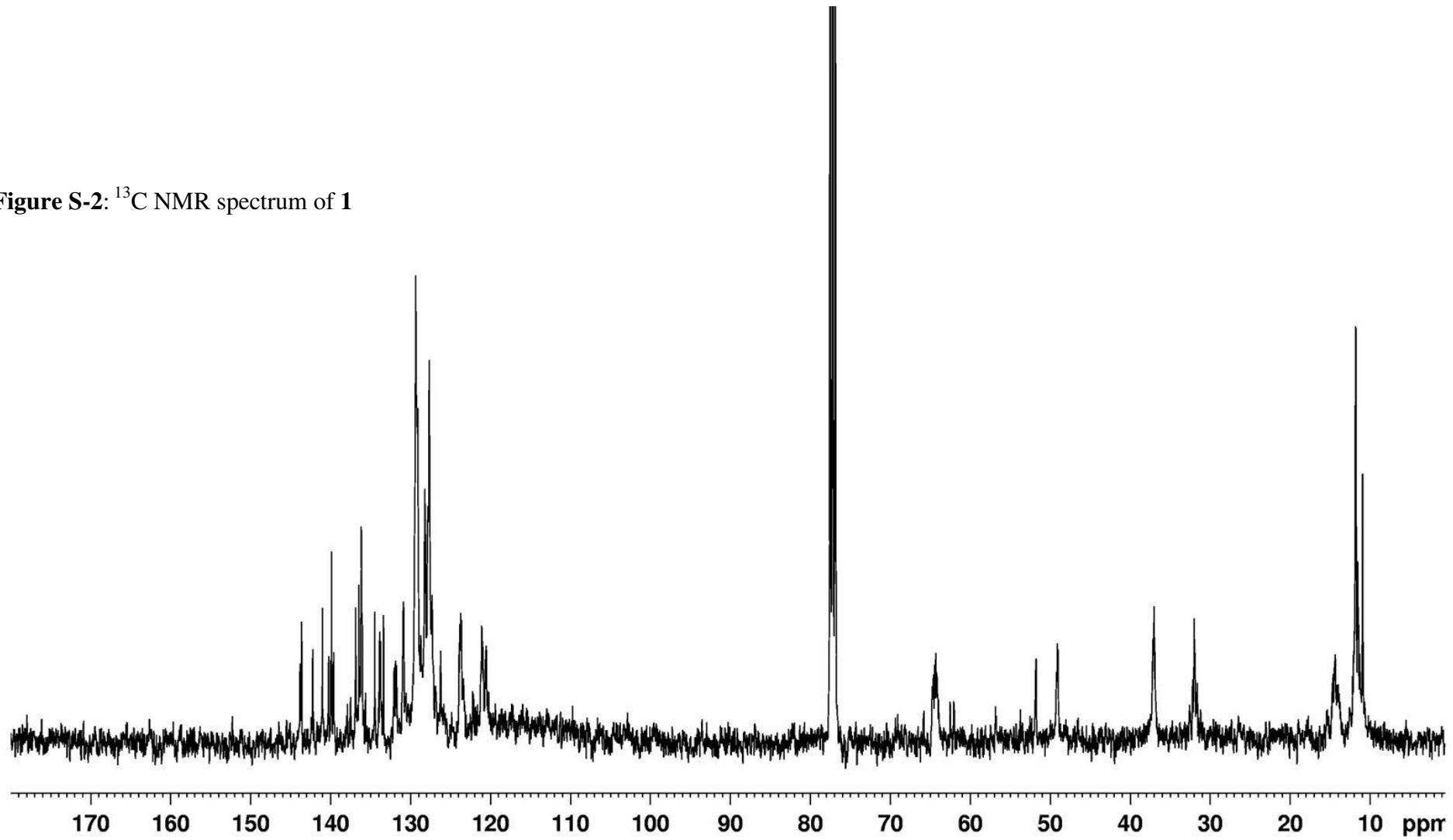
**Figure S-8:**  $^1\text{H}$ - $^{13}\text{C}$  HMBC NMR spectrum of **2...9**

**Figure S-9:**  $^1\text{H}$ - $^1\text{H}$  COSY NMR spectrum of **2...10**

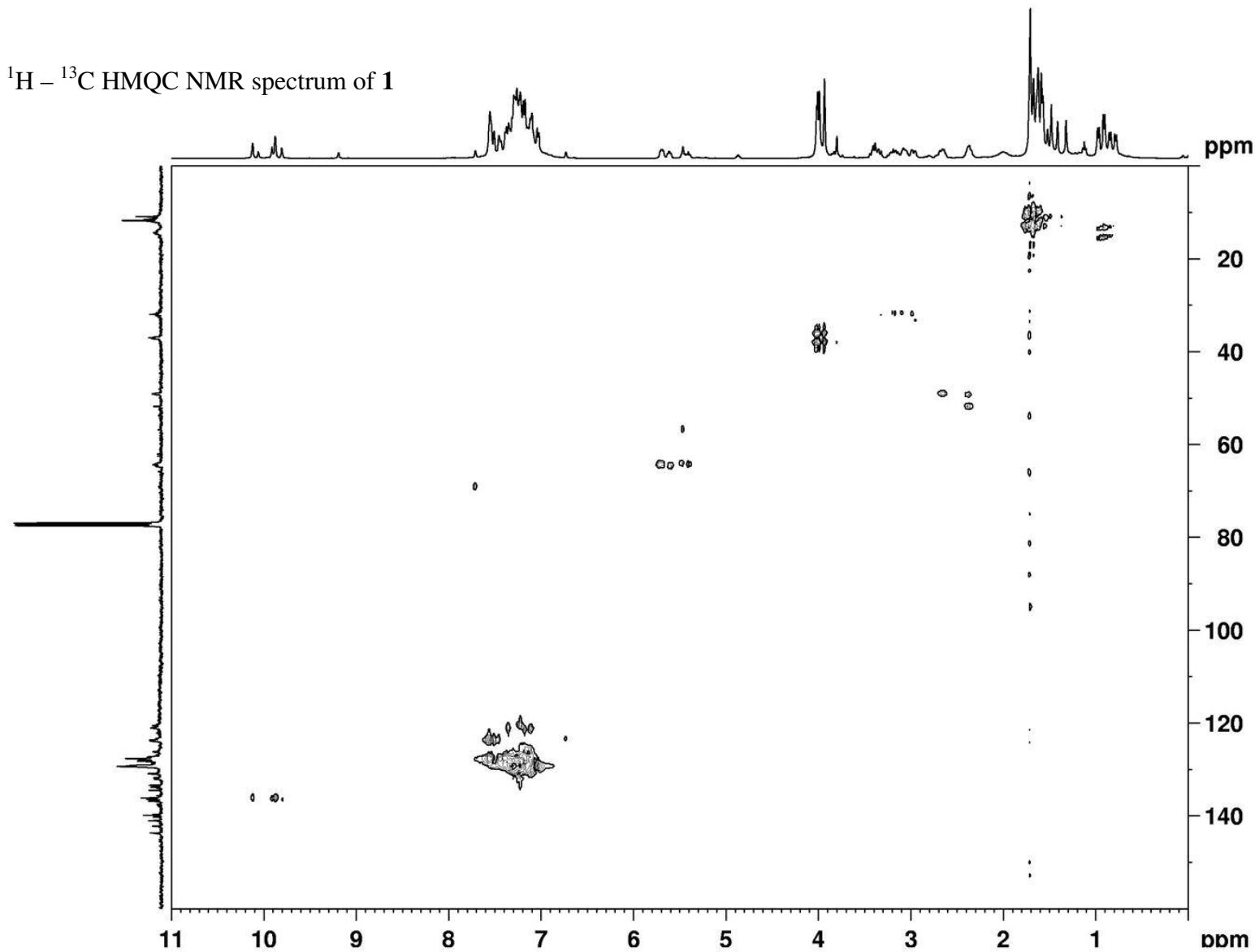
**Figure S-1:**  $^1\text{H}$  NMR spcetrum of **1**



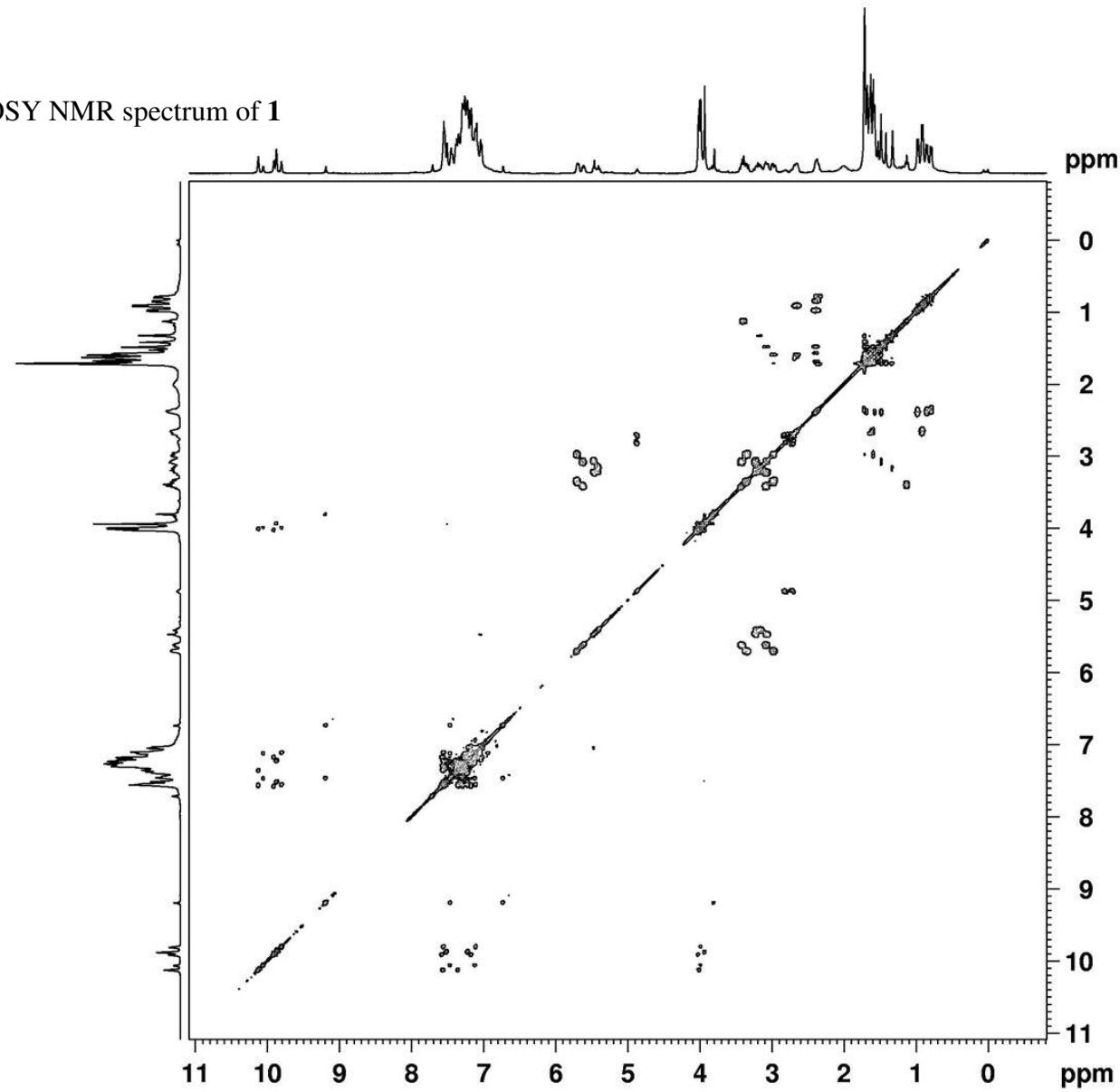
**Figure S-2:**  $^{13}\text{C}$  NMR spectrum of 1



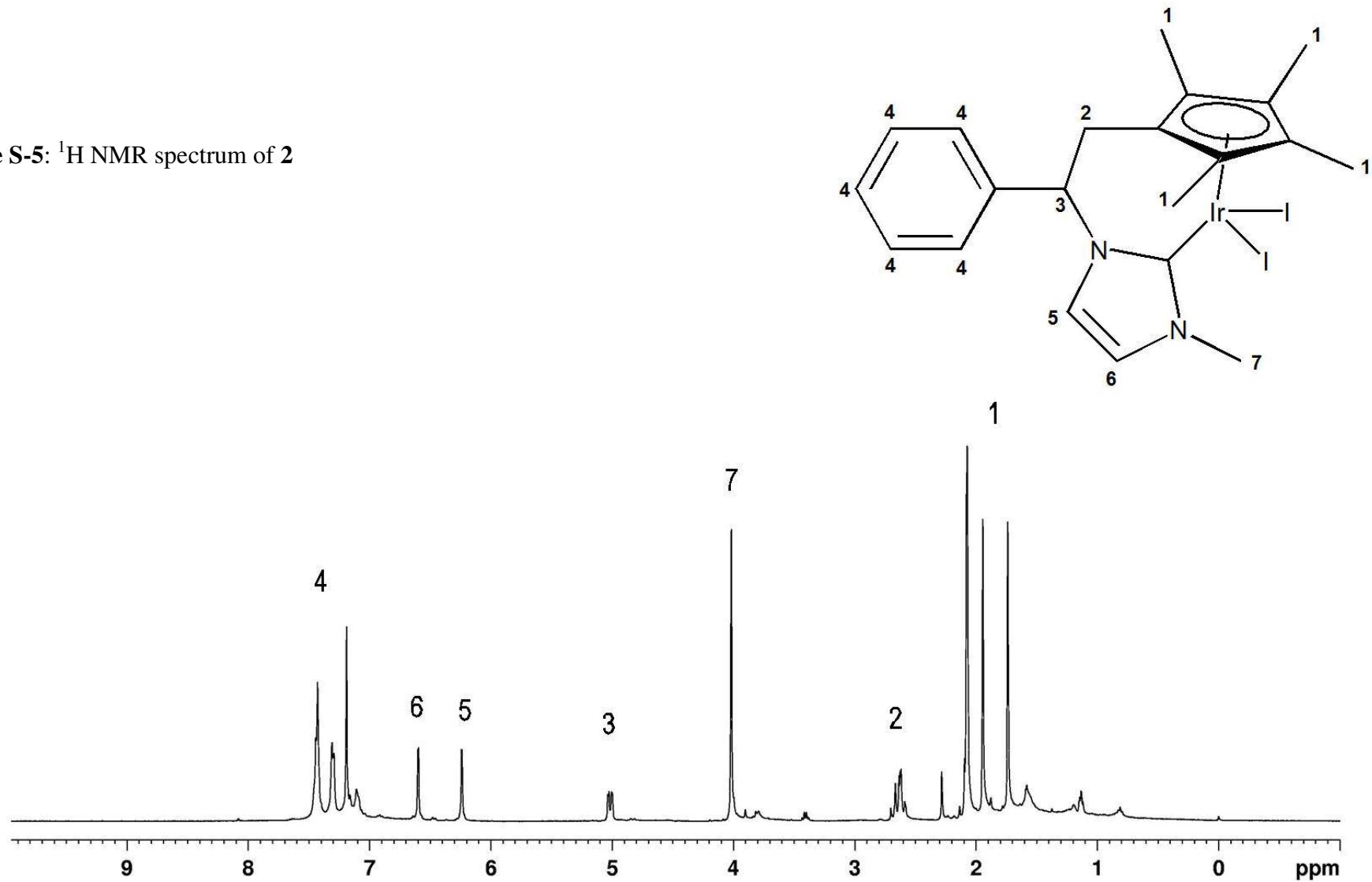
**Figure S-3:**  $^1\text{H} - ^{13}\text{C}$  HMQC NMR spectrum of **1**



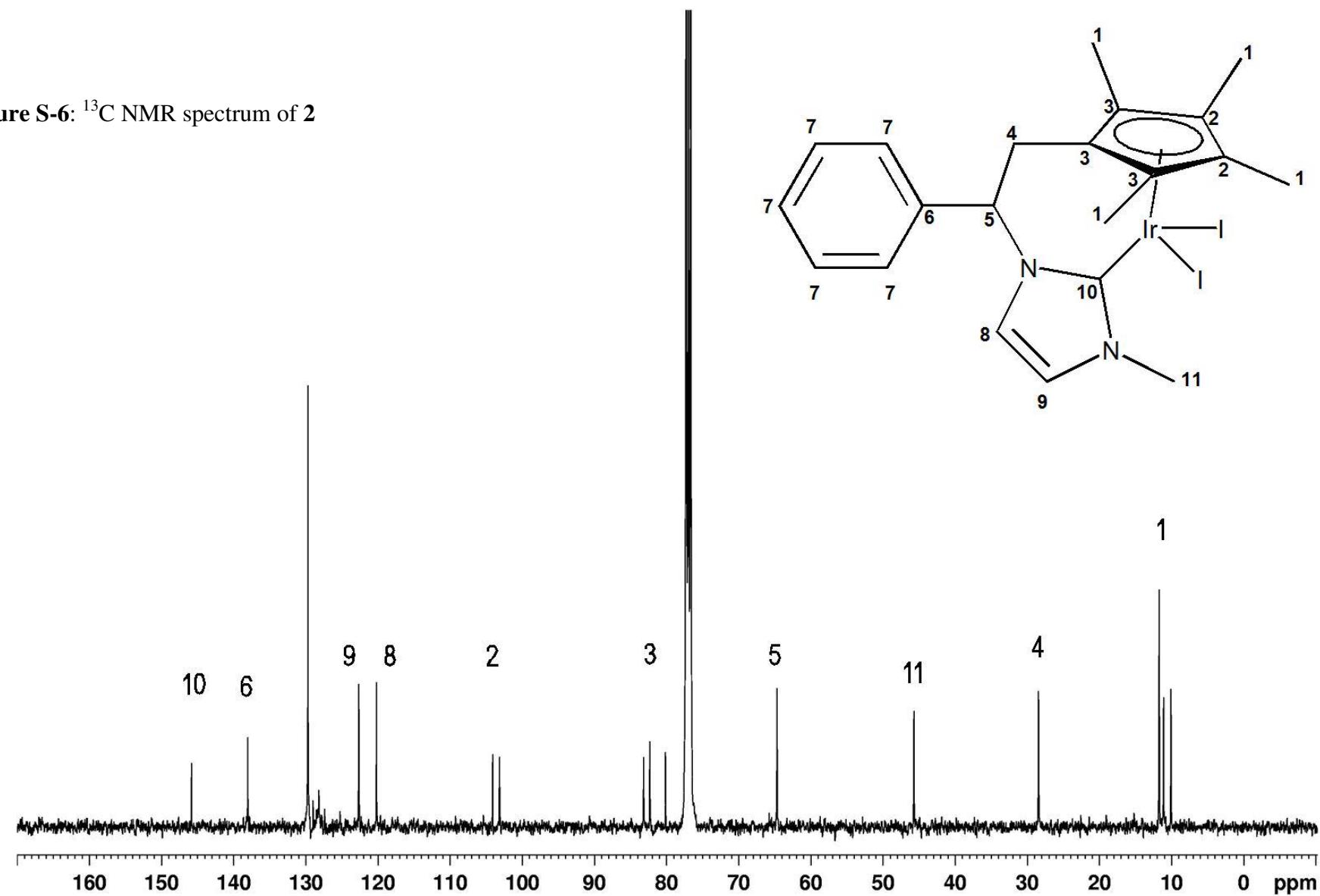
**Figure S-4:**  $^1\text{H} - ^1\text{H}$  COSY NMR spectrum of **1**



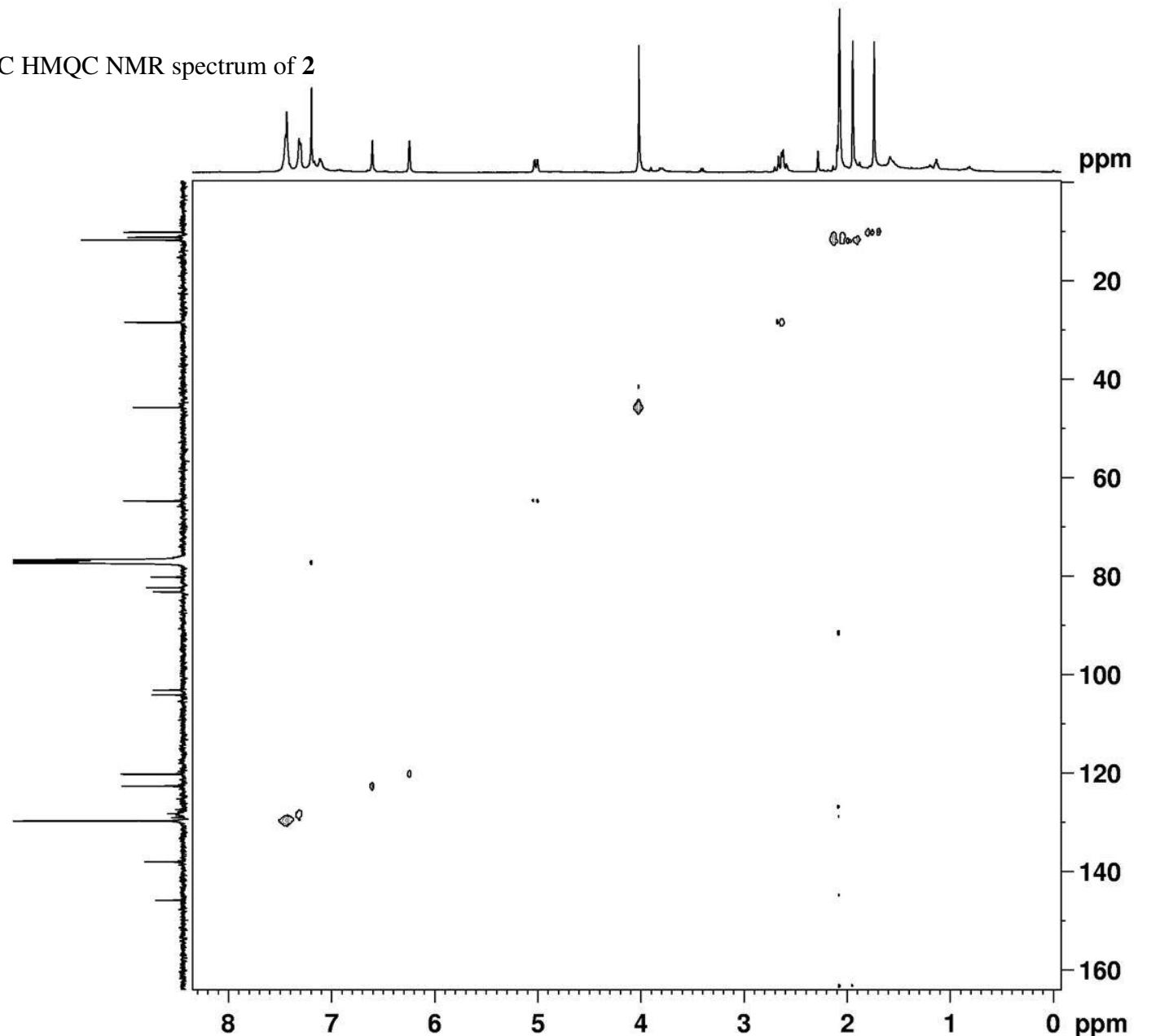
**Figure S-5:**  $^1\text{H}$  NMR spectrum of **2**



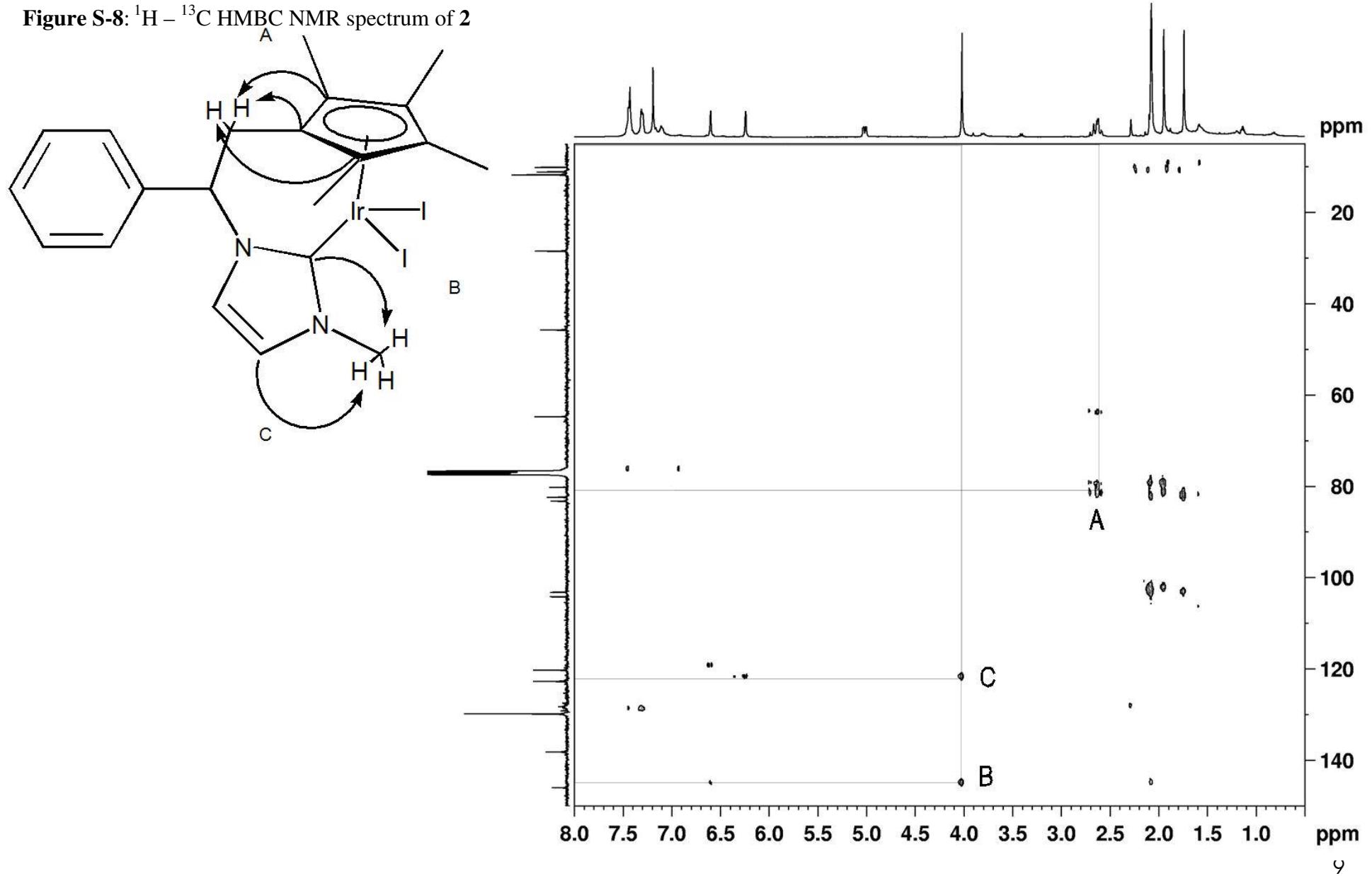
**Figure S-6:**  $^{13}\text{C}$  NMR spectrum of **2**



**Figure S-7:**  $^1\text{H} - ^{13}\text{C}$  HMQC NMR spectrum of **2**



**Figure S-8:**  $^1\text{H} - ^{13}\text{C}$  HMBC NMR spectrum of **2**



**Figure S-9:**  $^1\text{H}$  –  $^1\text{H}$  COSY NMR spectrum of **2**

