

## Supporting Information

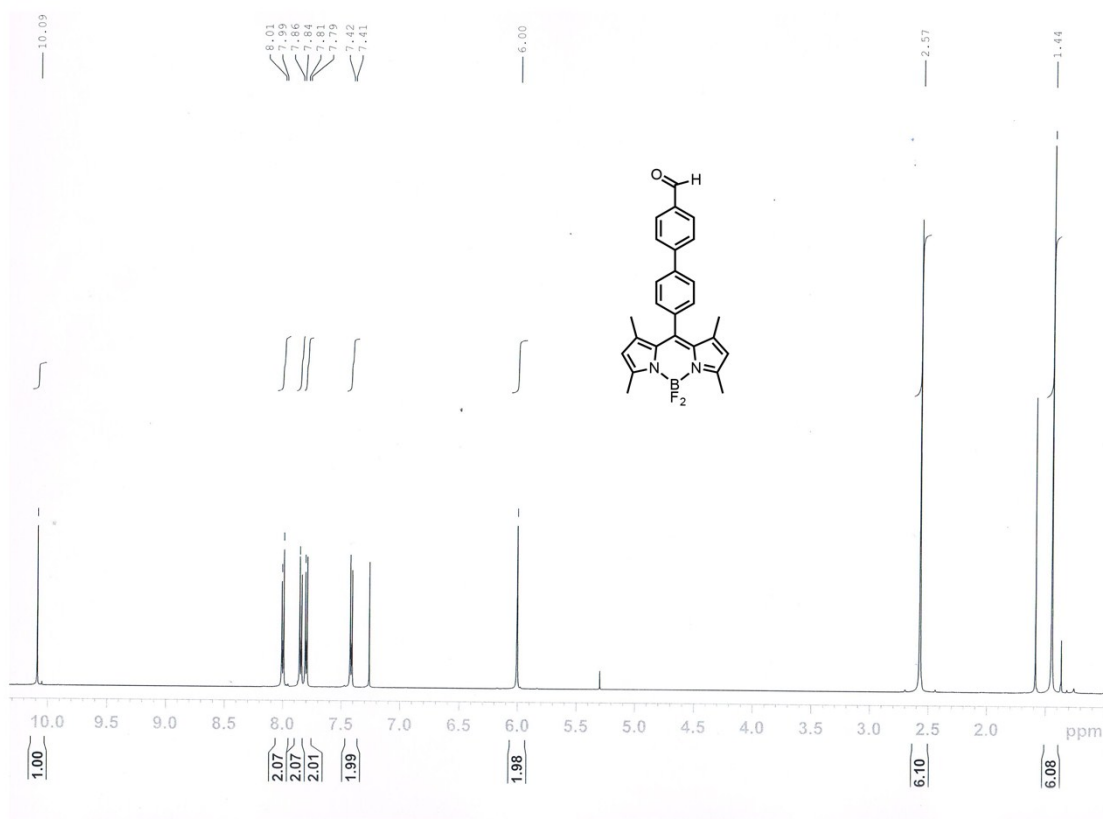
for

### Effect of Co-sensitization Methods between N719 and Boron Dipyrromethene Triad on Dye-sensitized Solar Cells Performance

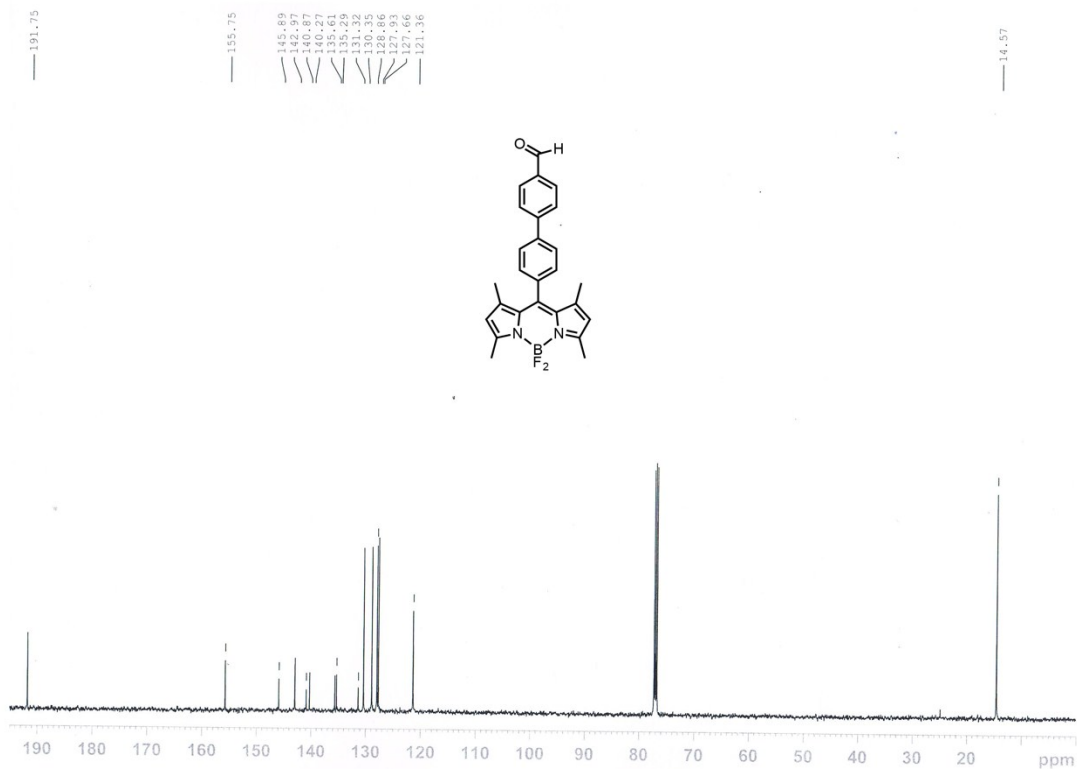
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<sup>a</sup> Division of Materials Technology, School of Energy, Environment and Materials, King Mongkut's University of Technology Thonburi, Bangkok 10140, Thailand.

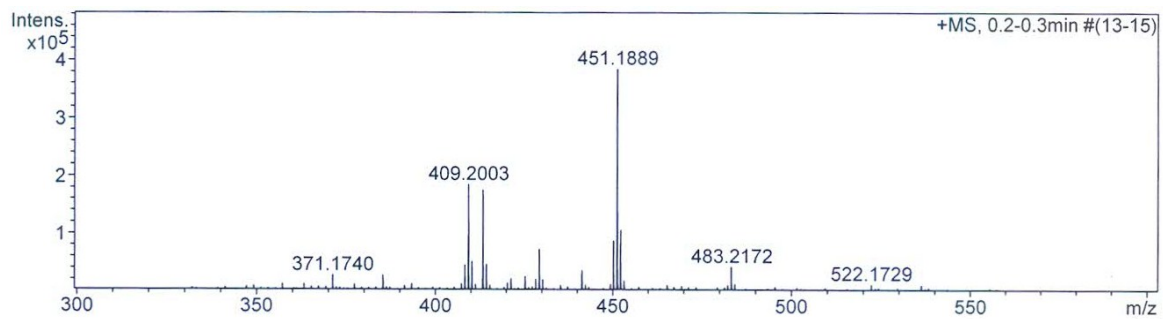
<sup>b</sup> Nanotec-KMUTT Center of Excellence on Hybrid Nanomaterials for Alternative Energy, King Mongkut's University of Technology Thonburi, Bangkok 10140, Thailand.



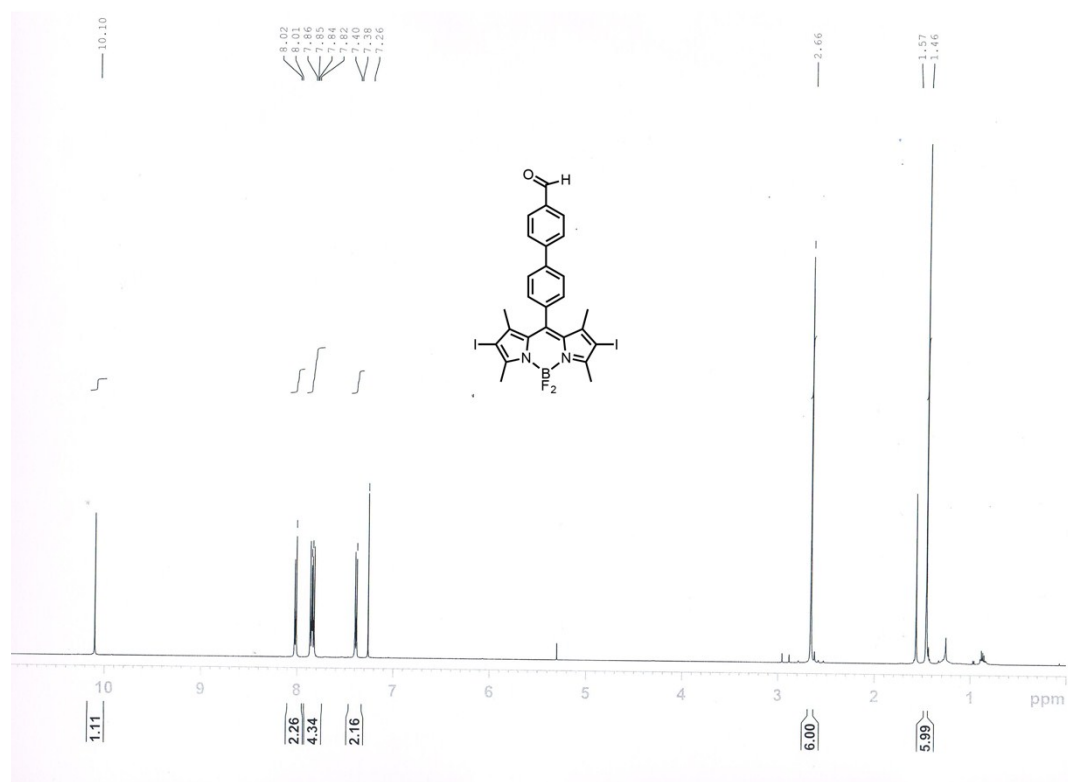
S1 <sup>1</sup>H-NMR of compound 2



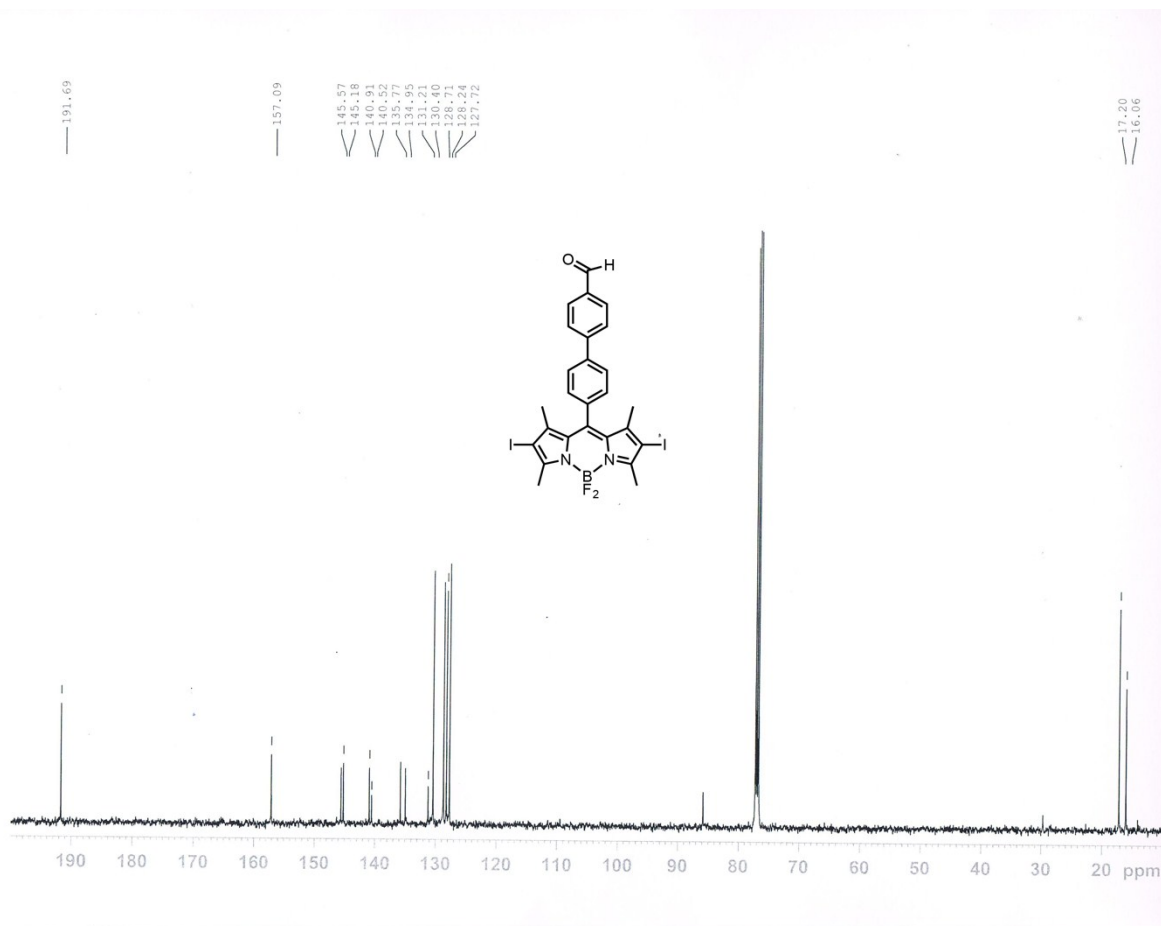
**S2** <sup>13</sup>C-NMR of compound 2



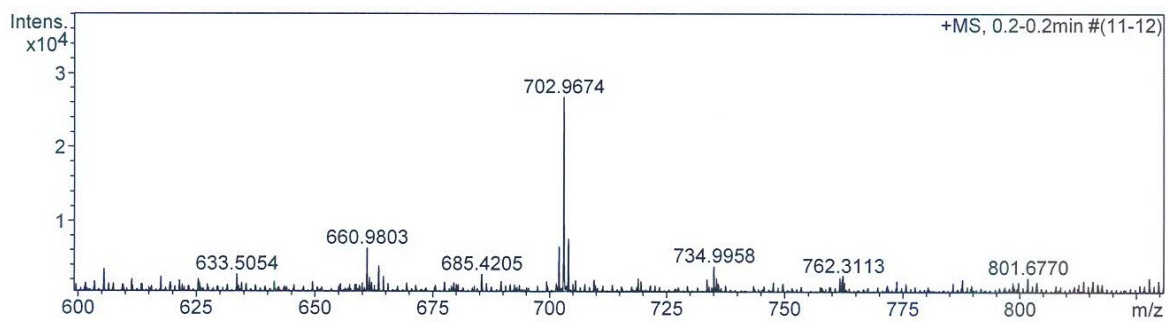
**S3** MS of compound 2



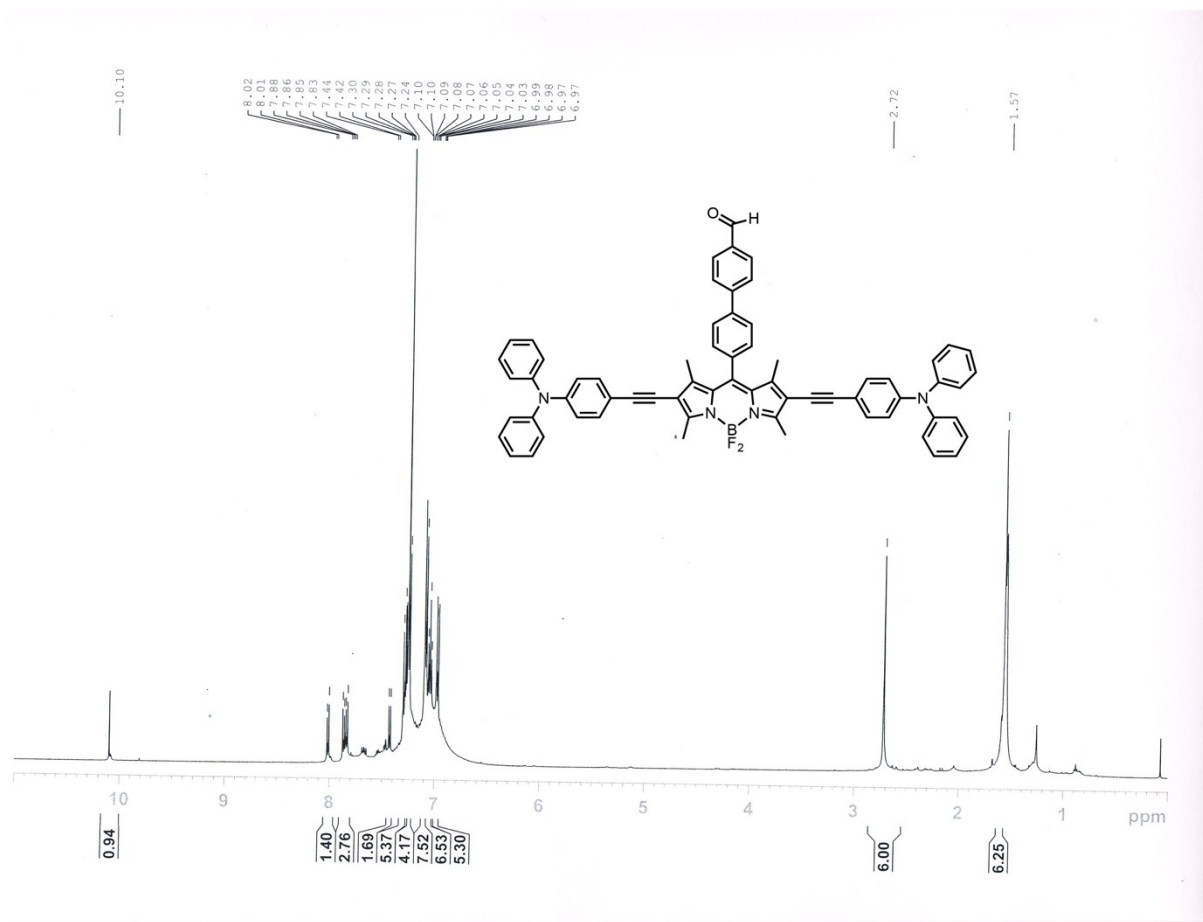
S4  $^1\text{H-NMR}$  of compound 3



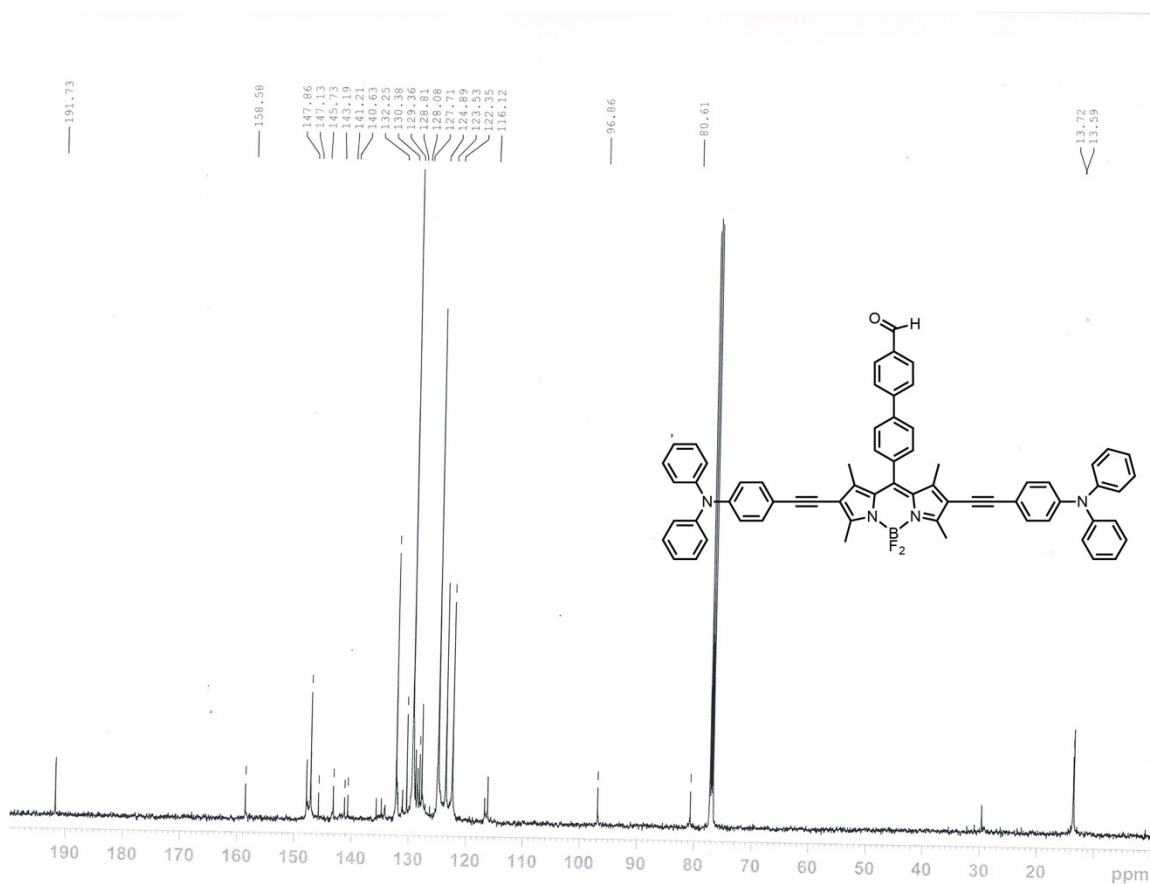
**S5** <sup>13</sup>C-NMR of compound **3**



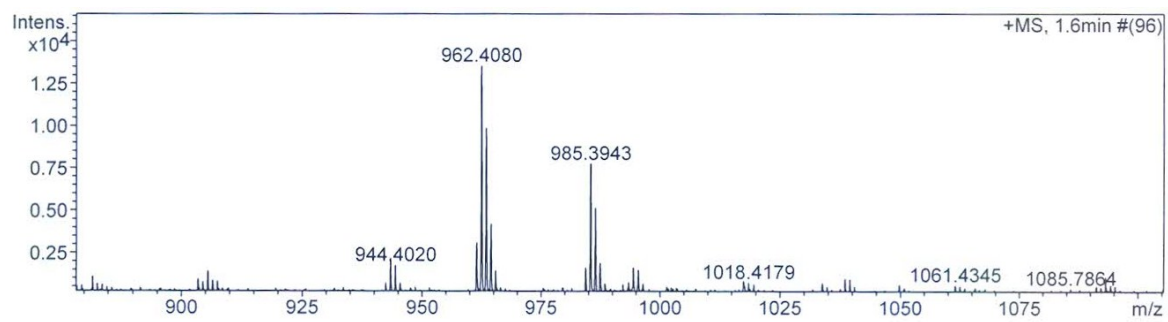
**S6** MS of compound **3**



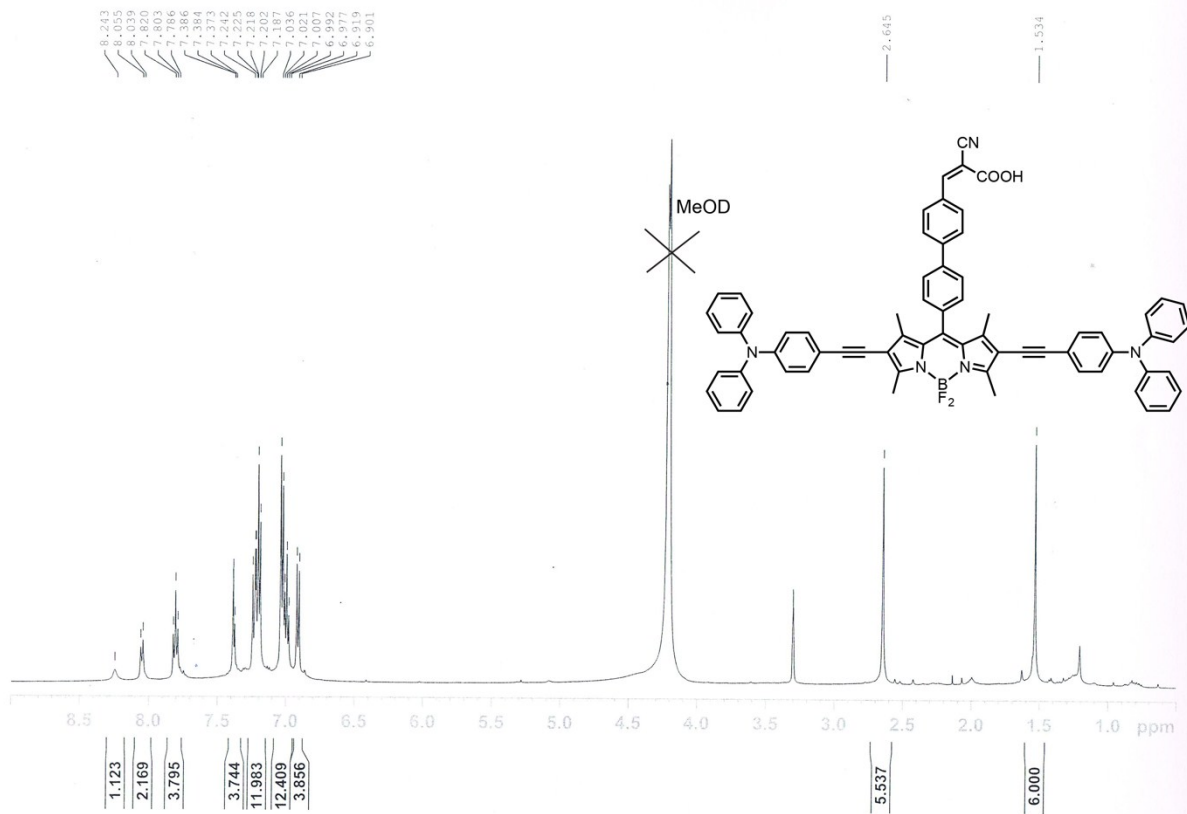
S7 <sup>1</sup>H-NMR of compound 4



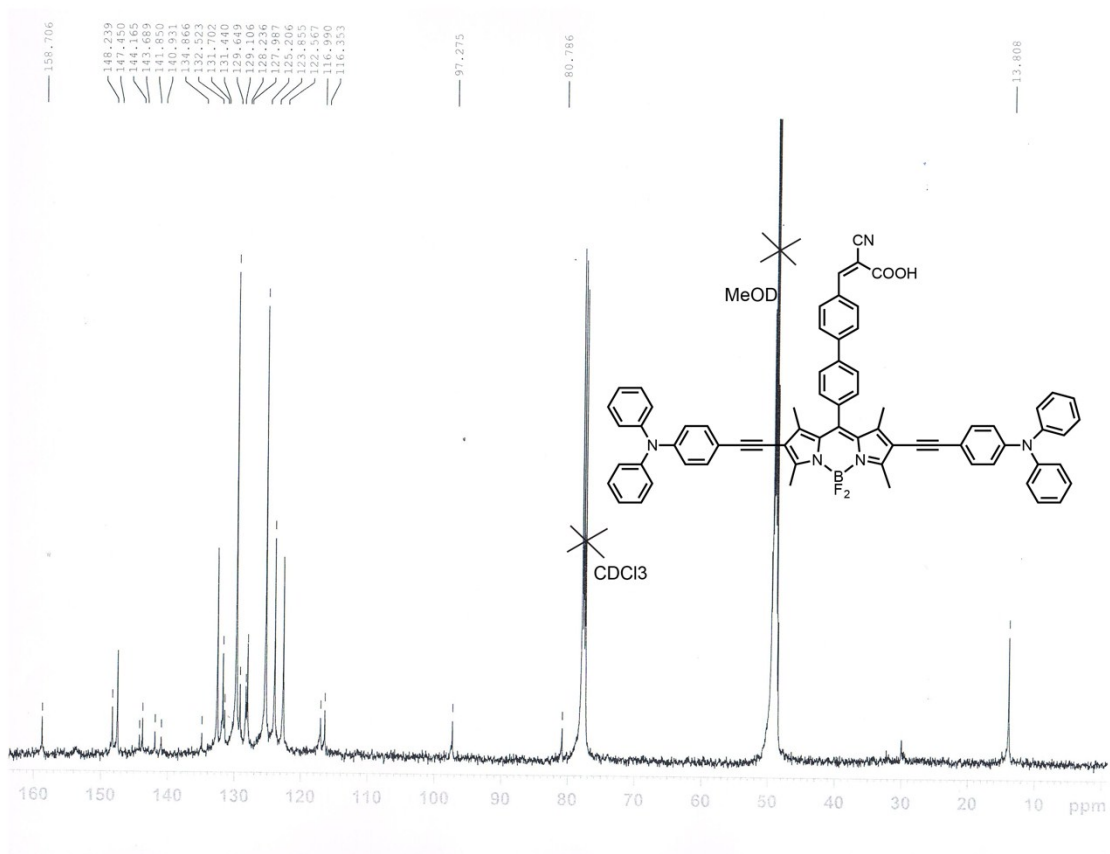
**S8**  $^{13}\text{C}$ -NMR of compound **4**



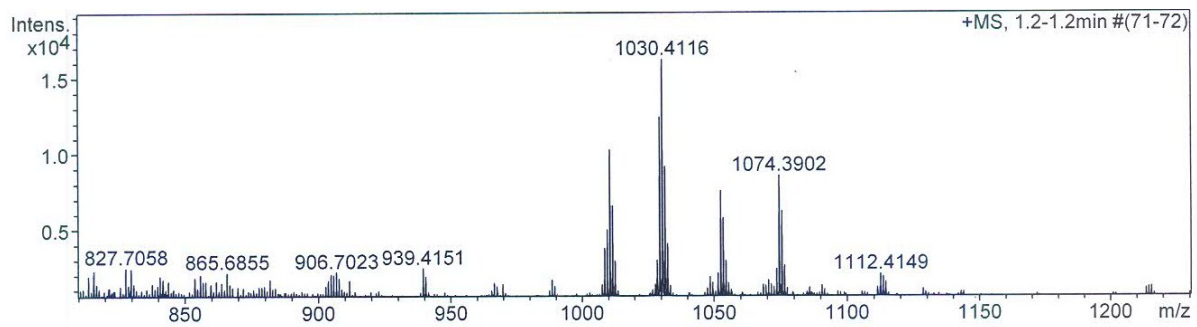
**S9** MS of compound **4**



S10 <sup>1</sup>H-NMR of compound 5



S11 <sup>13</sup>C-NMR of compound 5



S12 MS of compound 5