

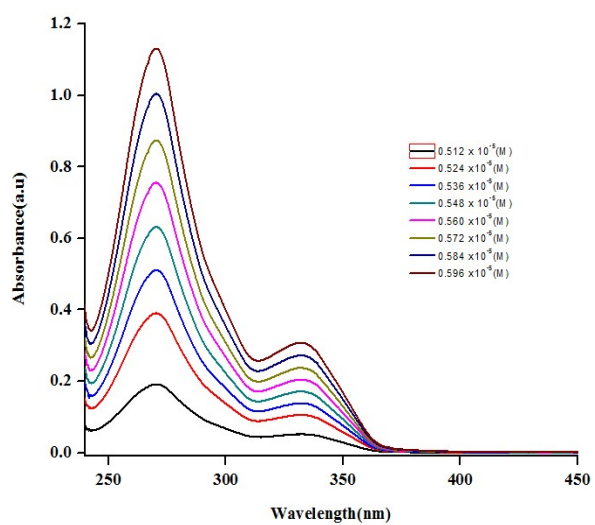
## Packing-induced solid-state fluorescence and thermochromic behavior of peptidic luminophores†

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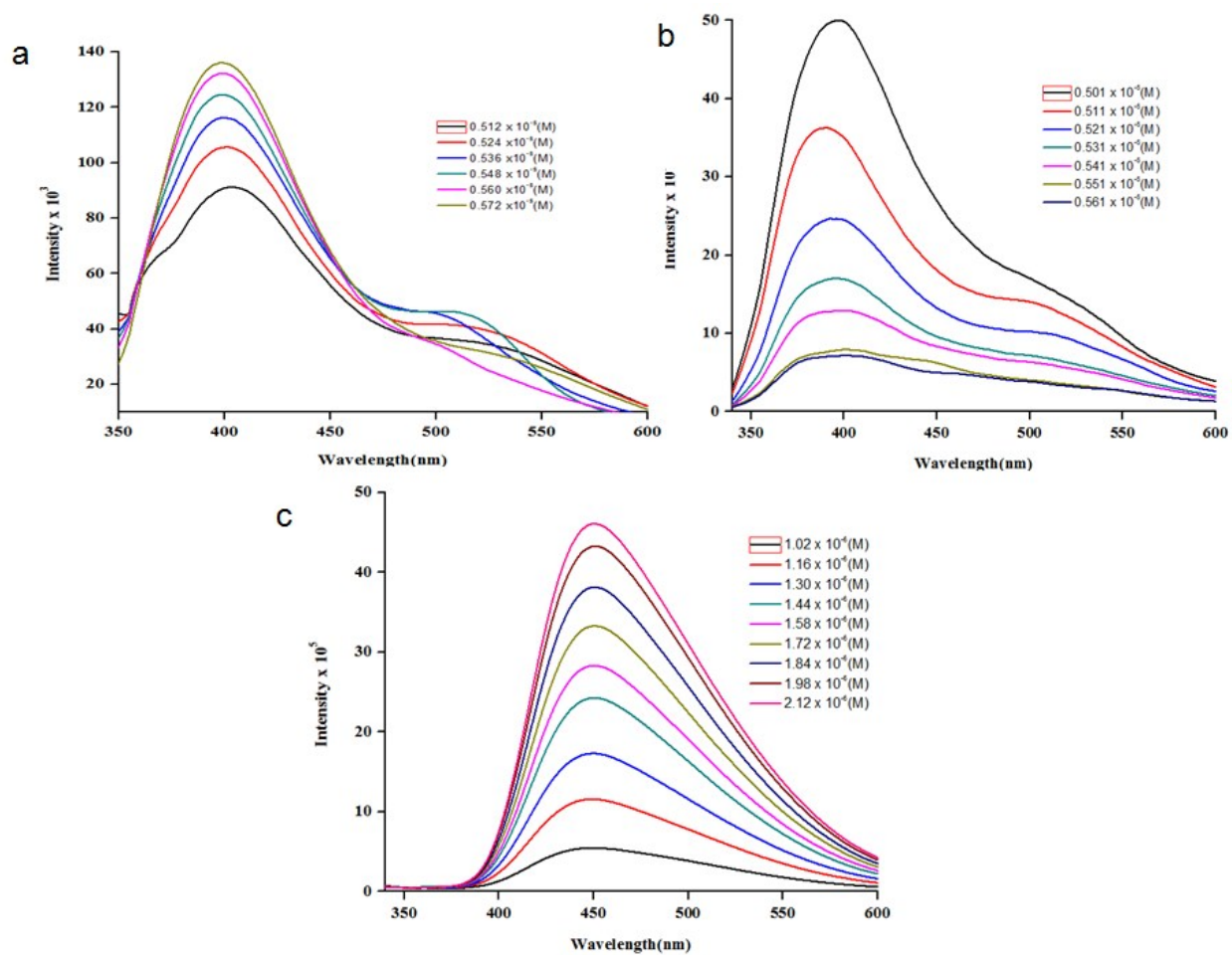
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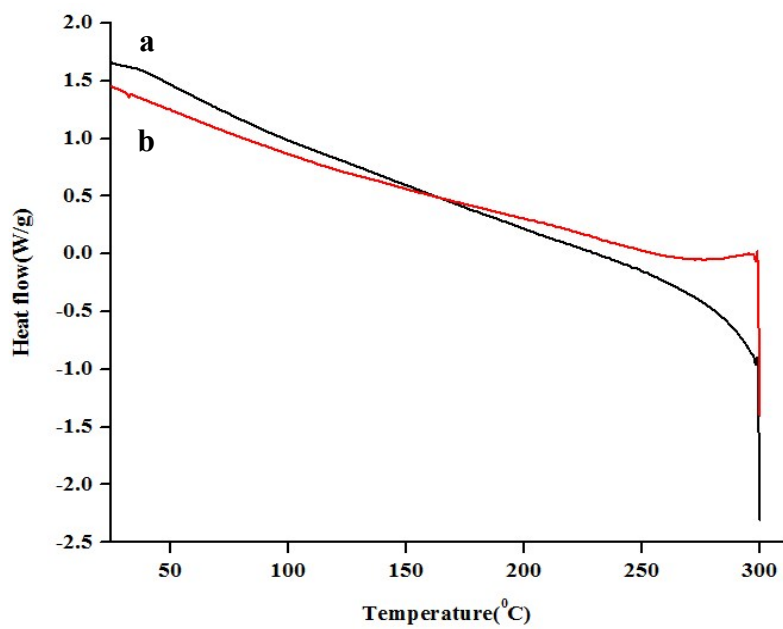
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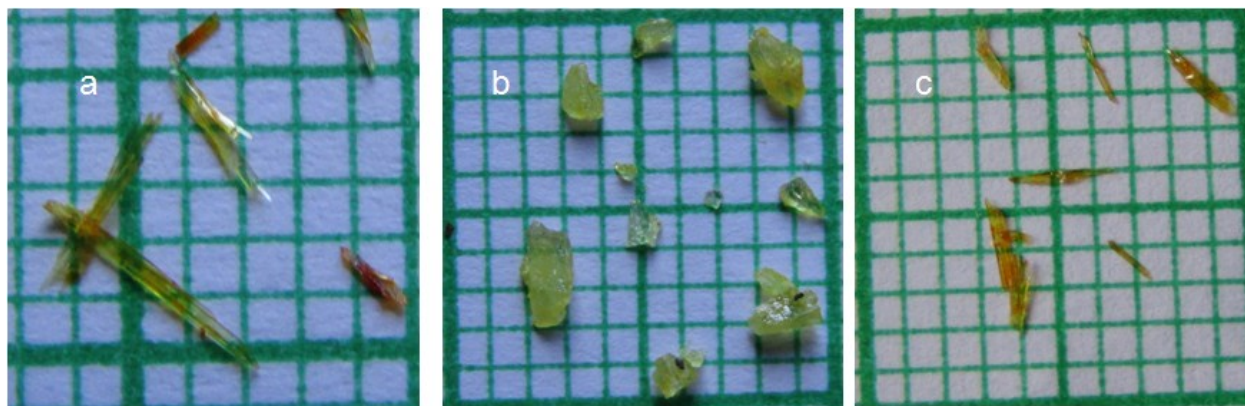
**ESI Figure S1:** UV/Vis absorption spectra of 6-Nitro-coumarin-3-carboxylic acid methyl ester **1**.



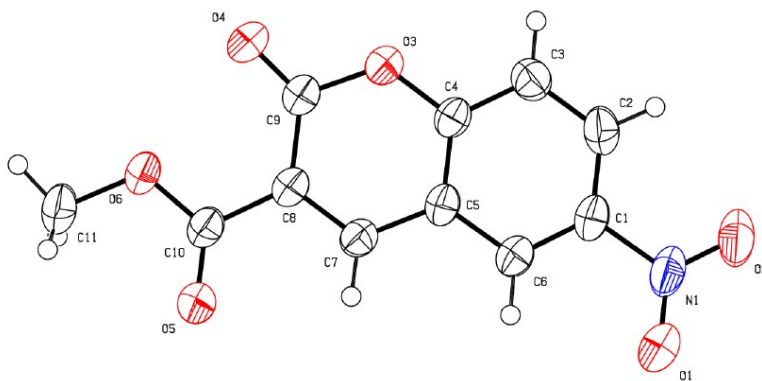
ESI Figure S2: Emission spectra of (a) compound 1, (b) nitropeptides 2 and (c) nitropeptide 3.



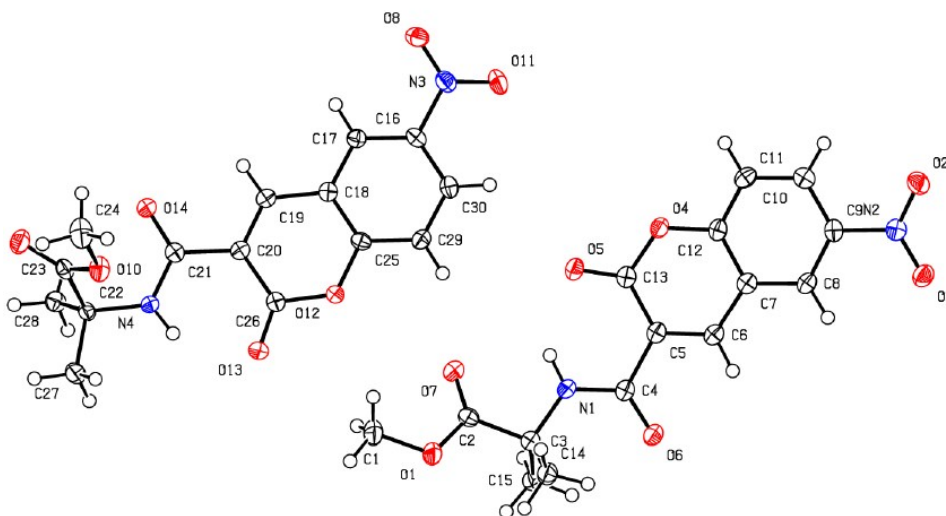
**ESI Figure S3:** DSC cooling scans for (a) nitropeptides **2** and (b) nitropeptide **3**.



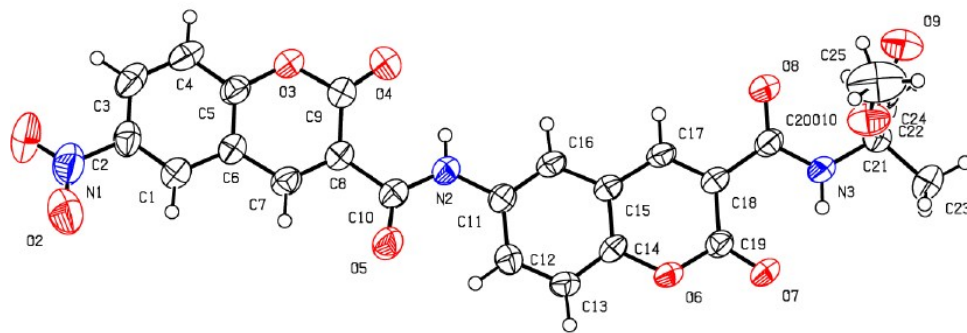
**ESI Figure S4:** Crystals of (a) compound **1**, (b) nitropeptides **2** and (c) nitropeptide **3**.



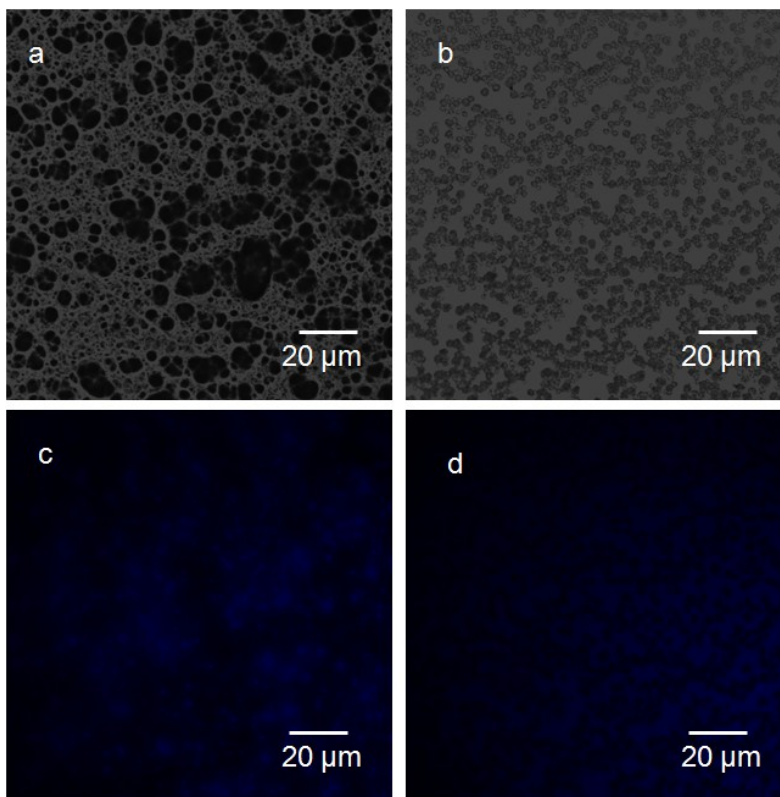
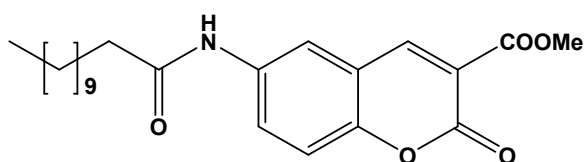
**ESI Figure S5:** The ORTEP diagram of compound **1** with atomic numbering scheme. Thermal ellipsoids are shown at 50% probability level.



**ESI Figure S6:** The ORTEP diagram of nitropeptide **2** with atomic numbering scheme. Thermal ellipsoids are shown at 50% probability level.



**ESI Figure S7:** The ORTEP diagram of nitropeptide **2** with atomic numbering scheme. Thermal ellipsoids are shown at 50% probability level.



**ESI Figure S8:** The fluorescence microscopic images of (a) lauric acid appended 6-amino-coumarin-3-carboxylic acid methyl ester, (b) solid obtained by cooling of melt. (c) lauric acid appended 6-amino-coumarin-3-carboxylic acid methyl ester and (d) solid obtained by cooling of melt on excitation at 330 nm.

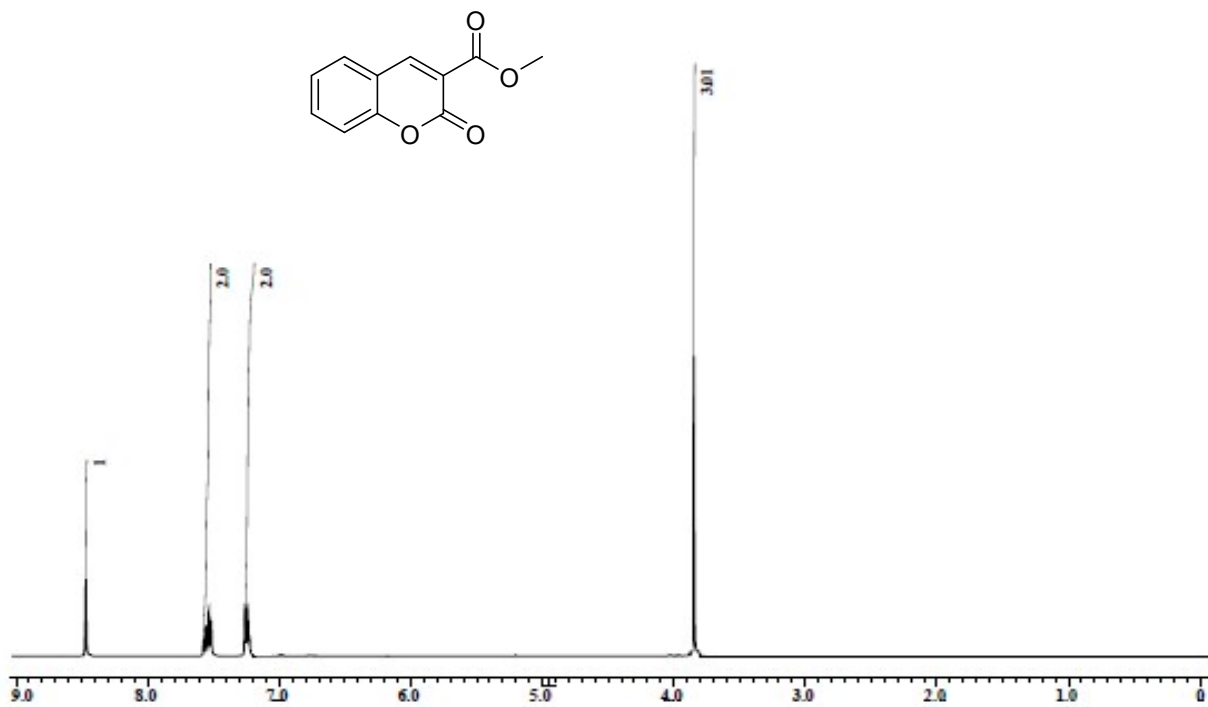


Fig S1 : <sup>1</sup>H NMR (CDCl<sub>3</sub>, 400 MHz, δppm) Spectra of compound 4

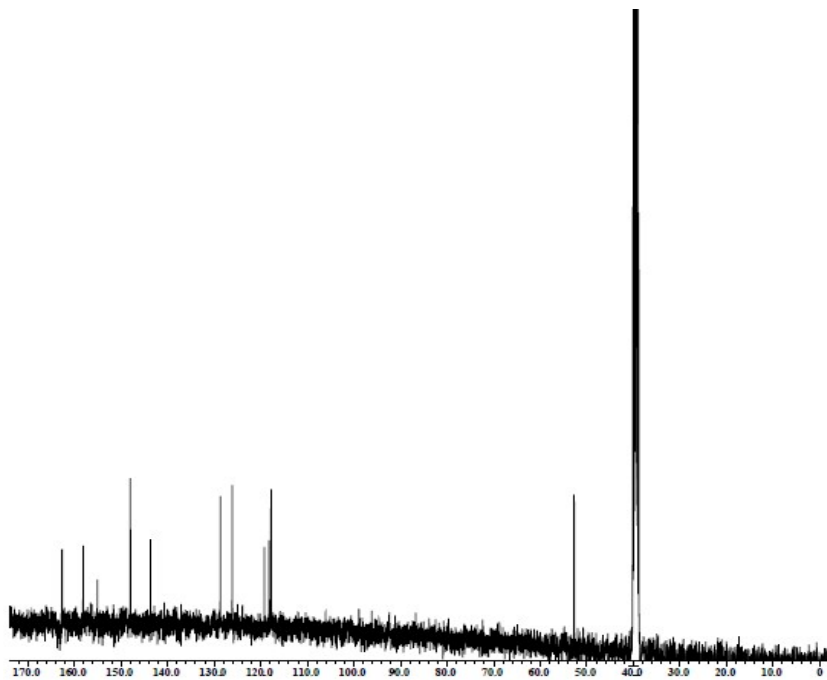


Fig S2 : <sup>13</sup>C NMR (DMSO-*d*<sub>6</sub>, 100 MHz, δppm) Spectra of compound 4

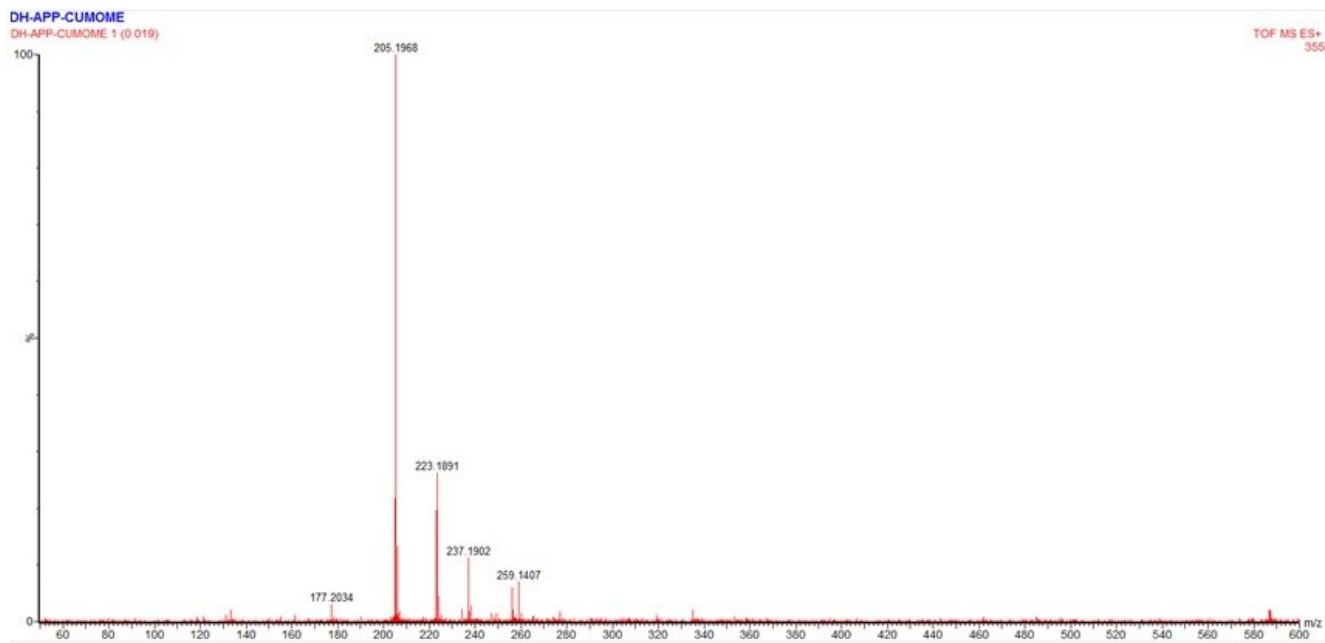


Fig S3 : Mass spectra of compounds 4

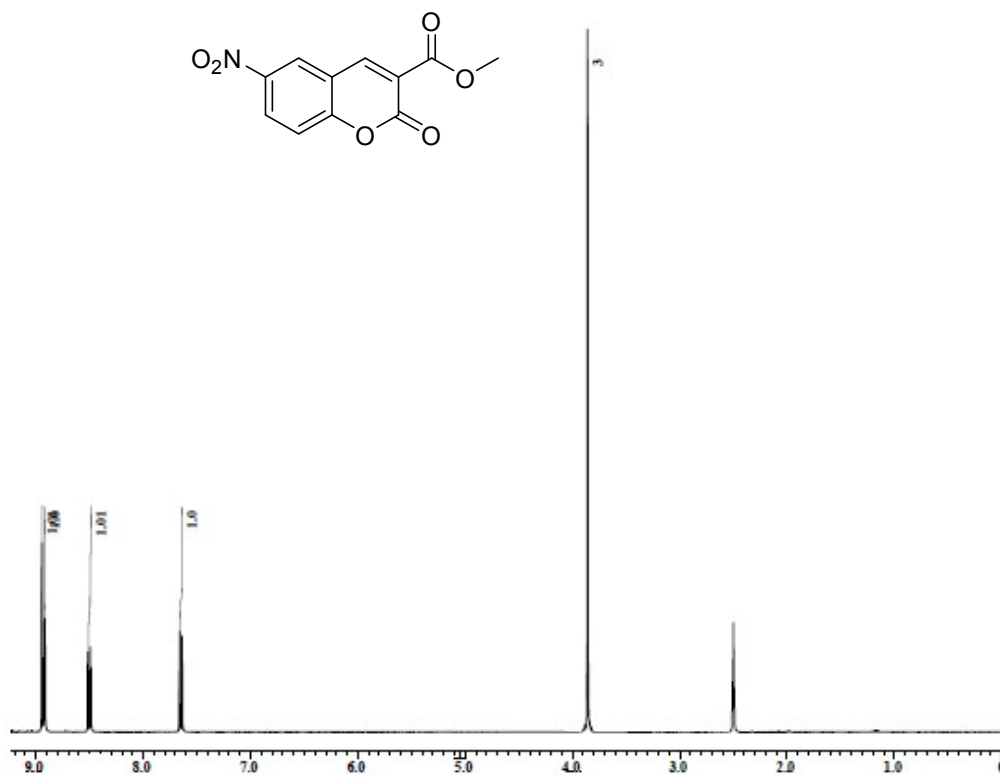
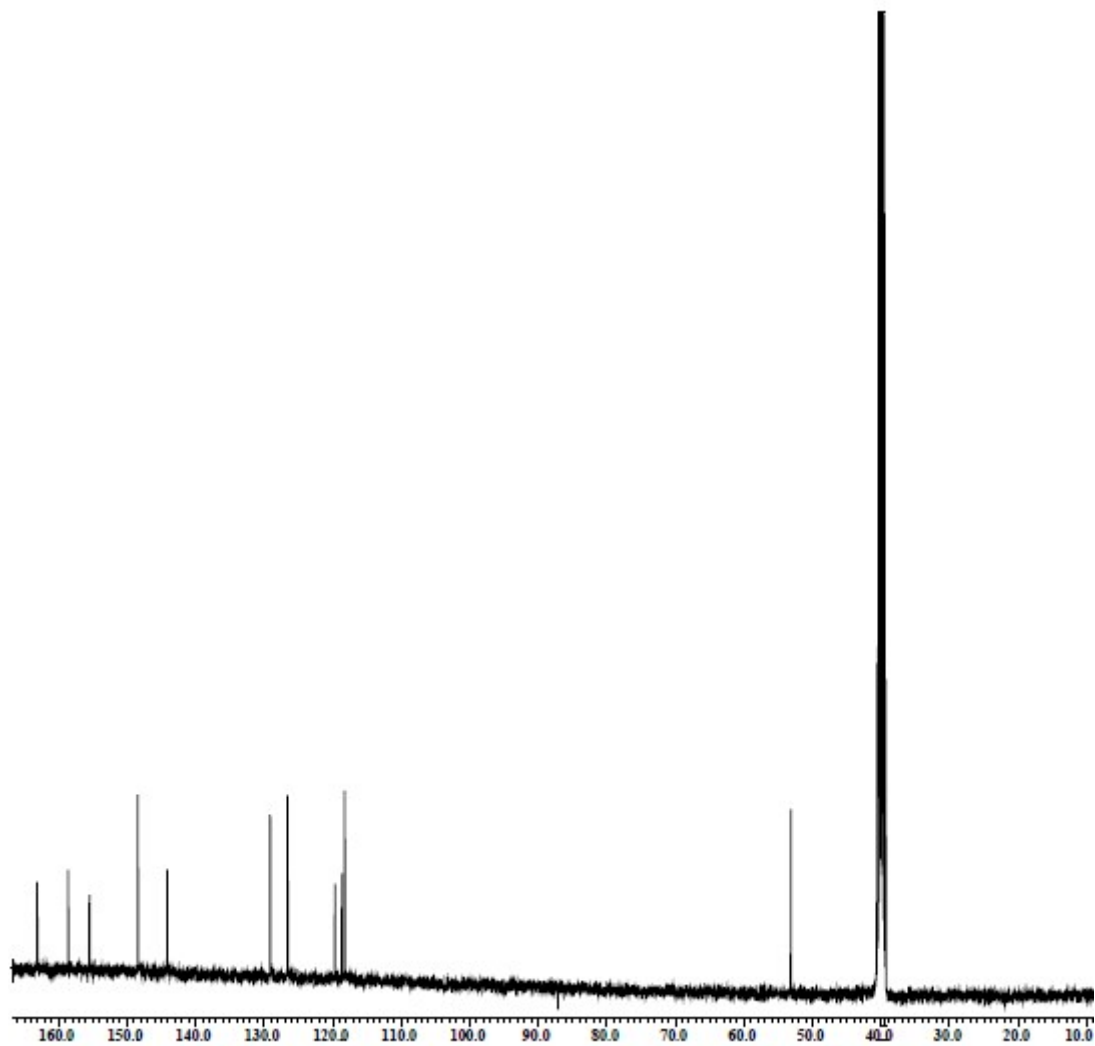


Fig S4 :  $^1\text{H}$  NMR ( $\text{DMSO-}d_6$ , 400 MHz,  $\delta$ ppm) Spectra of compound 1





**Fig S5 :**  $^{13}\text{C}$  NMR (DMSO- $d_6$ , 100 MHz,  $\delta$ ppm) Spectra of compound **1**

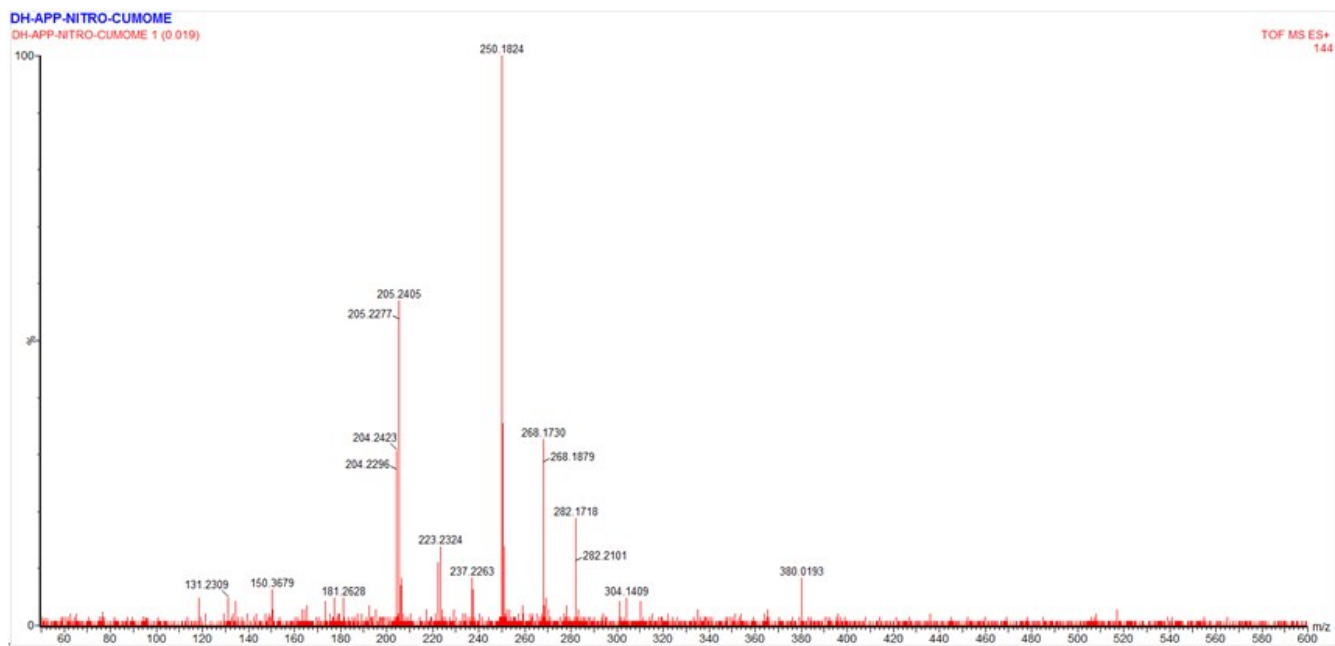


Fig S6 : Mass spectra of compounds 1

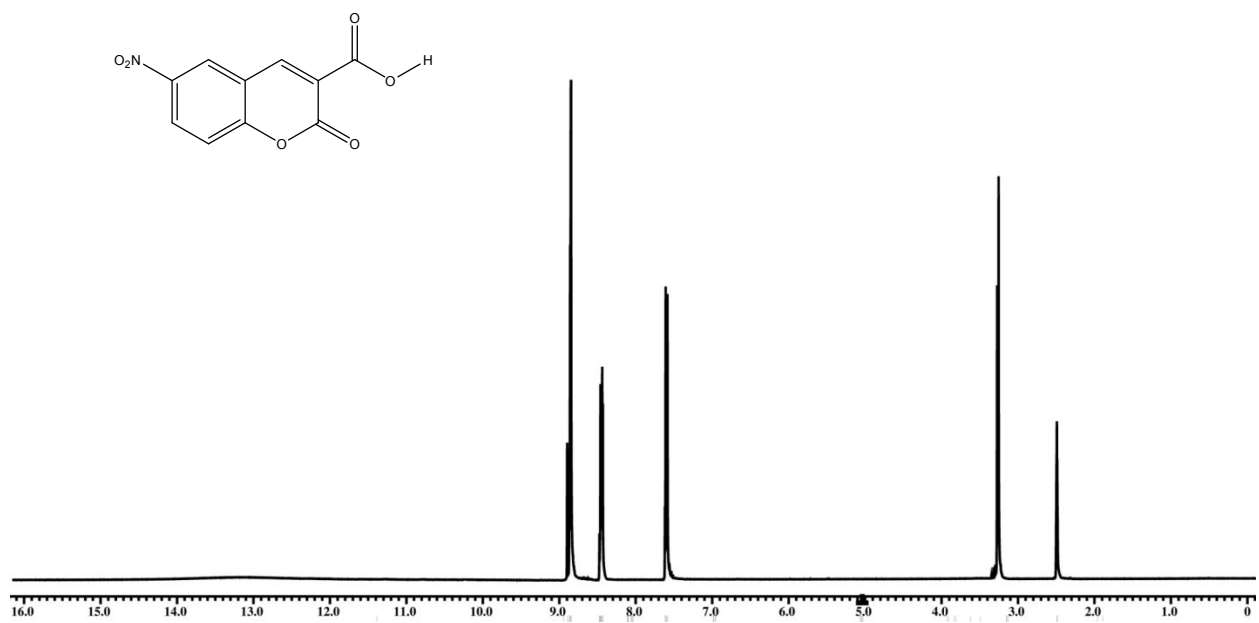
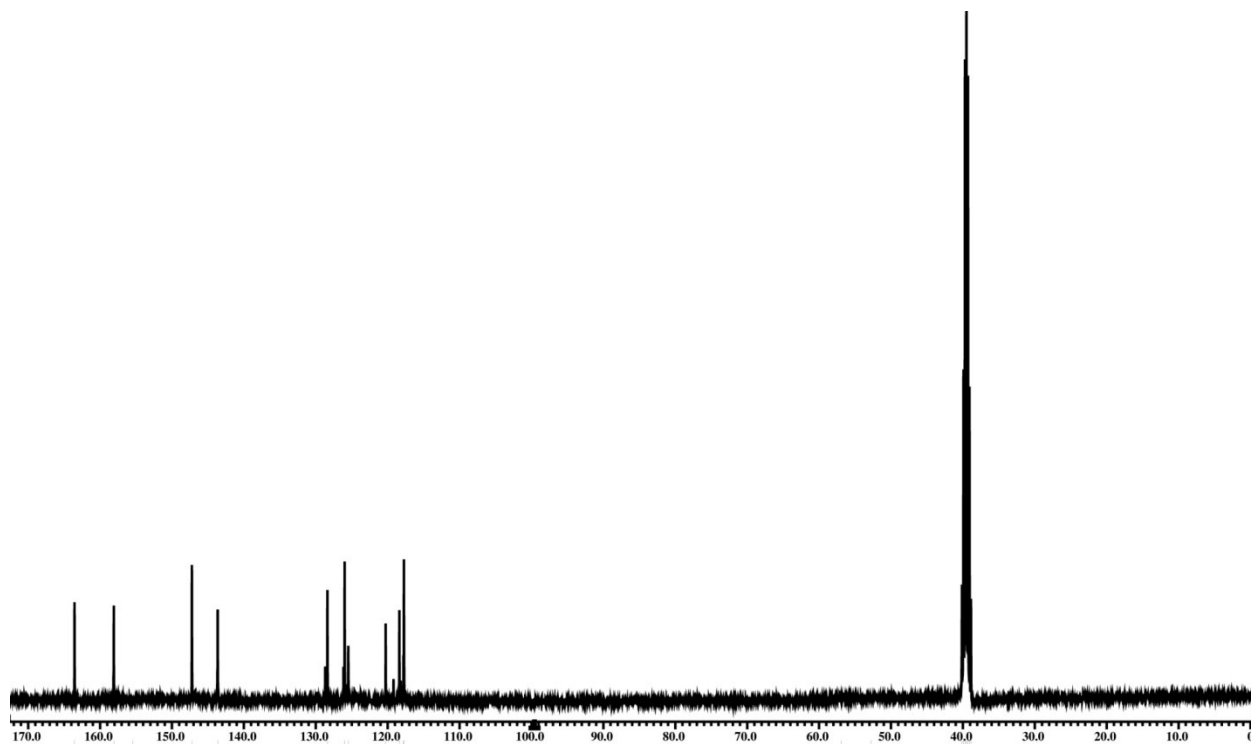
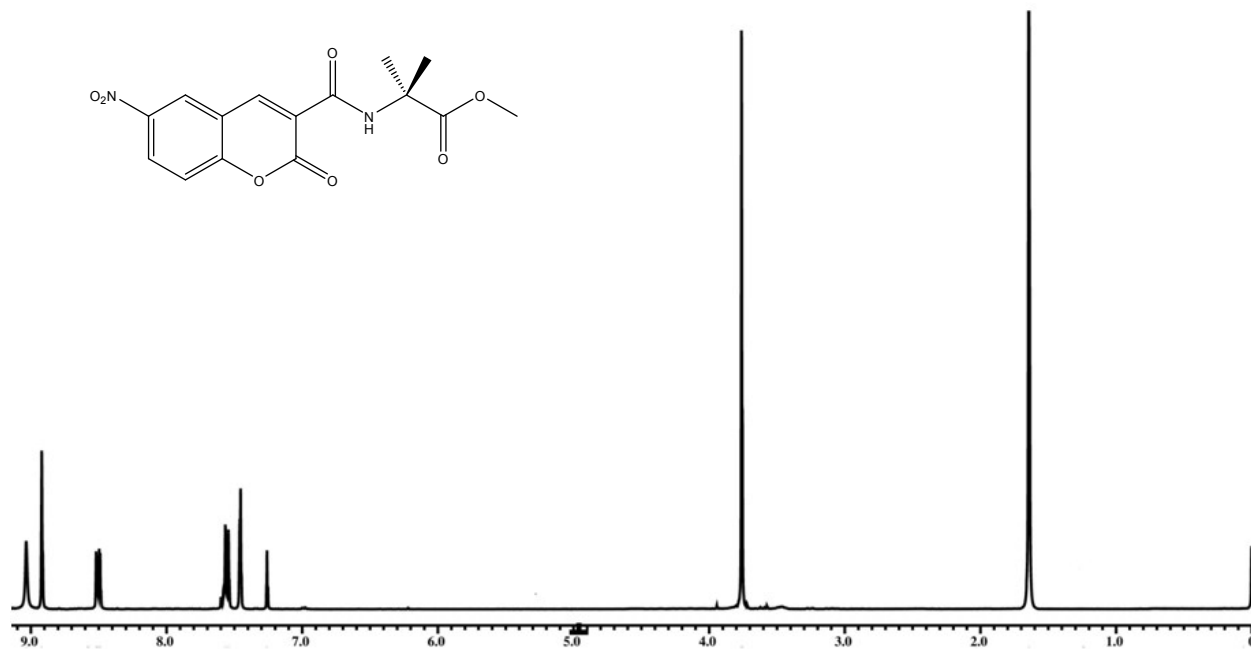


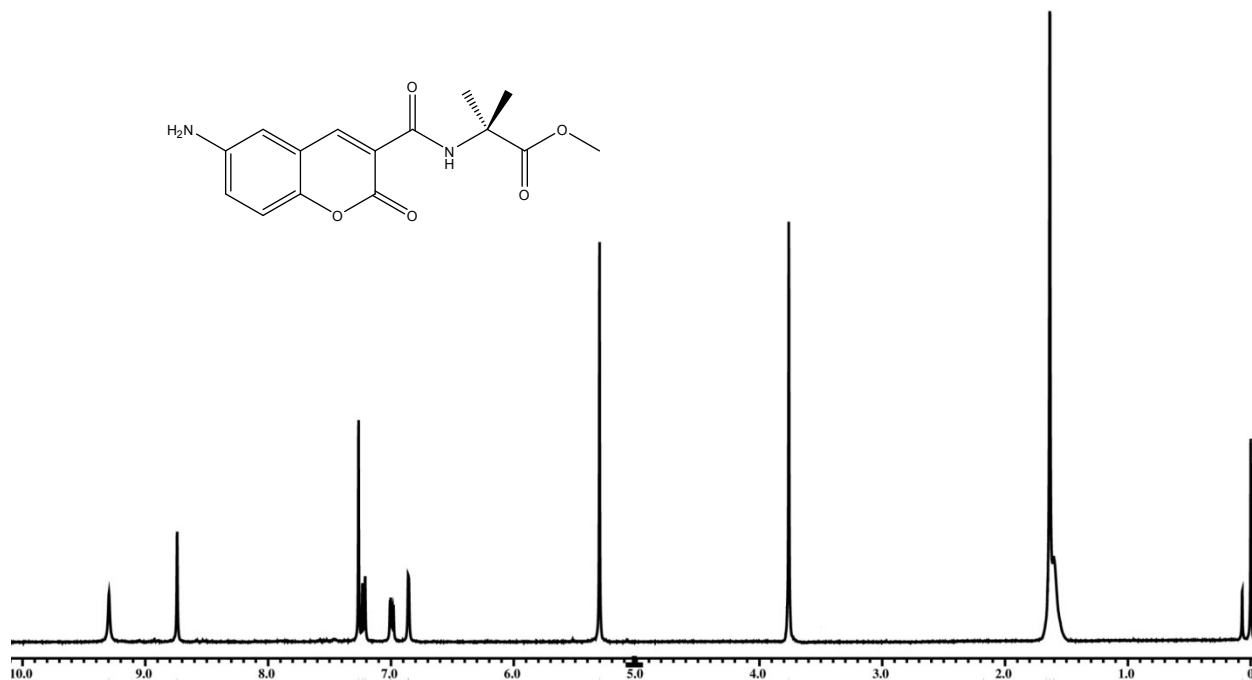
Fig. S7: <sup>1</sup>H NMR(DMSO-*d*<sub>6</sub>, 400 MHz, δ ppm) Spectra of O<sub>2</sub>N-Cum-OH.



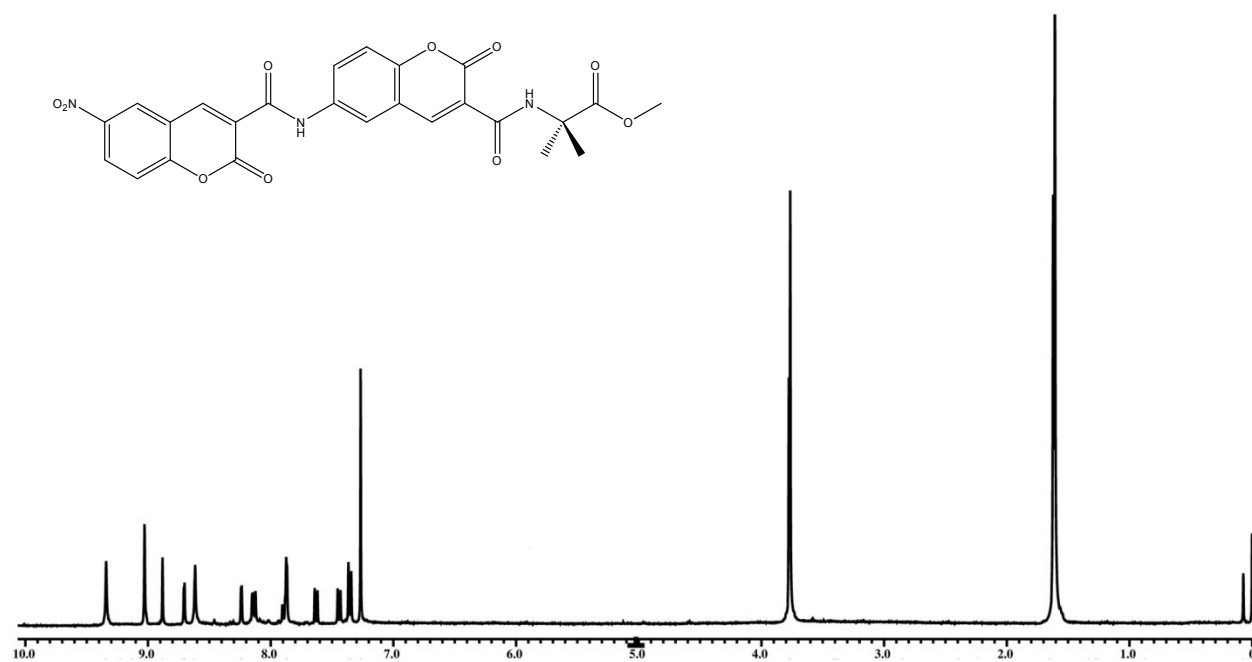
**Fig. S8:**  $^{13}\text{C}$  NMR ( $\text{DMSO-}d_6$ , 125 MHz,  $\delta$  ppm) spectra of  $\text{O}_2\text{N-Cum-OH}$ .



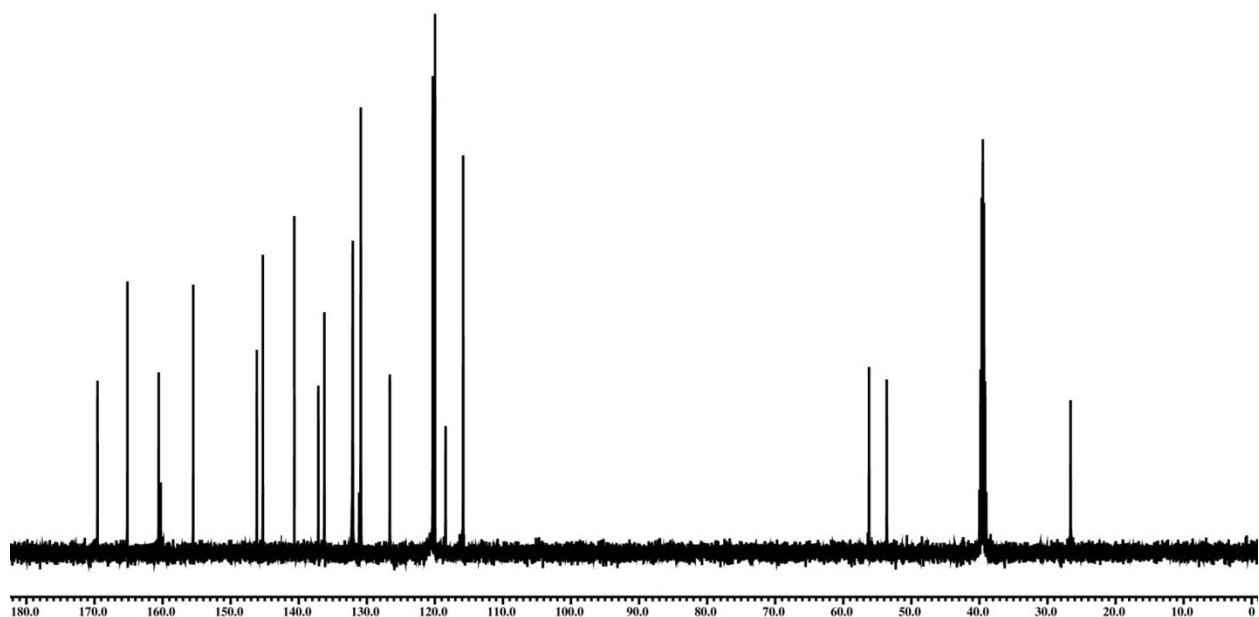
**Fig. S9:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 400 MHz,  $\delta$  ppm) spectra of  $\text{O}_2\text{N-Cum-Aib-OMe}$ .



**Fig. S10:** <sup>1</sup>H NMR (CDCl<sub>3</sub>, 400 MHz, δ ppm) spectra of H<sub>2</sub>N-Cum-Aib-OMe.



**Fig. S11:** <sup>1</sup>H NMR (CDCl<sub>3</sub>, 400 MHz, δ ppm) spectra of O<sub>2</sub>N-Cum-Cum-Aib-OMe.



**Fig. S12:**  $^{13}\text{C}$  NMR ( $\text{DMSO-}d_6$ , 125 MHz,  $\delta$  ppm) spectra of  $\text{O}_2\text{N-Cum-Cum-Aib-OMe}$ .