

SUPPORTING INFORMATION

Retention of Strong Intramolecular Hydrogen Bonds in High Polarity Solvents in Binaphthalene-benzamide Derivatives: Extensive NMR Studies

Arun Kumar Patel^{a,b,@}, Kiran Krishnamurthy^{b,\$}, Sandeep Kumar Mishra^{b,c,&} and N. Suryaprakash^{a,b,#,*}

^aSolid State and Structural Chemistry Unit and ^bNMR Research Centre, Indian Institute of Science, Bangalore 560012, India

Tel: +91-80-22933300, +91-8023607344, +919845124802 (Cell); Fax: +91-80-23601550

E-mail: suryaprakash1703@gmail.com; nsp@iisc.ac.in

[@]ORCID: 0000-0001-5949-4605; ^{\$}ORCID: 0000-0001-9103-8116;

[#]ORCID: 0000-0002-9954-5195

^cPresent Address: Indian Institute of Science Education and Research, Dr. Homi Bhabha Road, Pashan, Pune: 411008, India

[&]ORCID: 0000-0002-9737-6797

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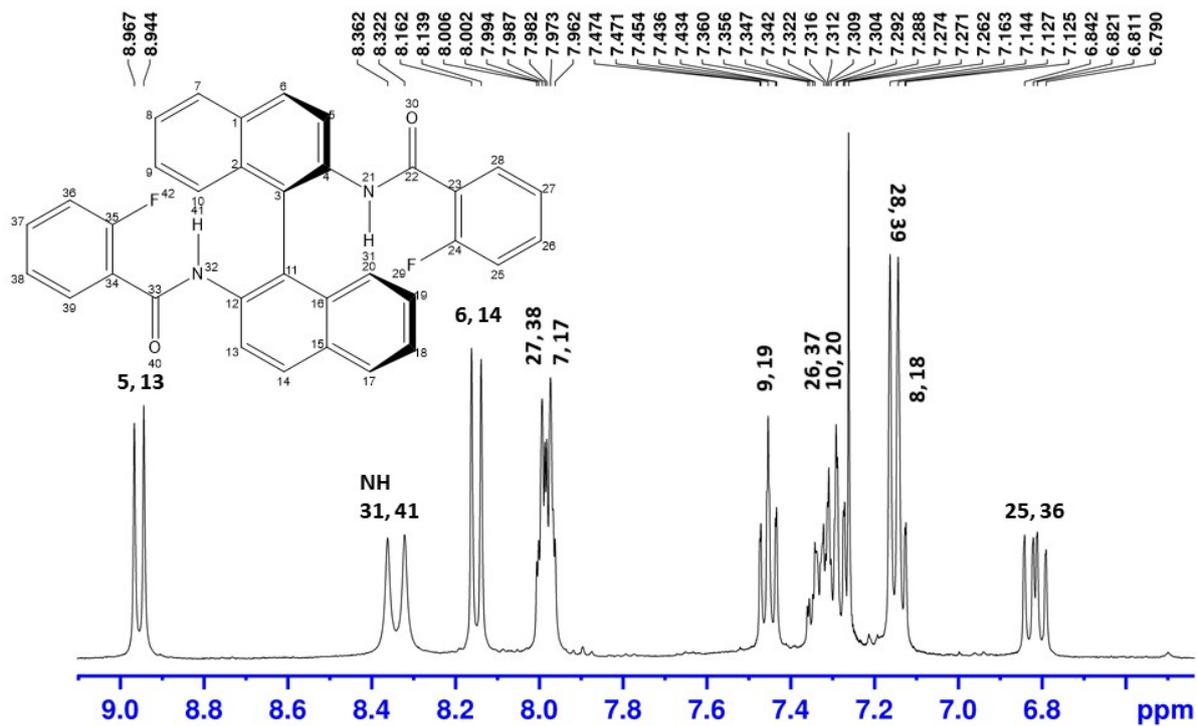


Fig.1S: 400 MHz ^1H -NMR spectrum of molecule **1**, in the solvent CDCl_3 .

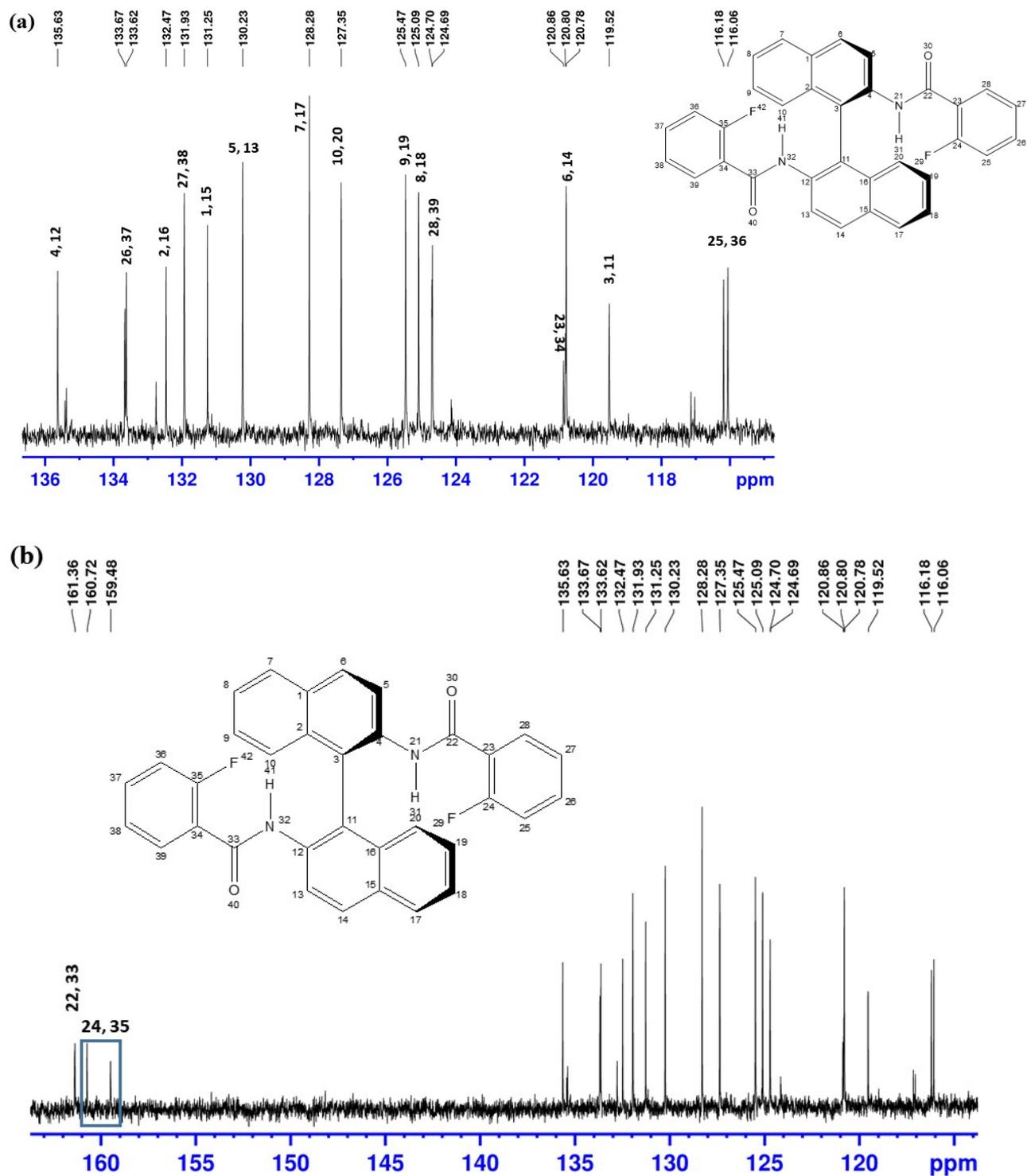


Fig.2S: (a) 100 MHz ^{13}C -NMR spectra of molecule **1**, in the solvent CDCl_3 ; (b): The expansion of the Fig. 2S(a)

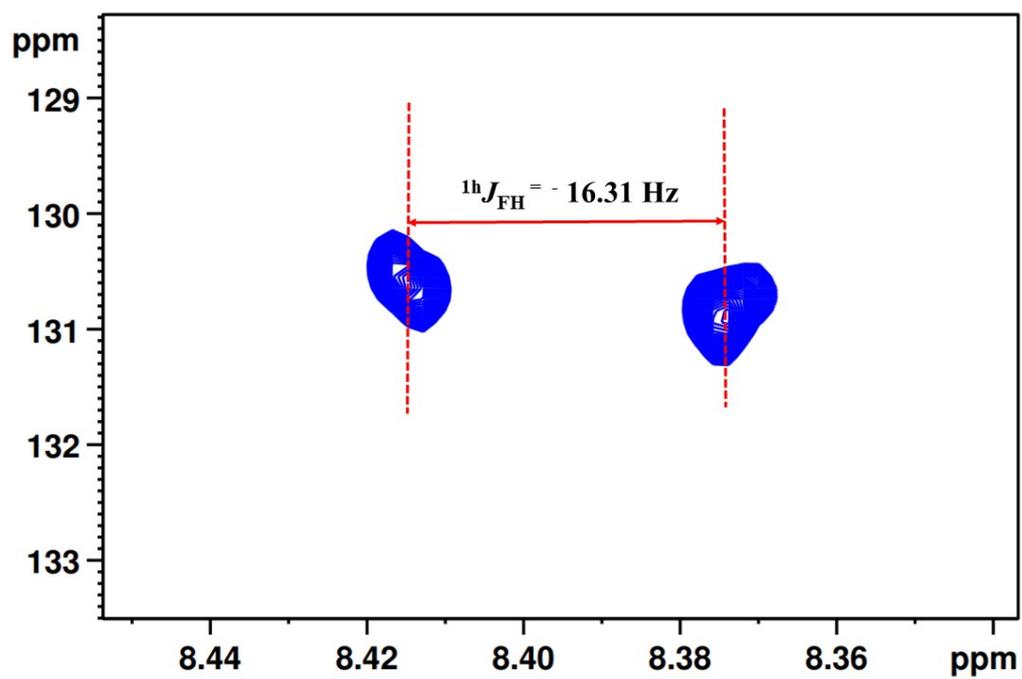


Fig 3S: 2D ^1H - ^{15}N HSQC NMR spectrum of molecule **1**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

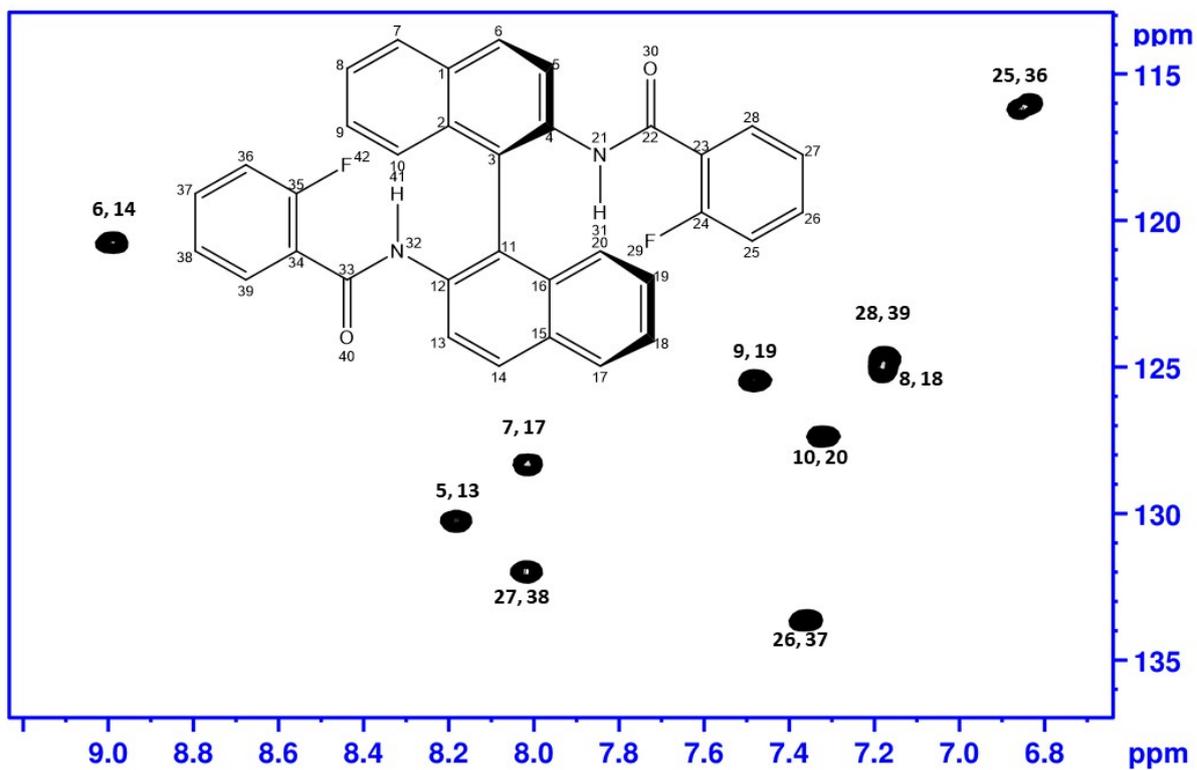


Fig 4S: 2D ^1H - ^{13}C HSQC NMR spectrum of molecule **1**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

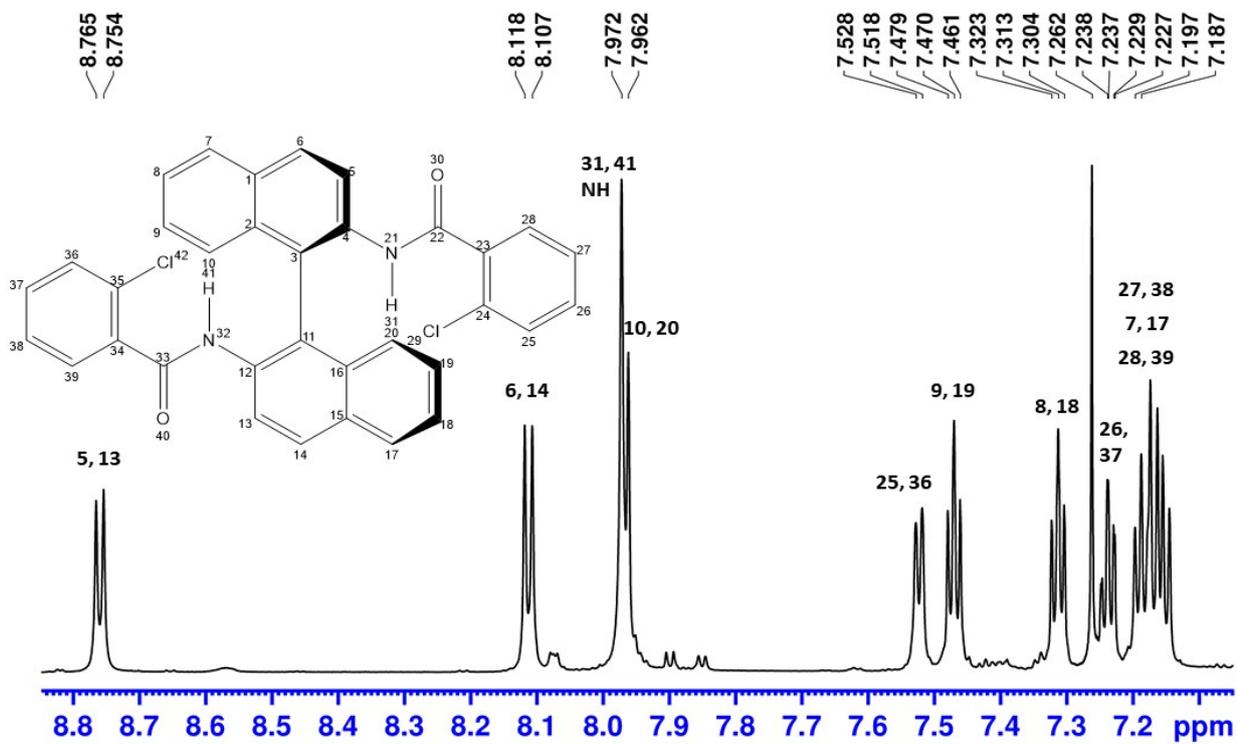


Fig.5S: 400 MHz ¹H- NMR spectrum of molecule 2, in the solvent CDCl₃.

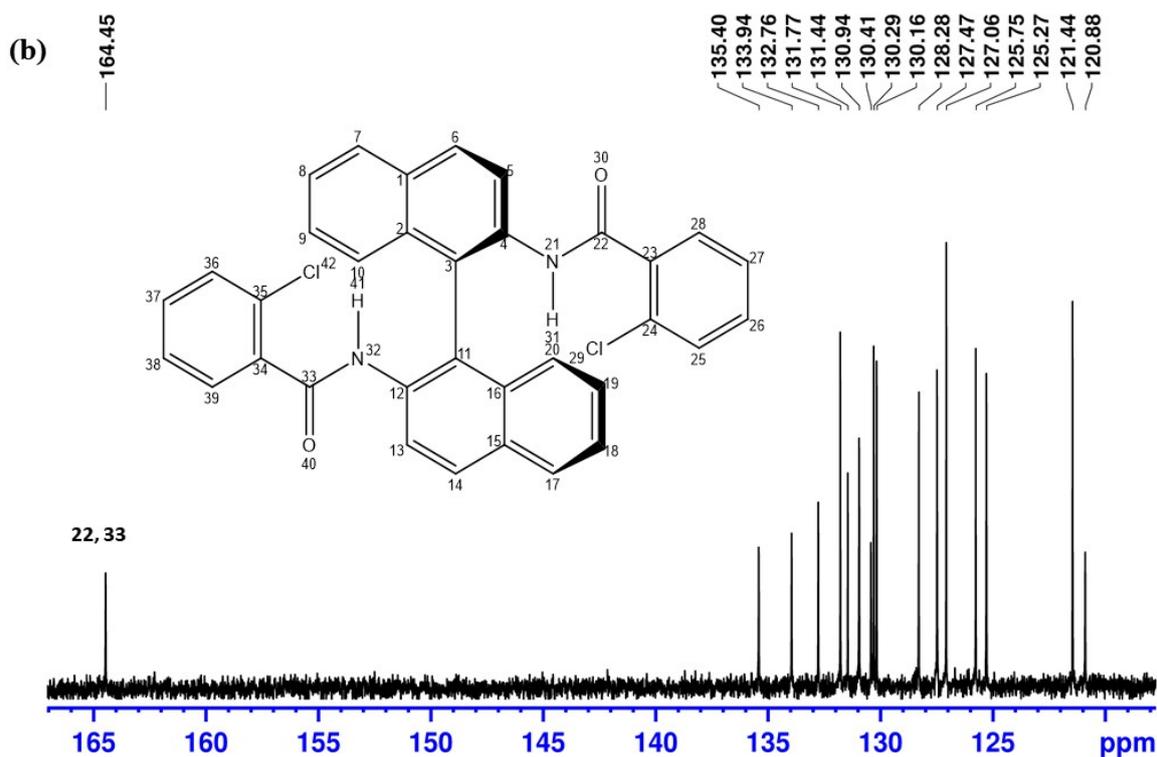
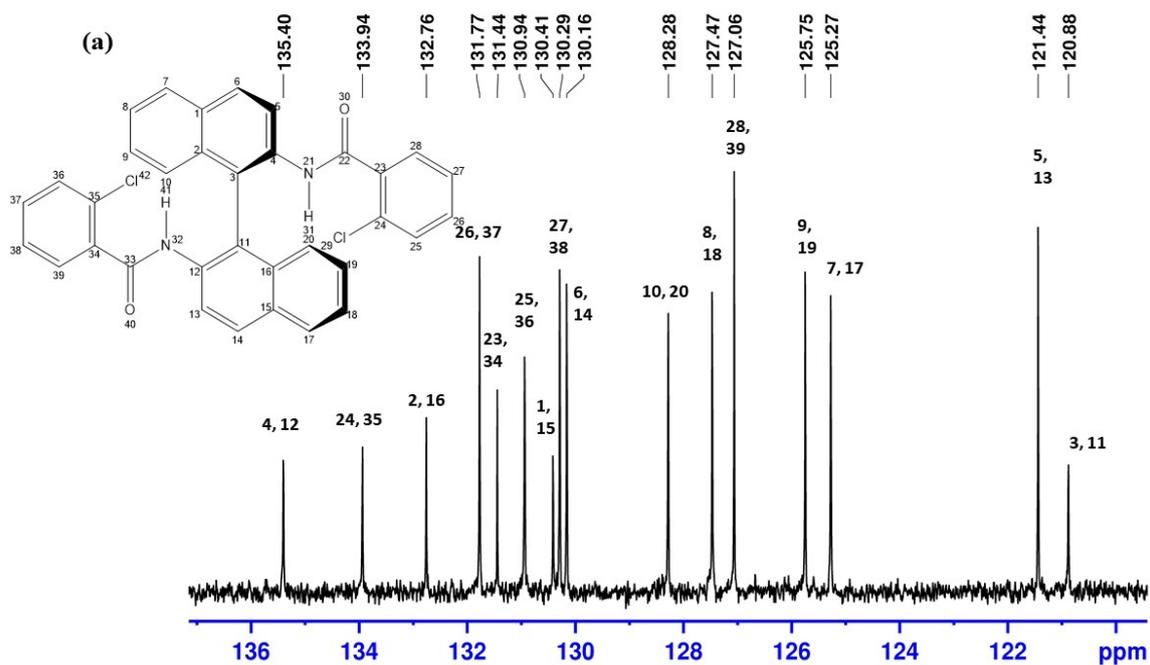


Fig.6S: (a) 100 MHz ^{13}C -NMR spectra of molecule **2**, in the solvent CDCl_3 ; (b) The expanded region of Fig. 6S(a)

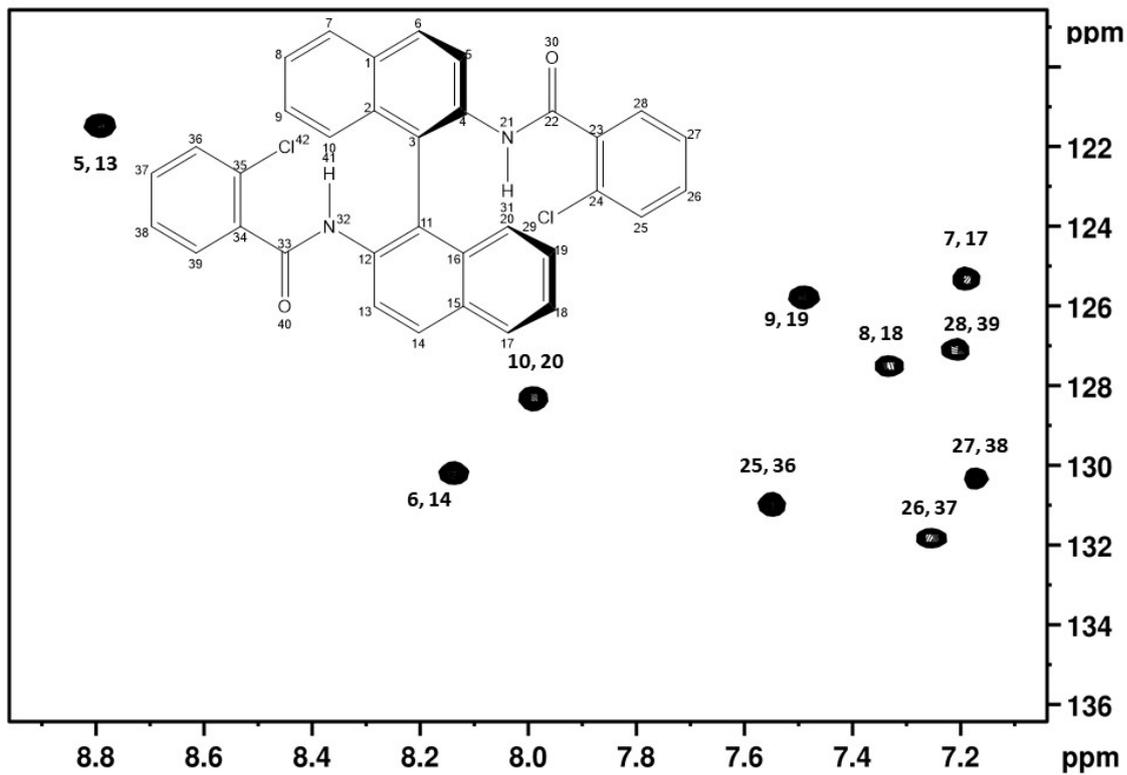


Fig 7S: 2D ^1H - ^{13}C HSQC NMR spectrum of molecule **2**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

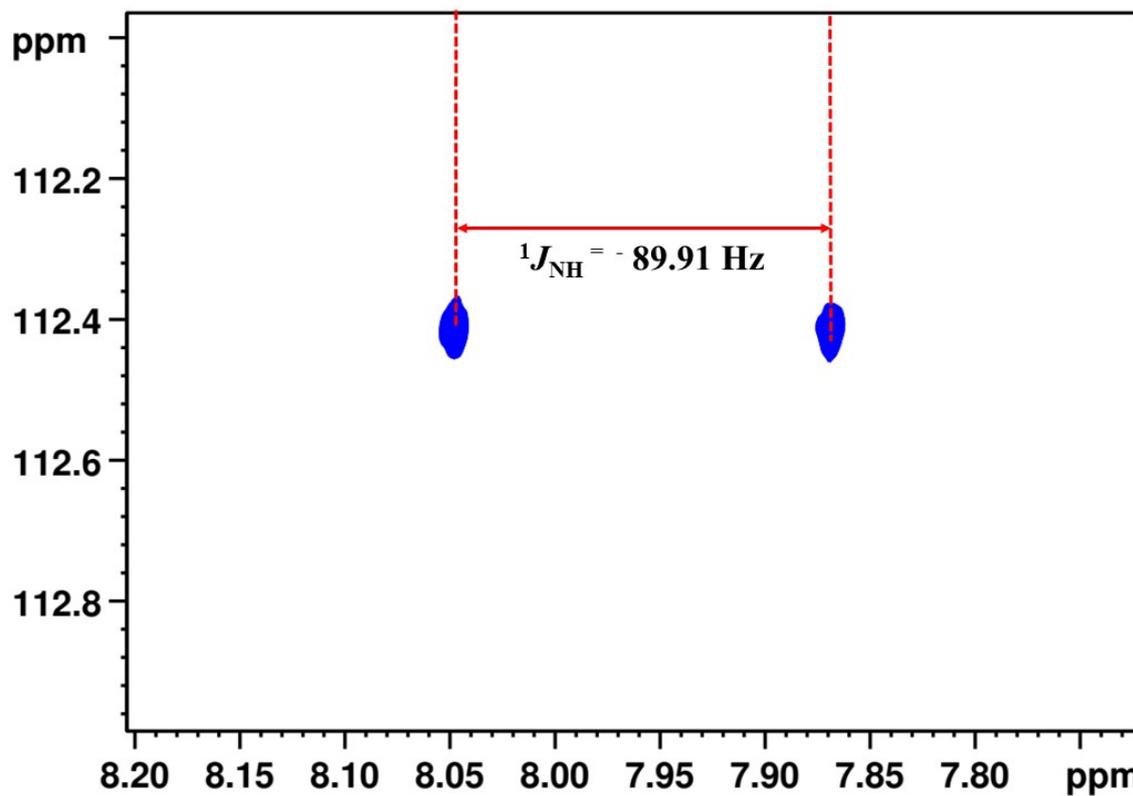


Fig 8S: 2D ^1H - ^{15}N HSQC NMR spectrum of molecule **2**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

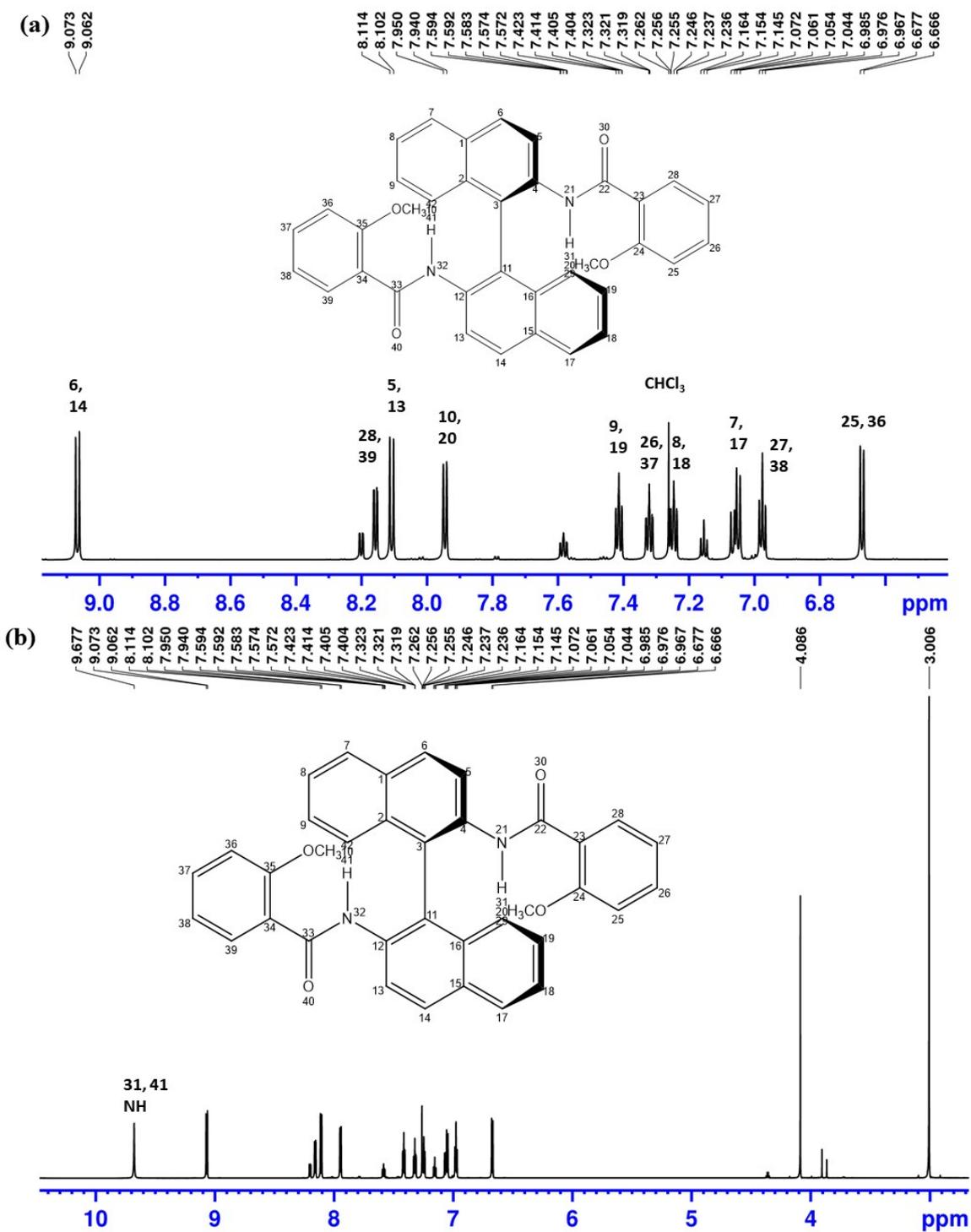


Fig.9S (a): 400 MHz ^1H - NMR spectra of molecule **3**, in the solvent CDCl_3 ; **(b)** The expanded region of **Fig. 9S(a)**

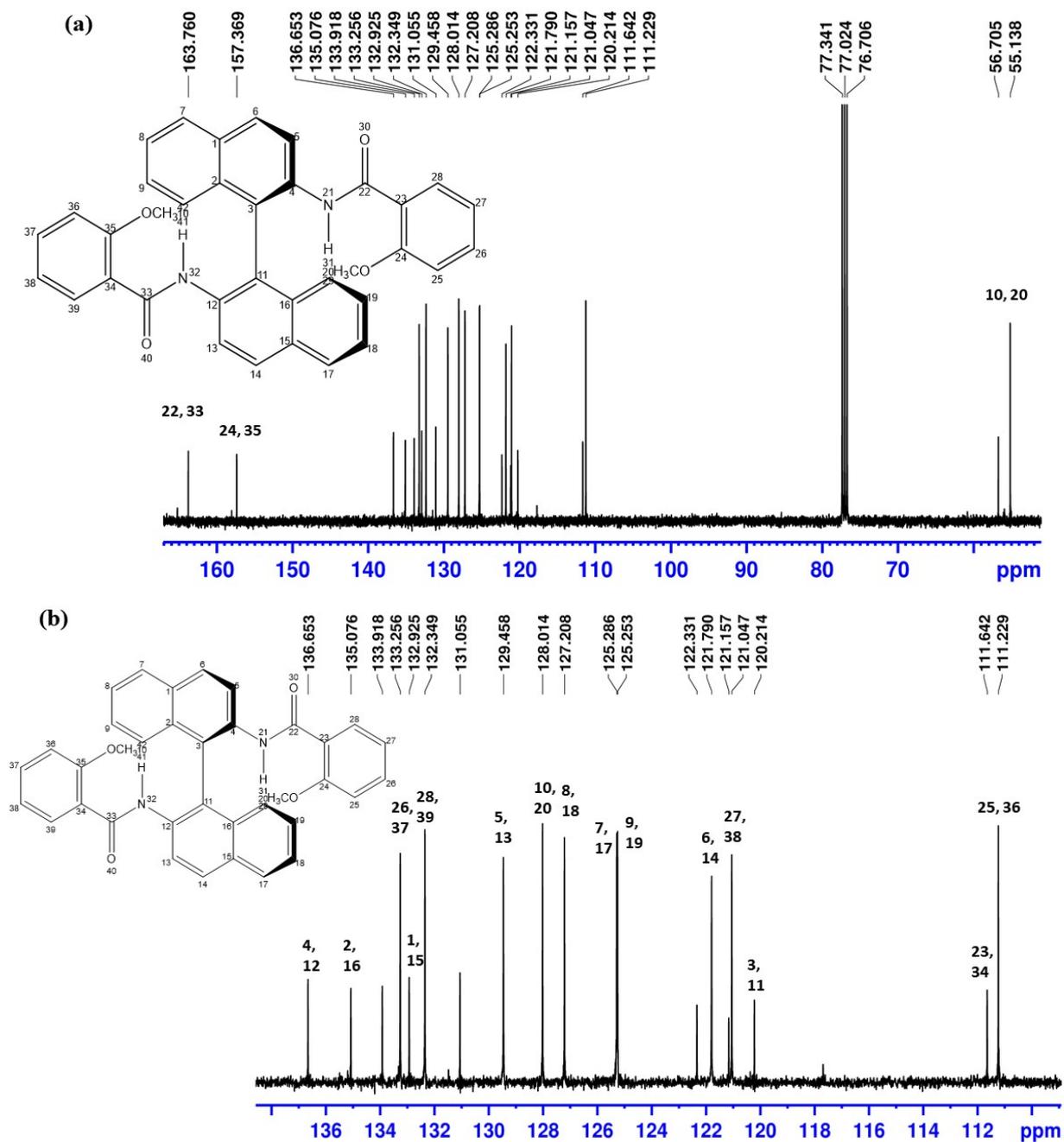


Fig.10S (a): 100 MHz ^{13}C - NMR spectra of molecule **3**, in the solvent CDCl_3 ; **(b)** The expanded region of **Fig. 10S(a)**

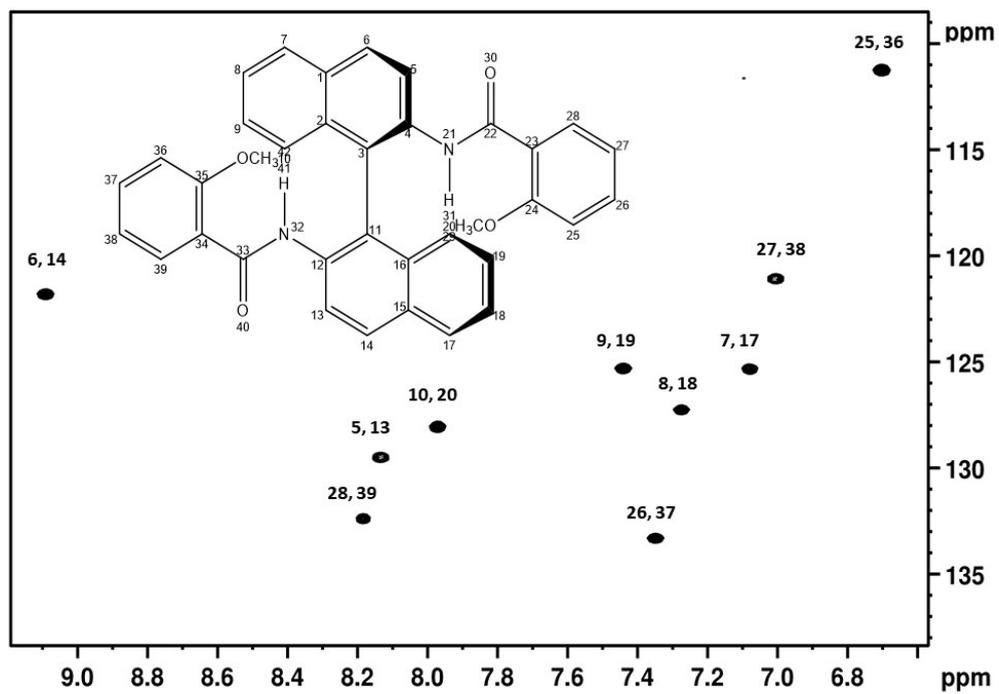


Fig 11S: 2D ^1H - ^{13}C HSQC NMR spectrum of molecule **3**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

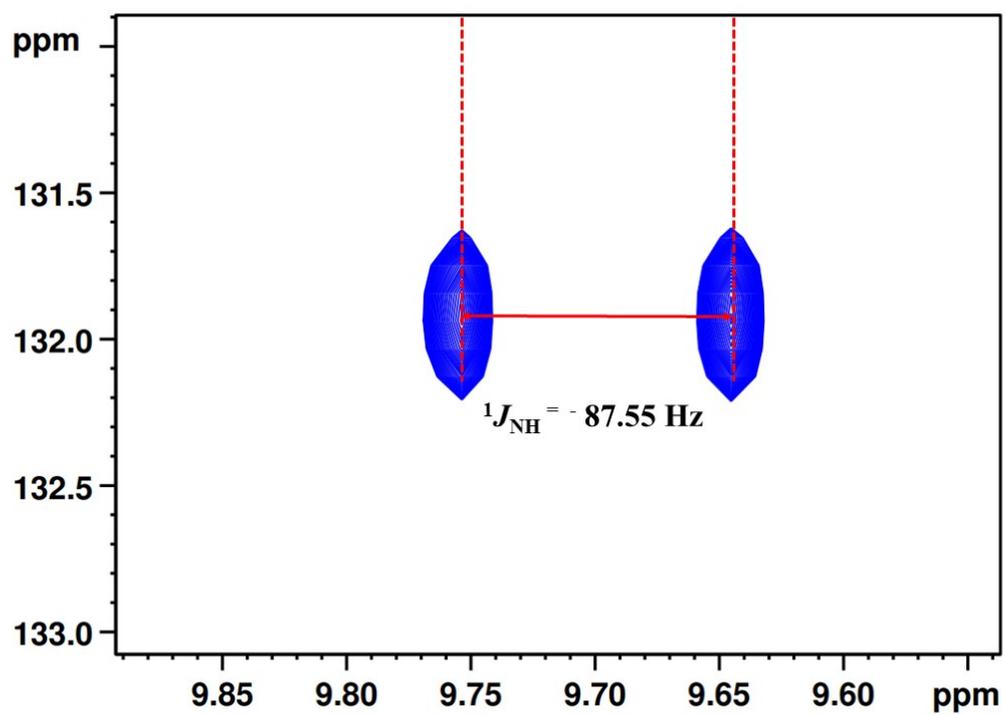


Fig 12S: 2D ^1H - ^{15}N HSQC NMR spectrum of molecule **3**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

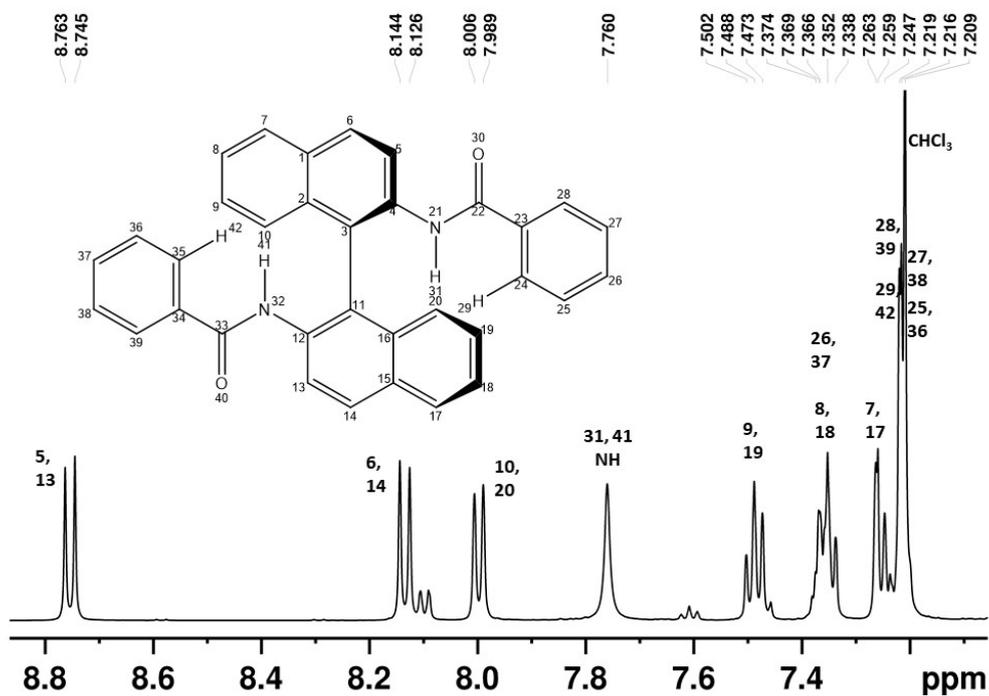


Fig.13S: 400 MHz ¹H- NMR spectrum of molecule 4, in the solvent CDCl₃.

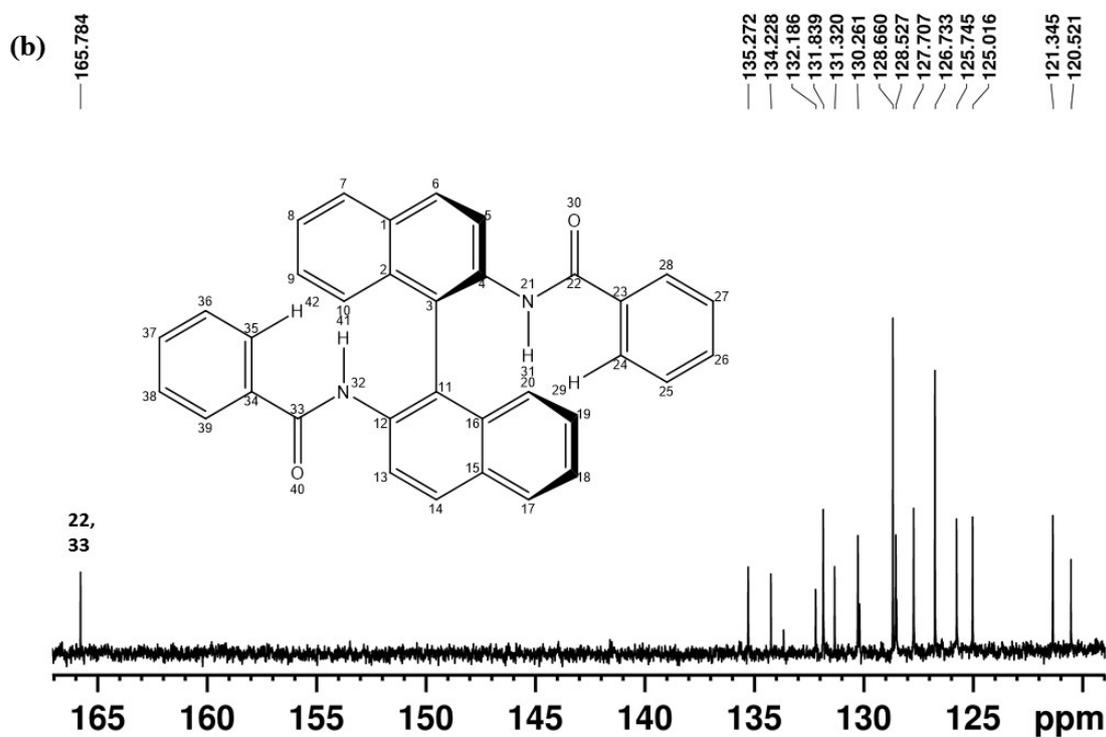
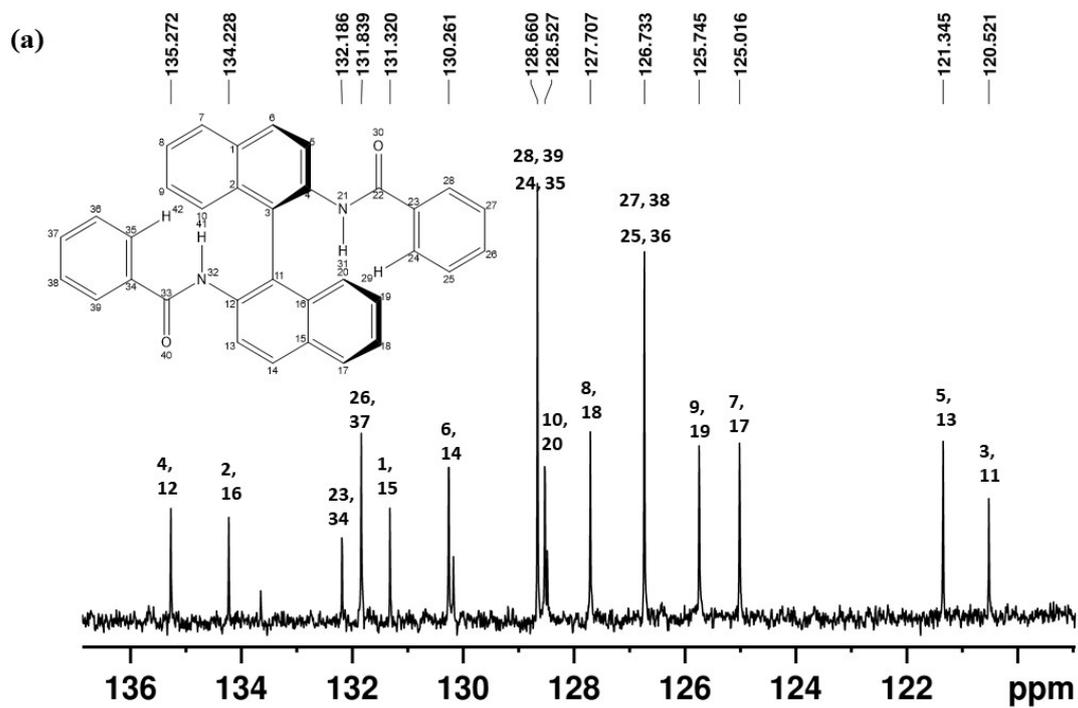


Fig.14S (a): 100 MHz ^{13}C - NMR spectra of molecule 4, in the solvent CDCl_3 ; **(b)** Expanded region of Fig. 14S(a)

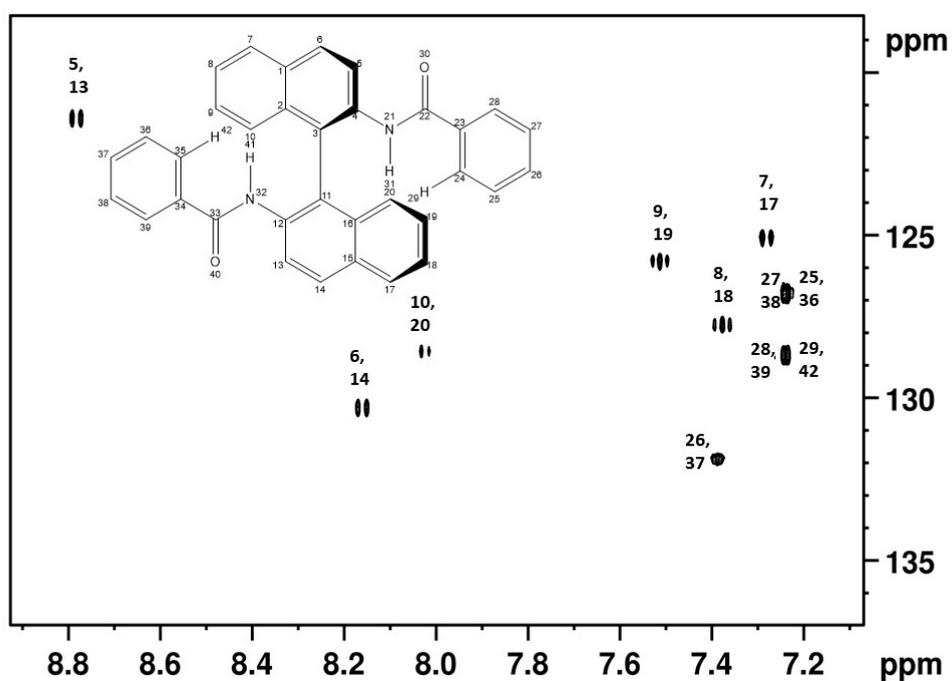


Fig 15S: 2D ^1H - ^{13}C HSQC NMR spectrum of molecule **4**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

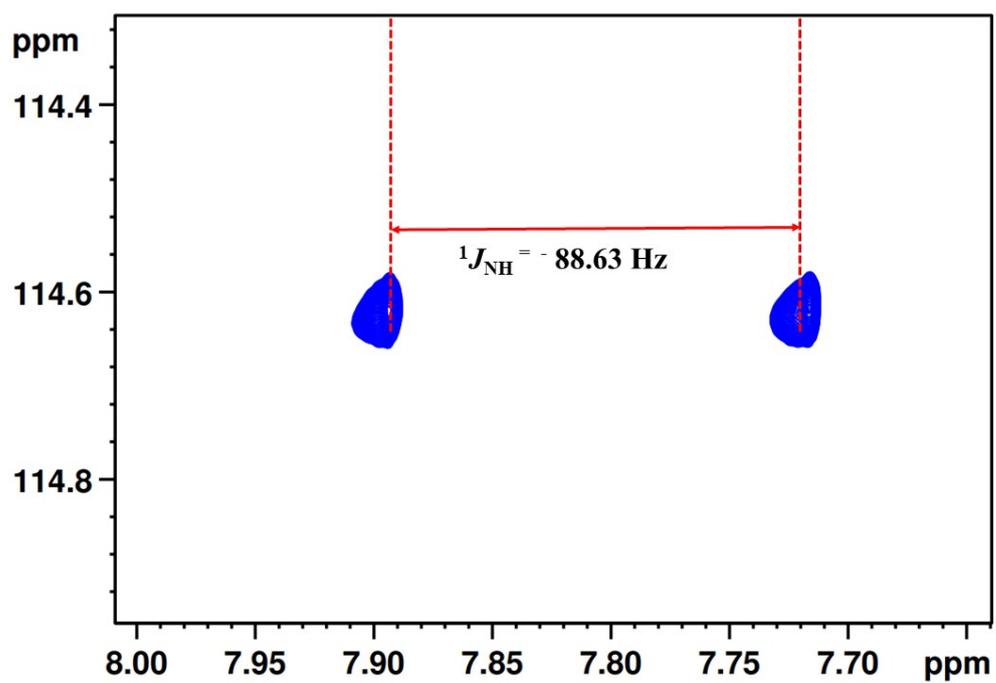


Fig 16S: 2D ^1H - ^{15}N HSQC NMR spectrum of molecule **4**, acquired on 800 MHz NMR spectrometer in the solvent CDCl_3

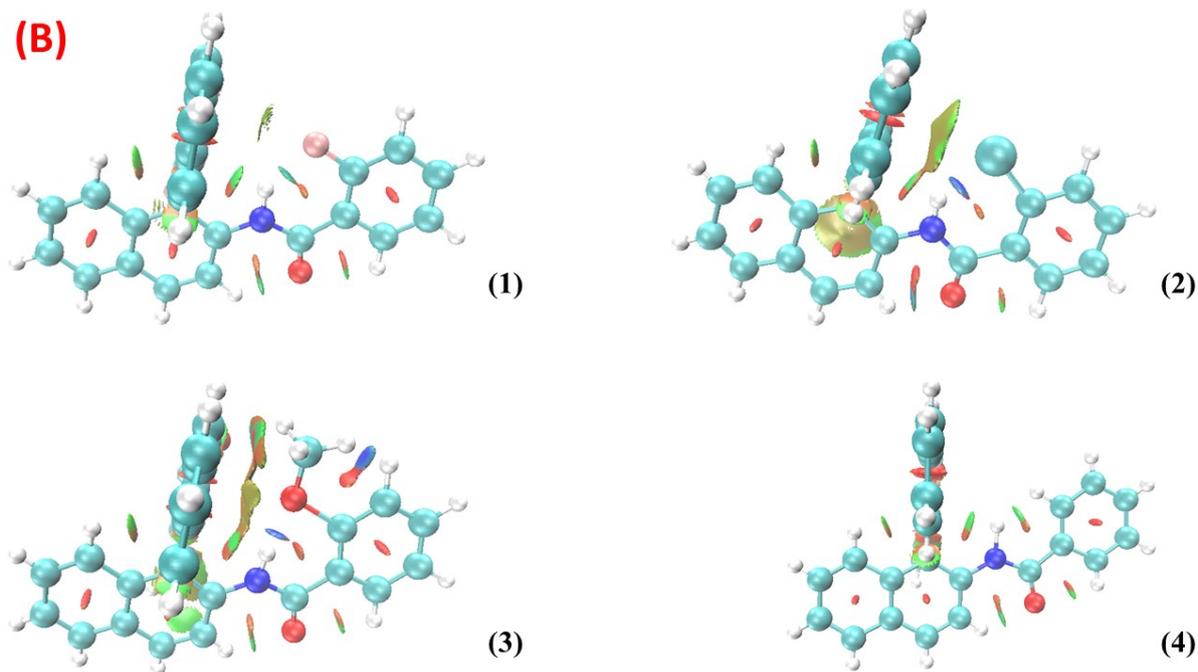
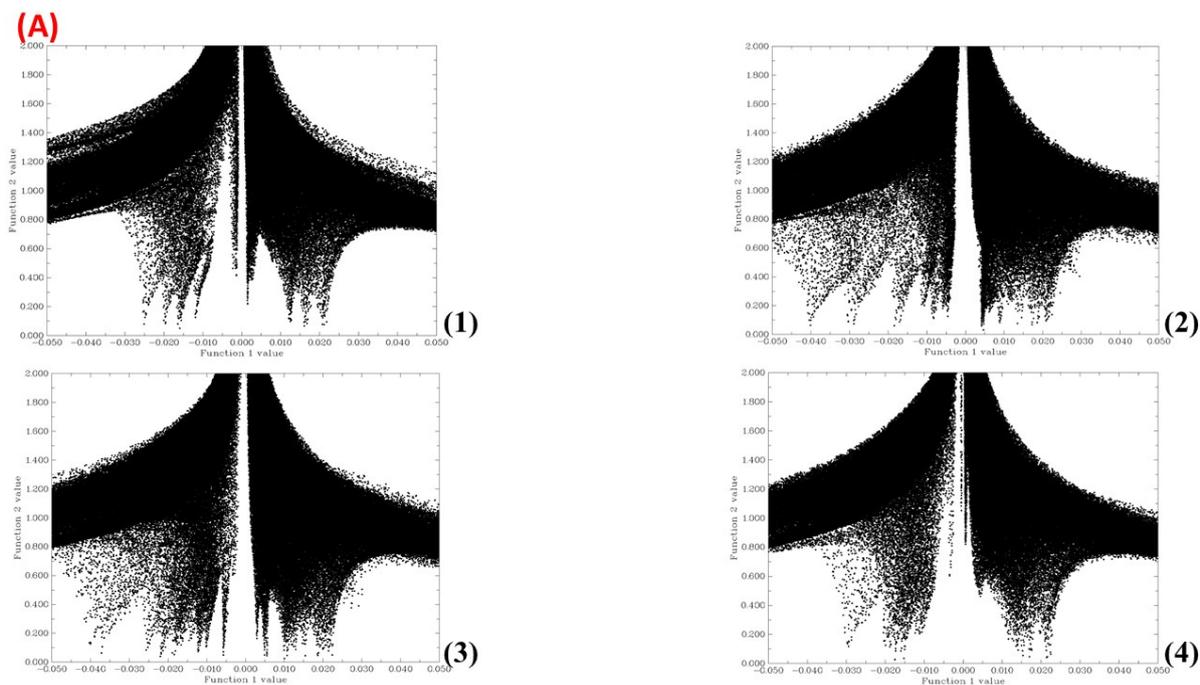


Figure 17S: (A) A plot of $\text{sign}(\lambda_2(r))\rho(r)$ as function 1 vs. the RDG as function 2, and (B) a coloured isosurface plot (the green colour denotes a weak HB, the dark green colour denotes a strong HB and the red colour represents the steric effect) for the molecules, **1–4** plotted using VMD programme.

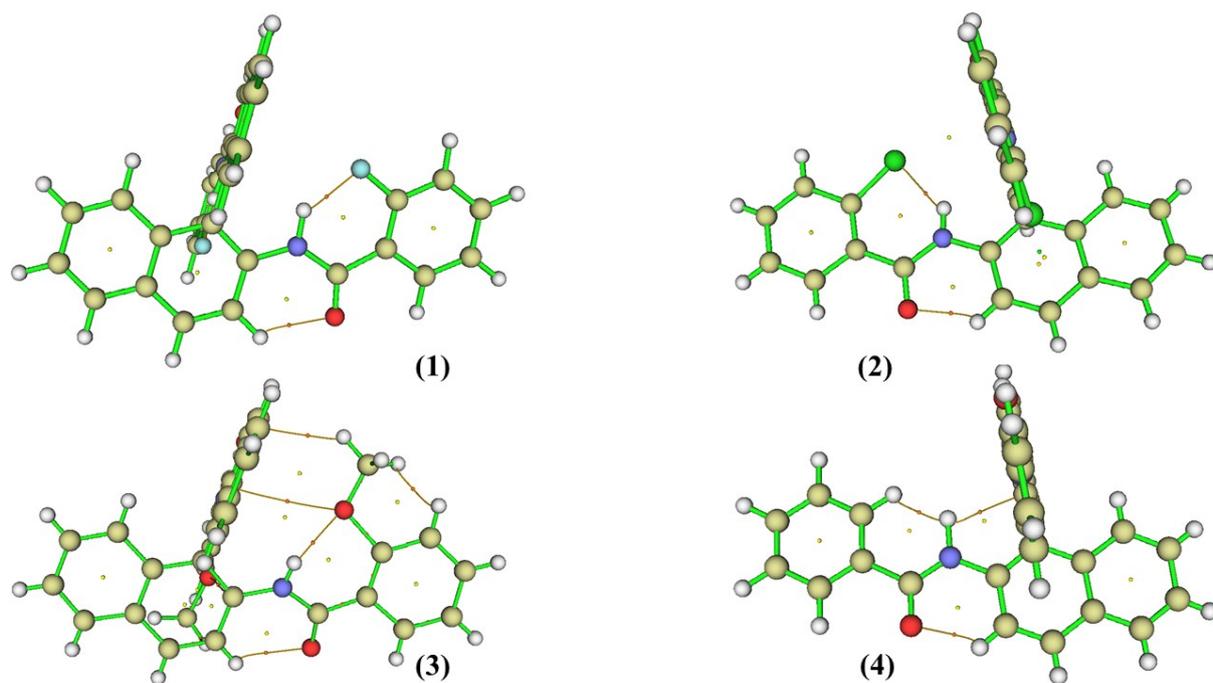


Figure 18S: Visualization of the BCPs and the bond paths of the HBs for the molecules, **1–4**, plotted using multiwfn software. The dots represent the CPs and the thin bars represent the path between two interacting atoms passing through the BCP of the HB interactions.