Self assembly of γ-amino butyric acid based derivative into tunable nano/micro structures

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[b]Centre for Nanoscience & Nanotechnology (U.I.E.A.S.T.), Panjab University, Sector-14, Chandigarh-160014, India

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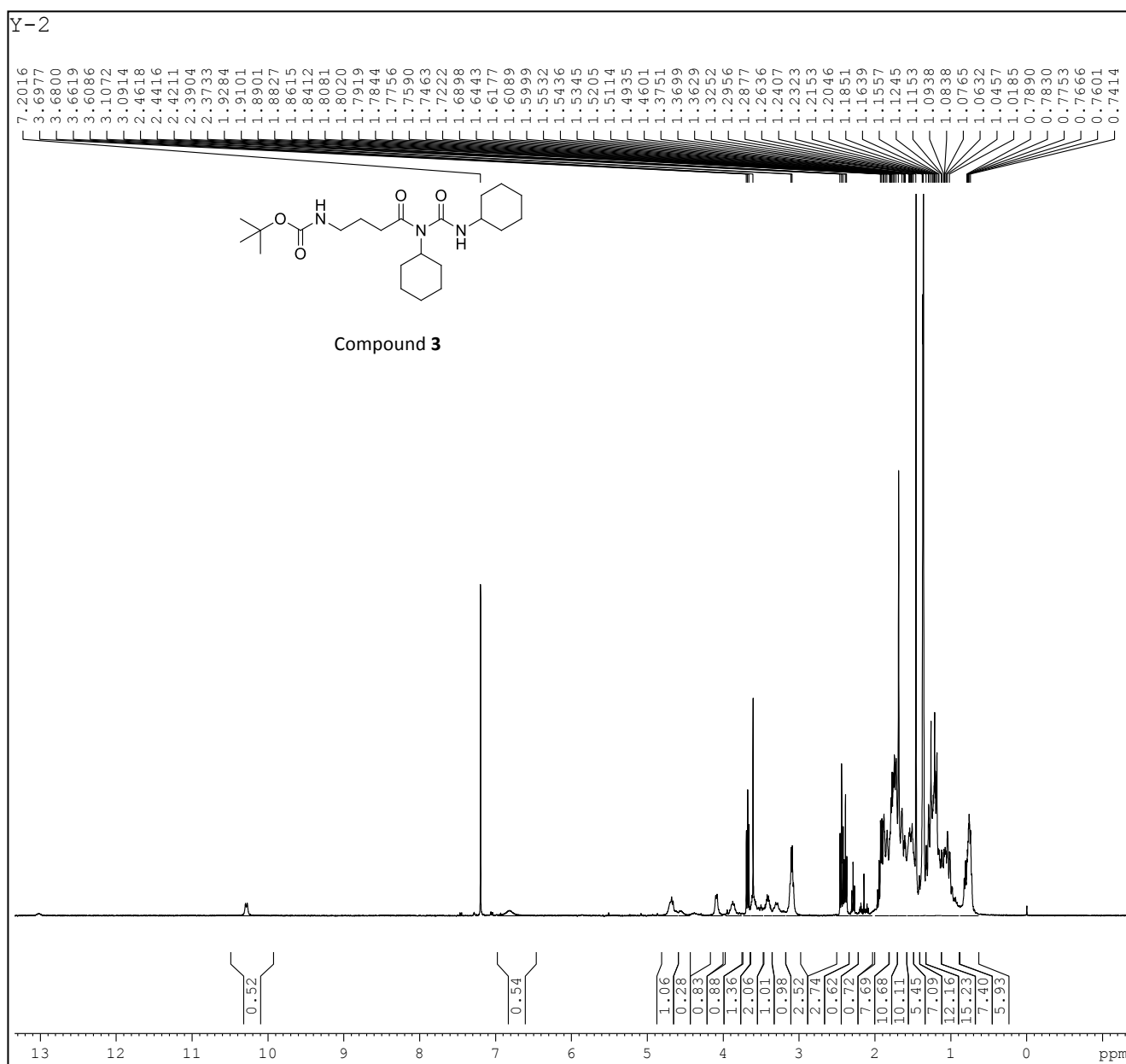**Figure S1.** ^{1}H NMR spectrum of GABA derivative 3 in CDCl$_3$ (400 MHz)
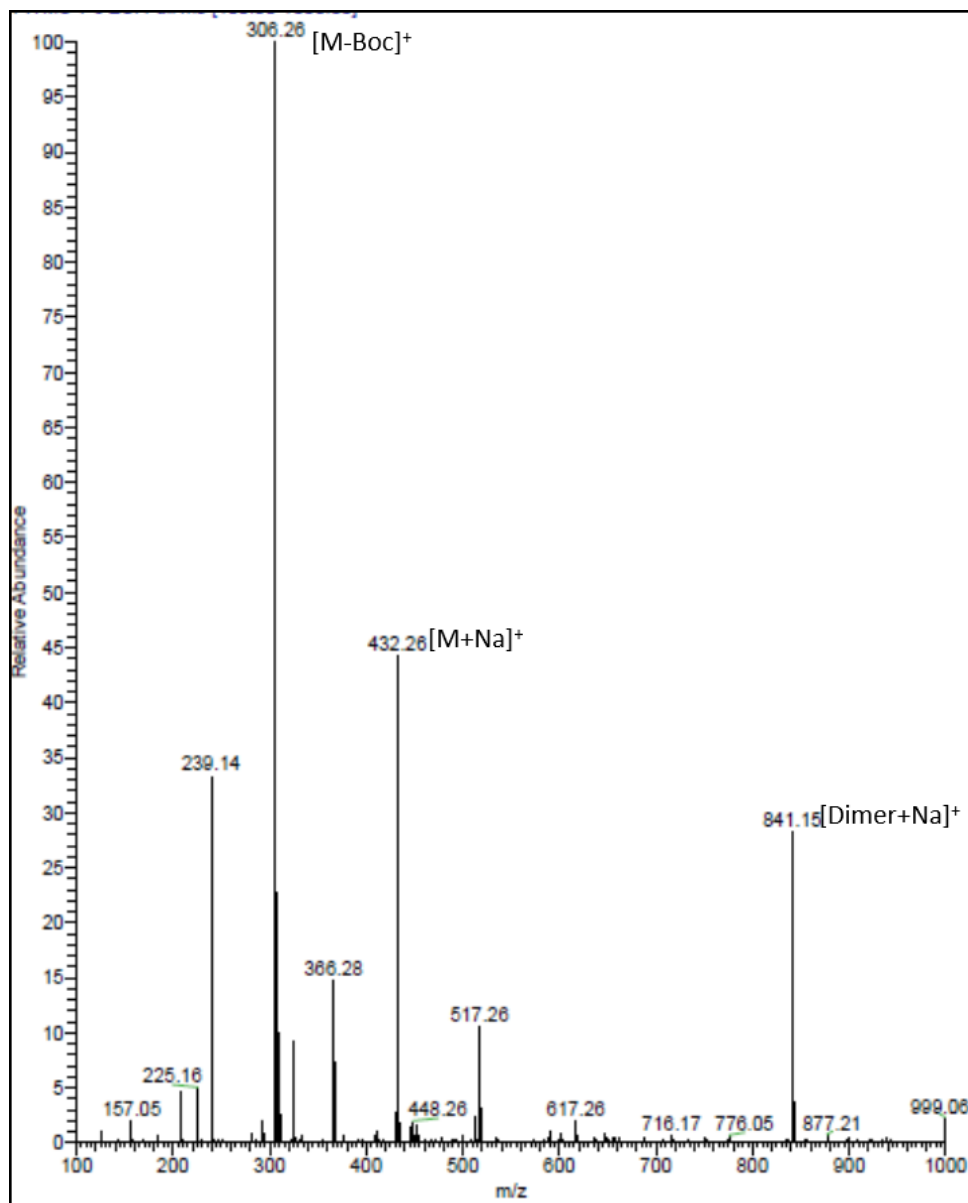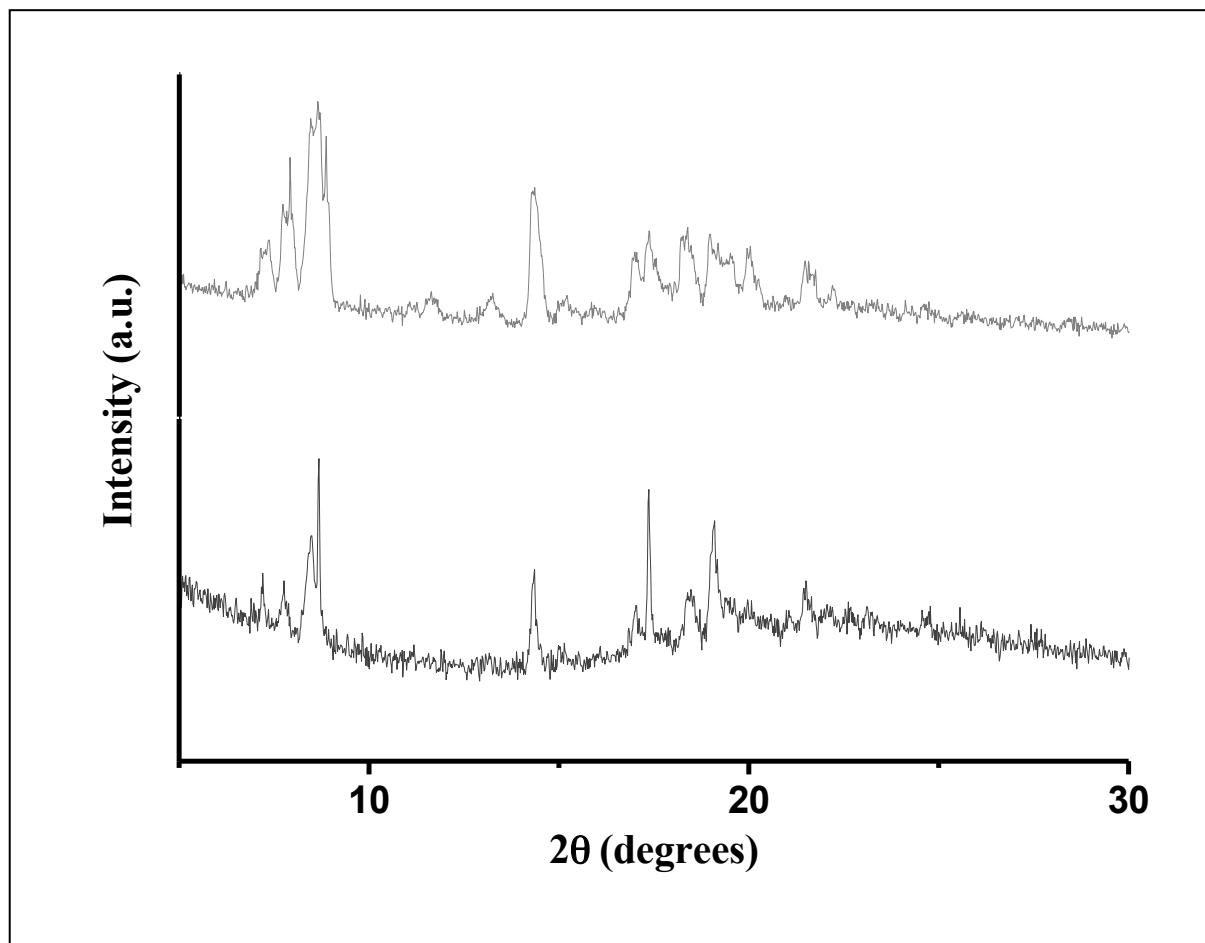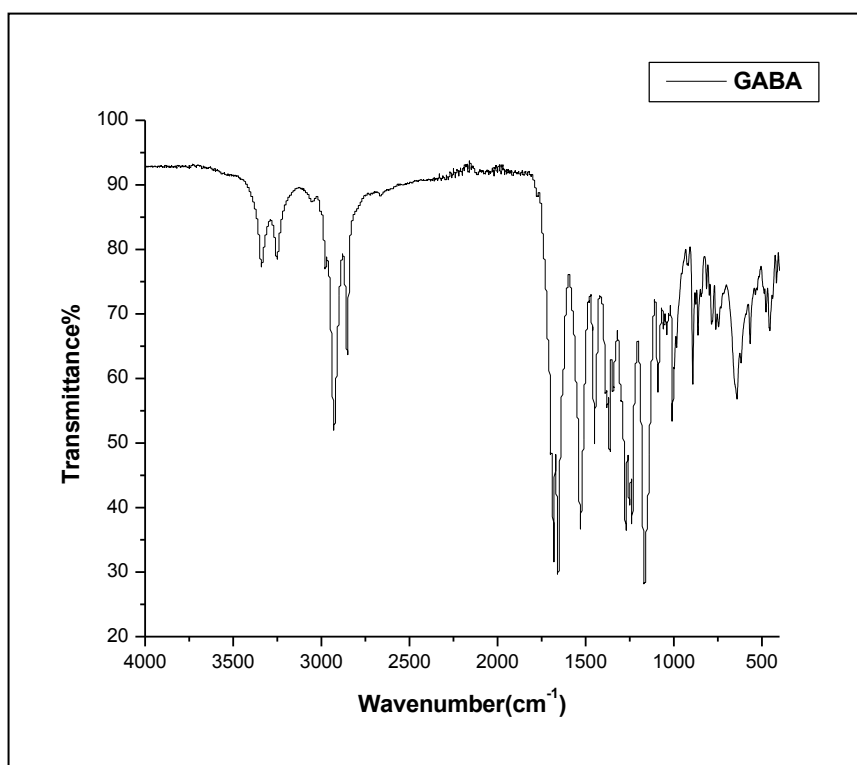

Compound **3**

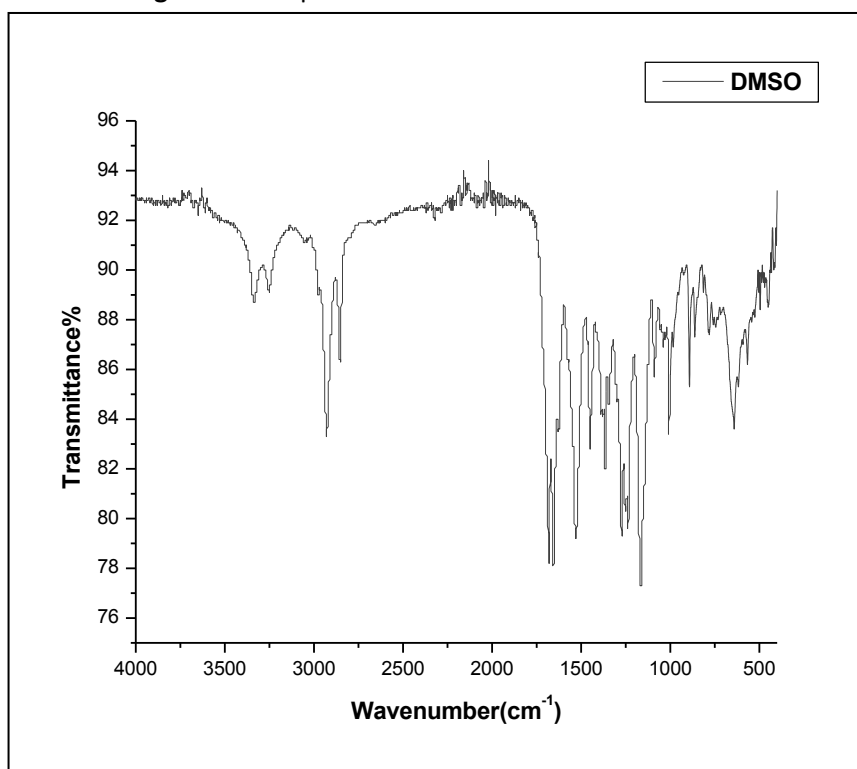**Figure S2.** MS spectrum of GABA derivative **3**

Figure S3. X-ray Diffraction Pattern of GABA derivative **3** (dark gray) and self assembled GABA derivative **3** (light gray) in DMSO
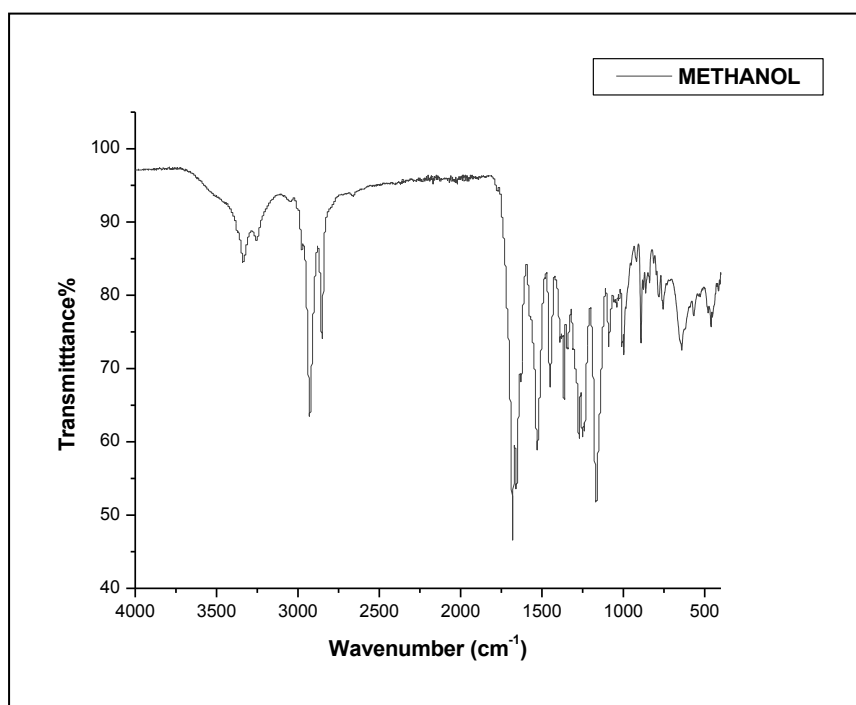
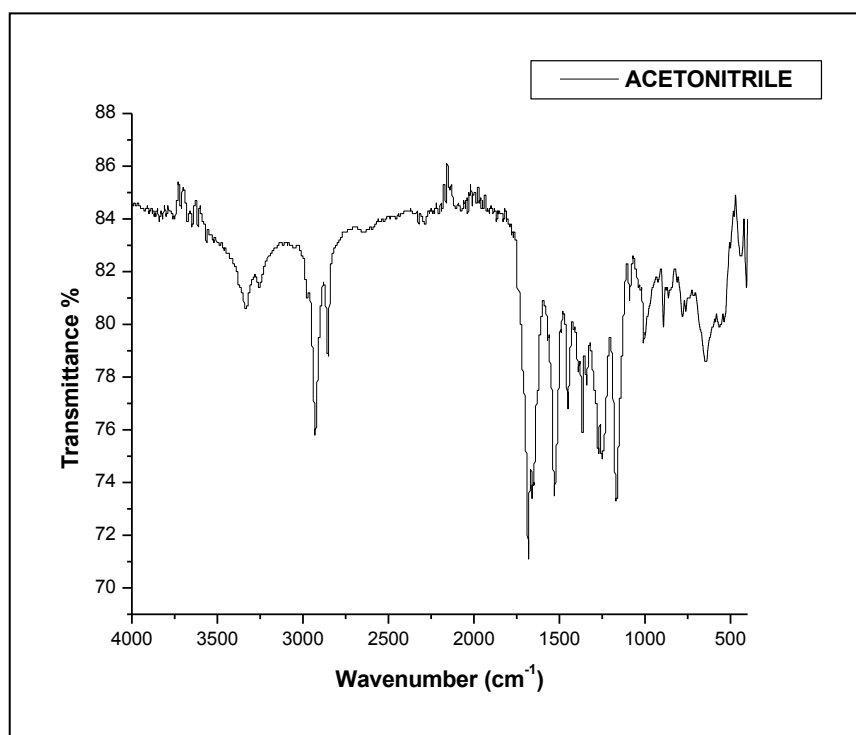**Figure S4.** IR spectra of solid GABA derivative **3**

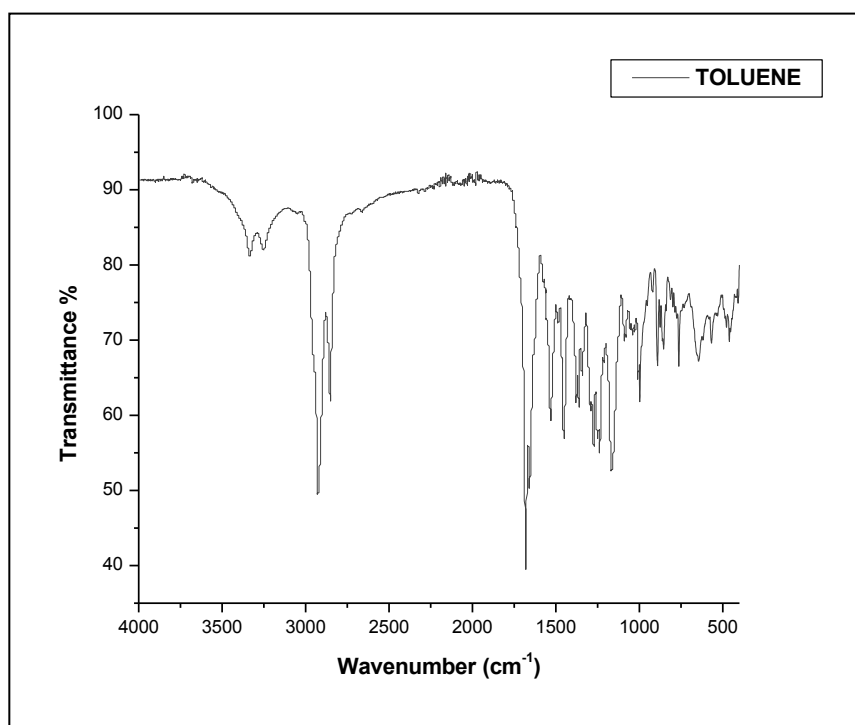**Figure S5**. IR spectra of GABA derivative **3** in DMSO

Figure S6. IR spectra of GABA derivative 3 in Methanol

Figure S7. IR spectra of GABA derivative **3** in Acetonitrile

Figure S8. IR spectra of GABA derivative **3** in Toluene

Table S1. IR data of GABA derivative 3 and its self assembled compound in different solvents

Solid GABA (in cm^{-1})	GABA 3 in Methanol (in cm^{-1})	GABA 3 in DMSO (in cm^{-1})	GABA 3 in Acetonitrile (in cm^{-1})	GABA 3 in Toluene (in cm^{-1})	Groups contributing to vibration
3339.92	3336.86	3335.51	3332.50	3334.81	-N-H symmetric stretch
2927.94	2926.79	2928.23	2927.77	2925.49	-C-H stretch (cyclohexyl ring)
1682.56	1682.30	1682.42	1681.80	1682.32	-C=O asymmetric stretch
1656.05	1657.88	1655.72	1662.31	1658.50	N-H bending stretch
1450.03	1450.09	1449.80	1451.09	1451.44	-CH$_3$ bend