

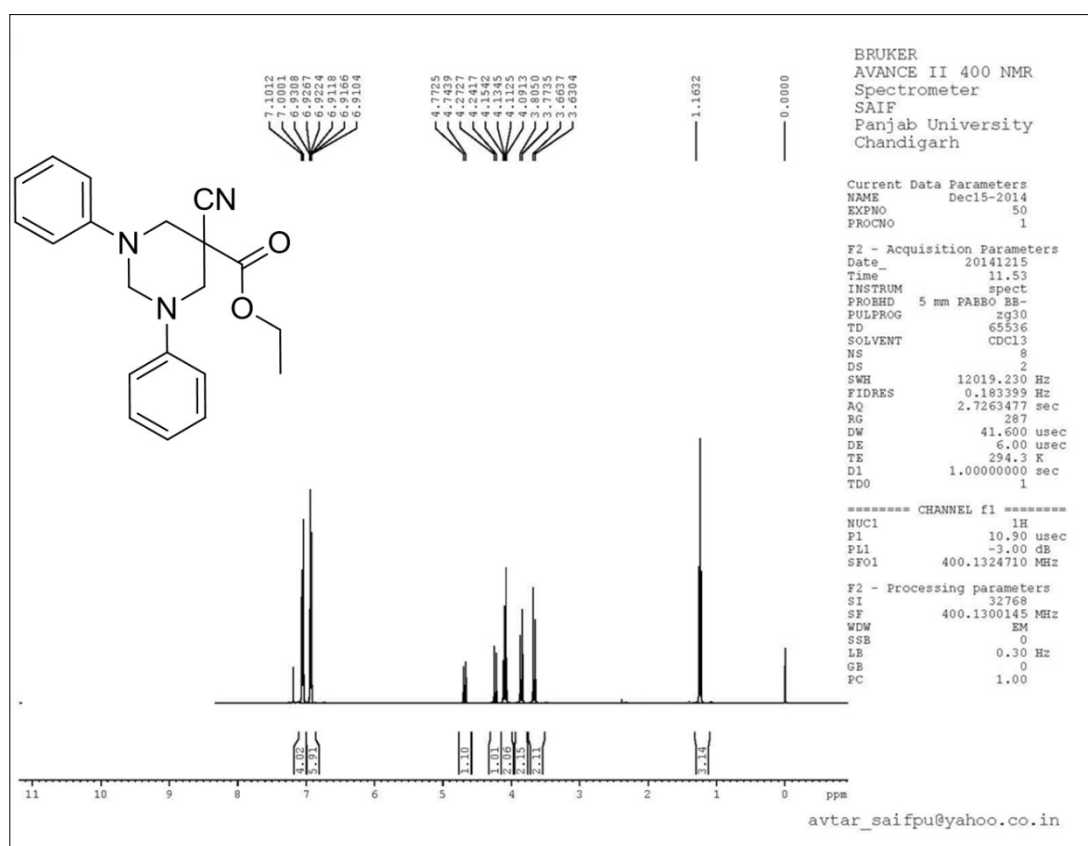
Supplementary Information

Dy/Chitosan: A highly efficient and recyclable heterogeneous nano catalyst for the synthesis of hexahydropyrimidines in aqueous media

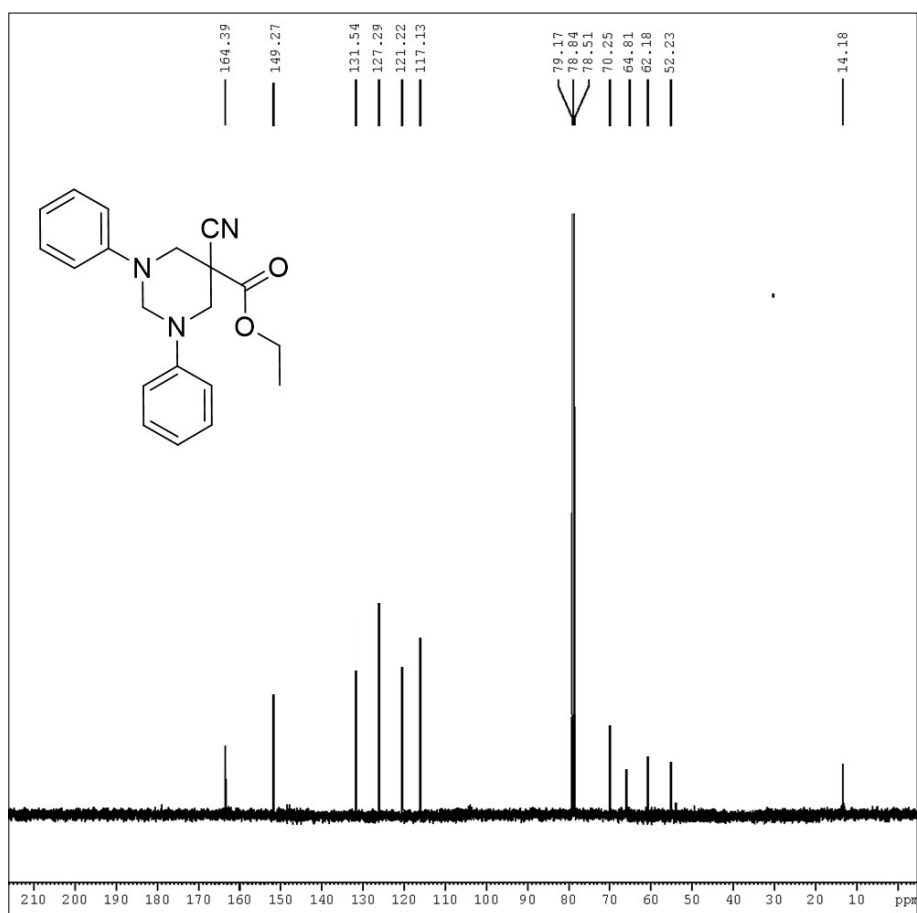
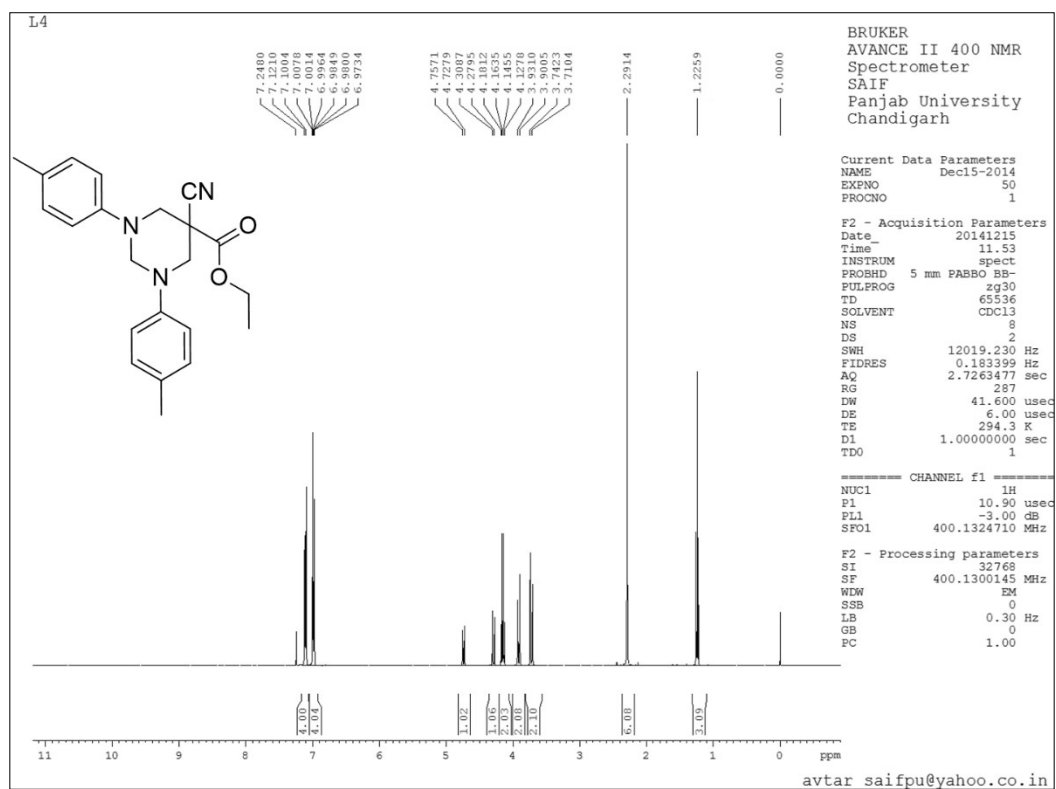
Authors: Nayeem Ahmed, Saima Tarannum and Zeba N. Siddiqui*

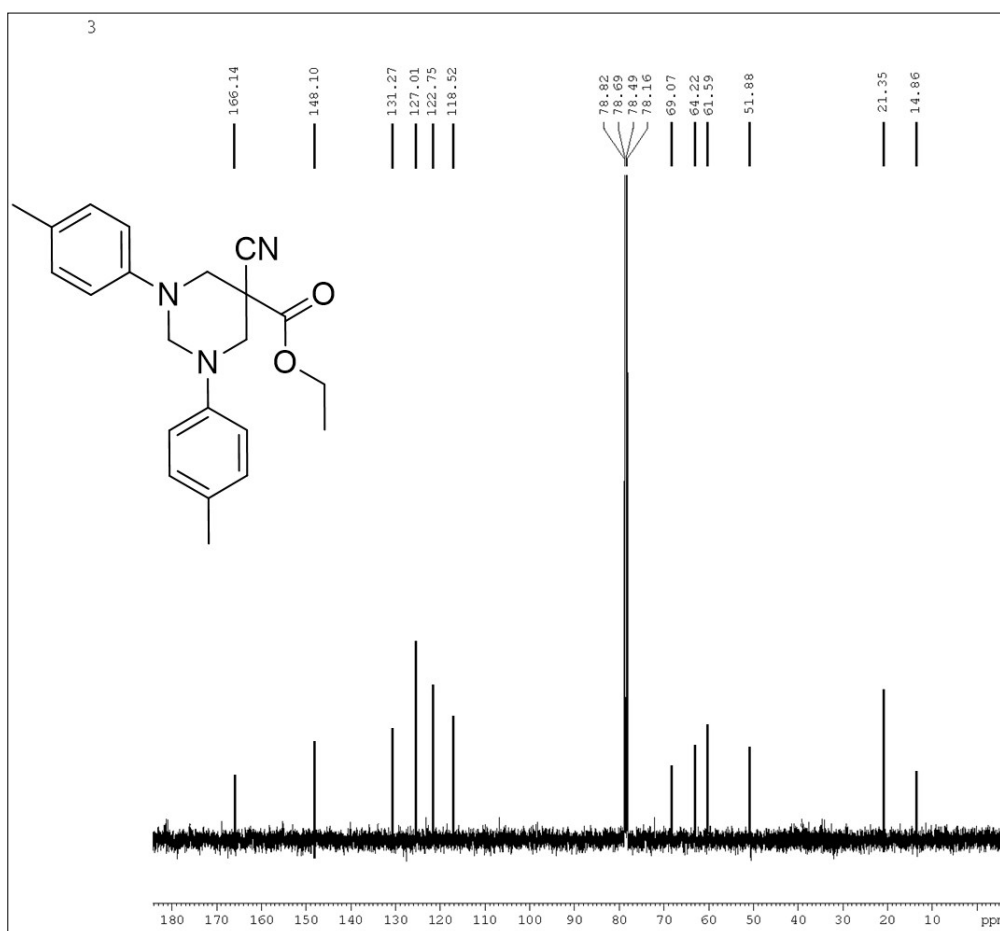
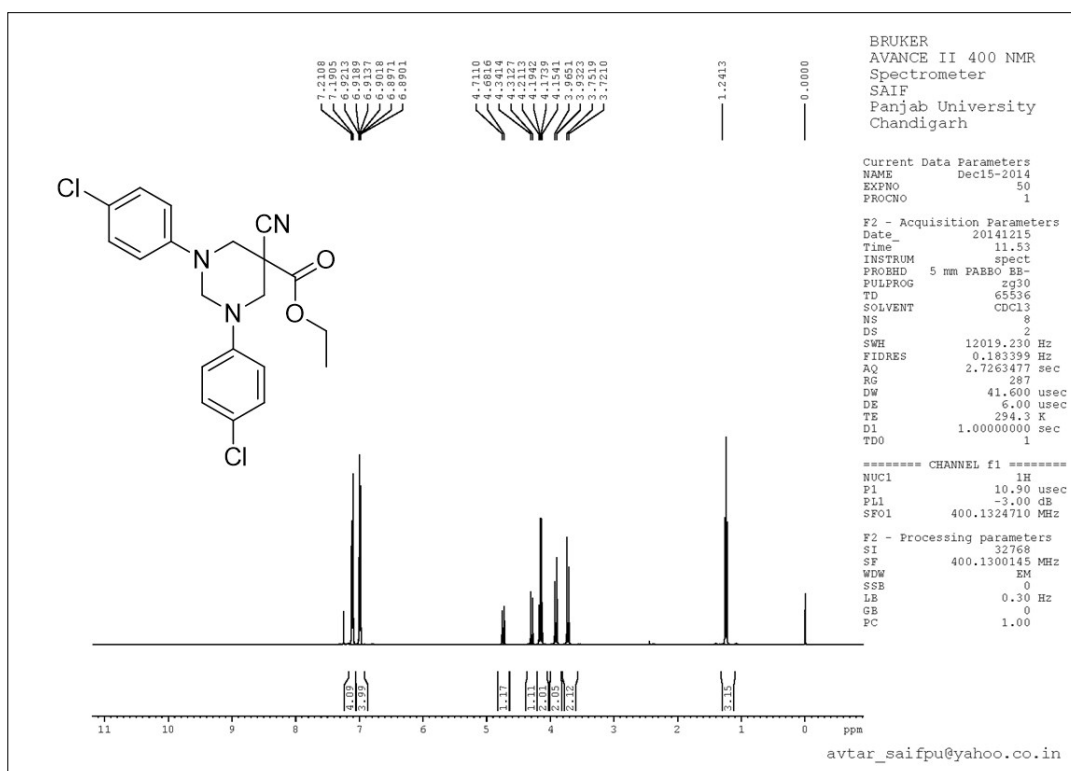
Affiliation: Department of Chemistry, Aligarh Muslim University, Aligarh, 202 002, India.

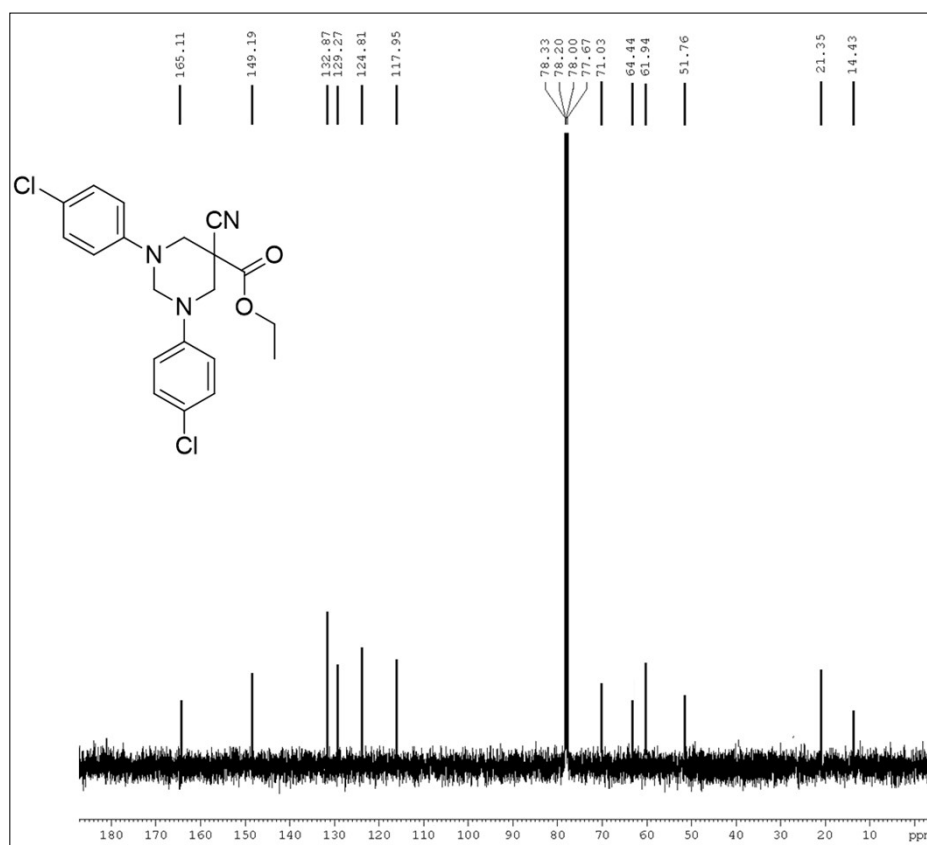
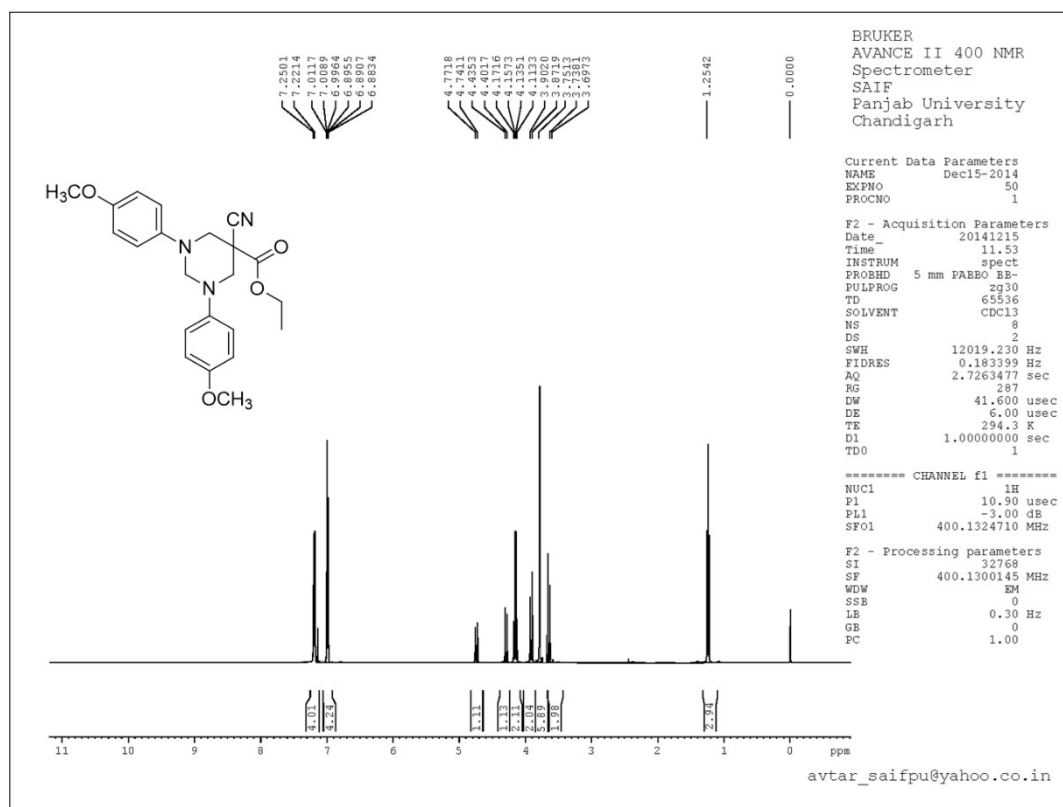
NMR Spectra of synthesised compounds

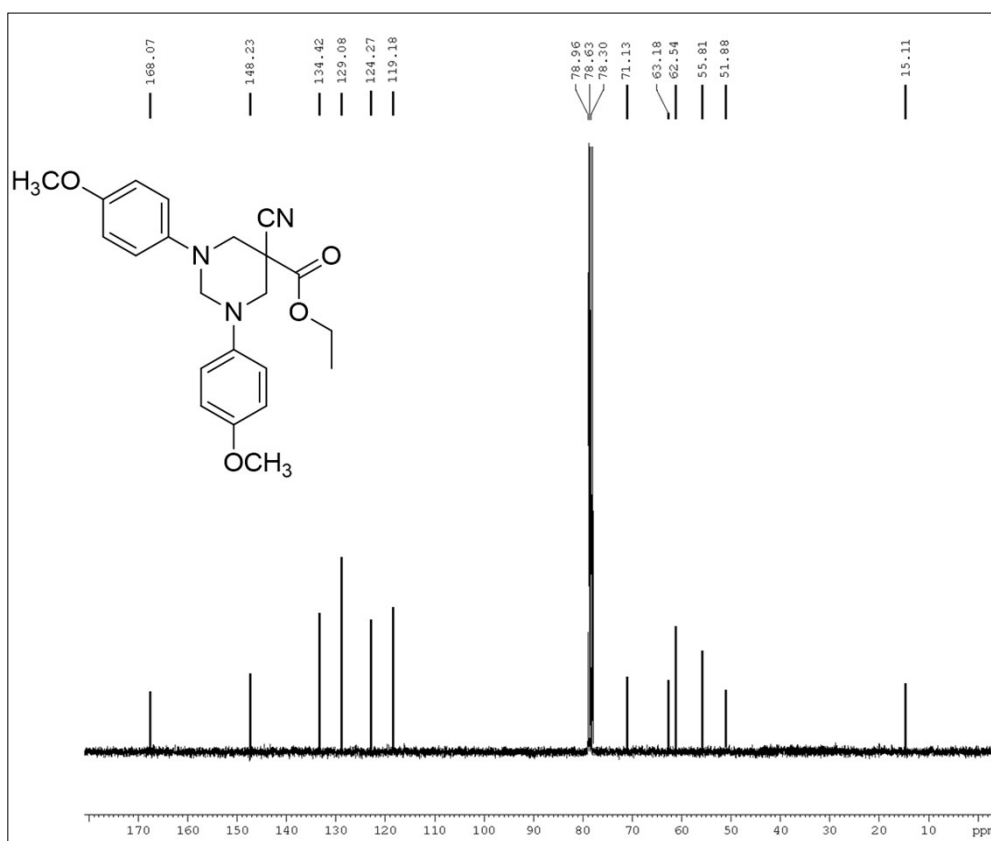
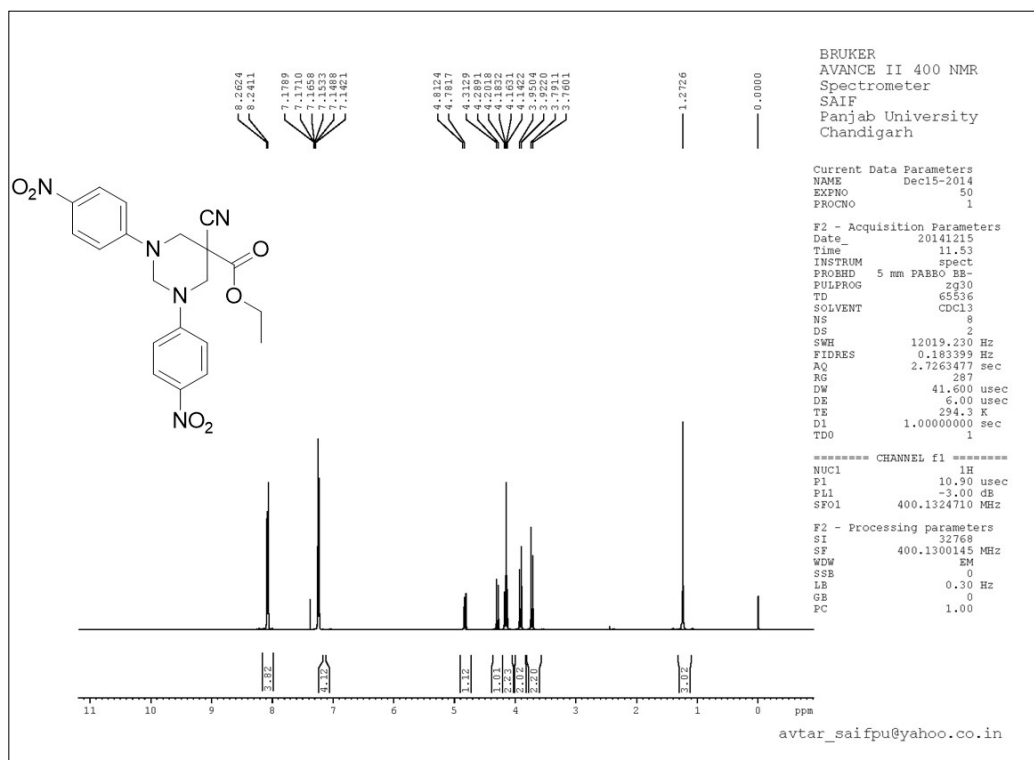


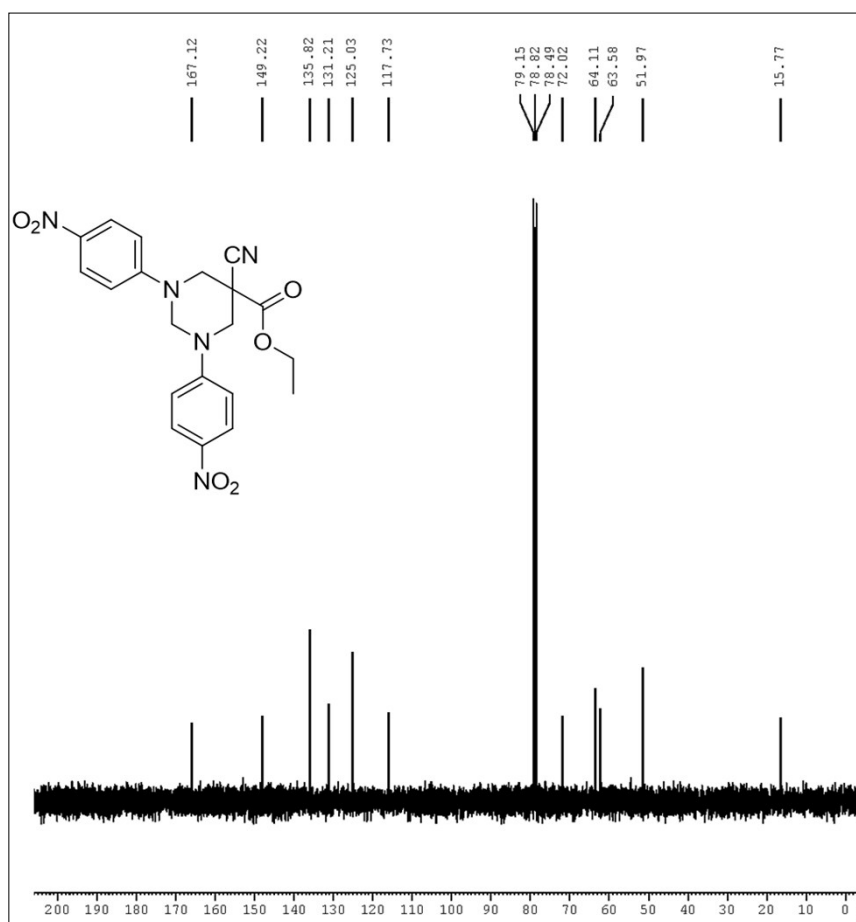
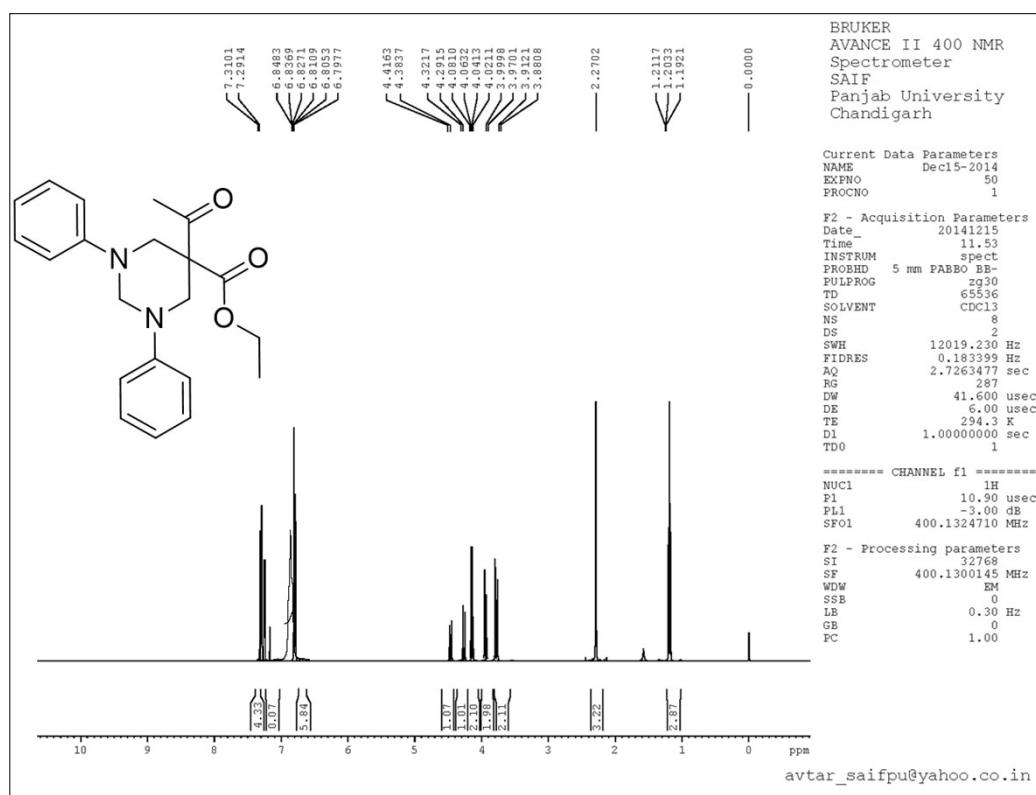
¹H-NMR Spectra of **3a**

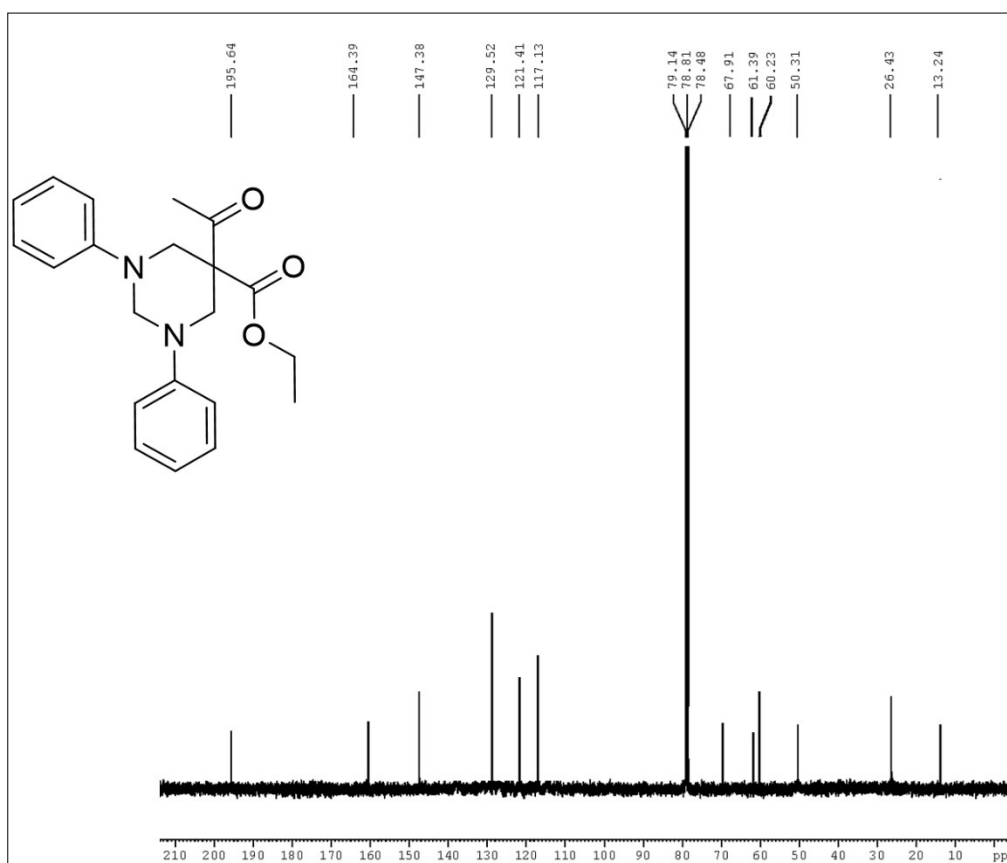
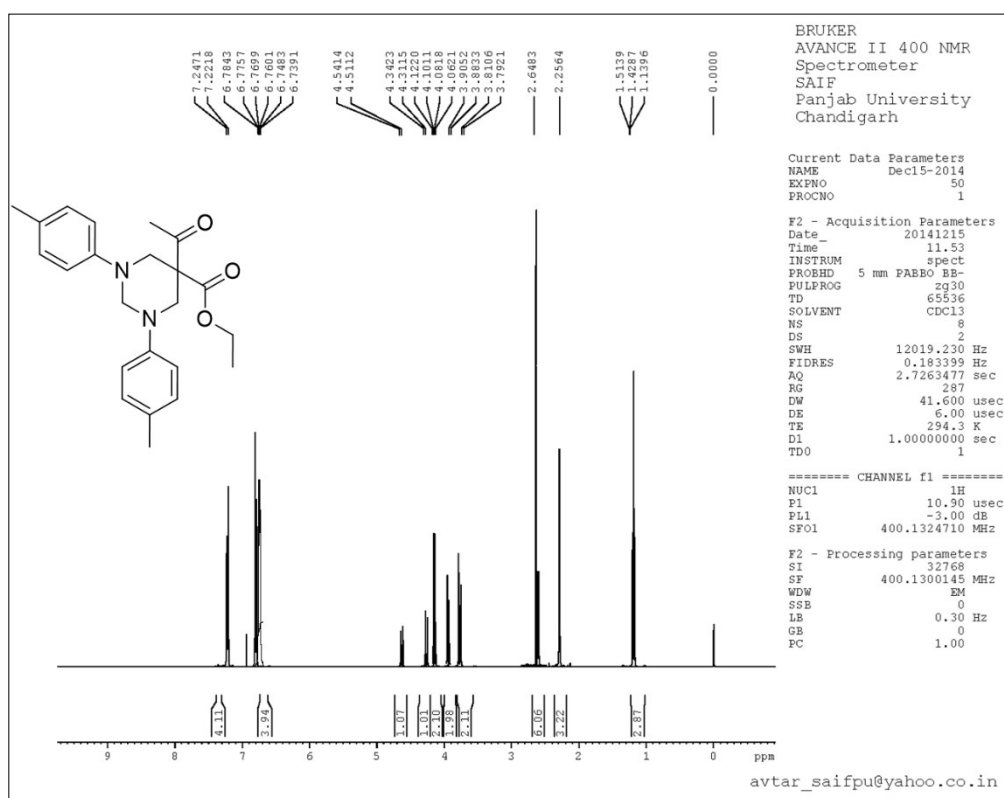
¹³C-NMR Spectra of **3a**¹H-NMR Spectra of **3b**

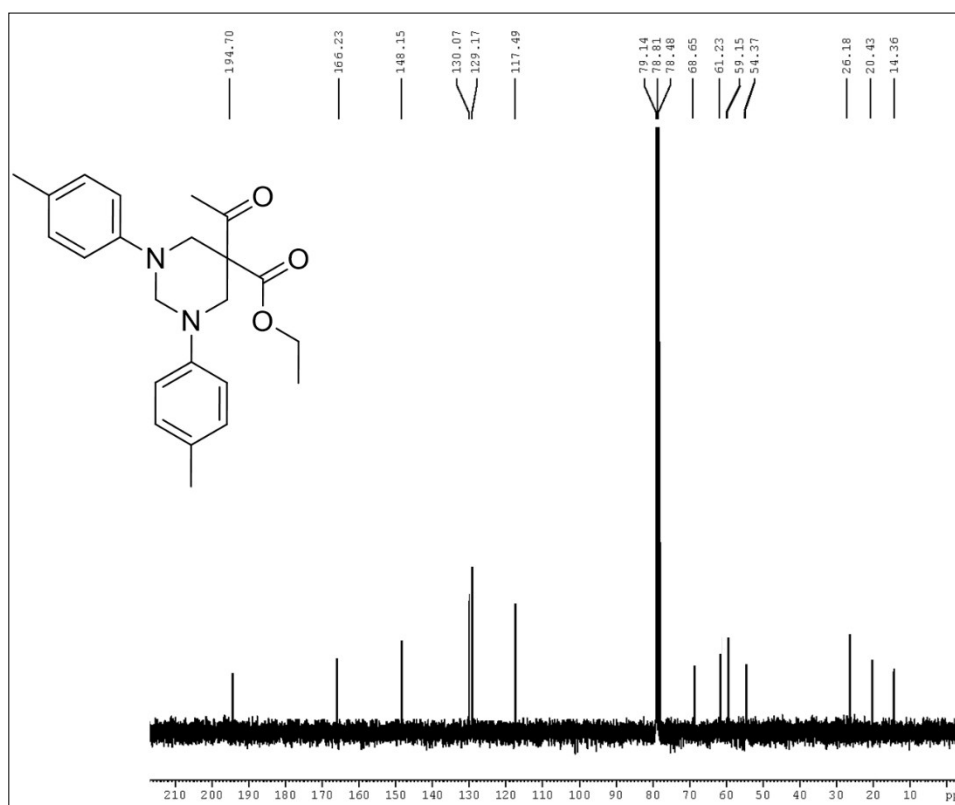
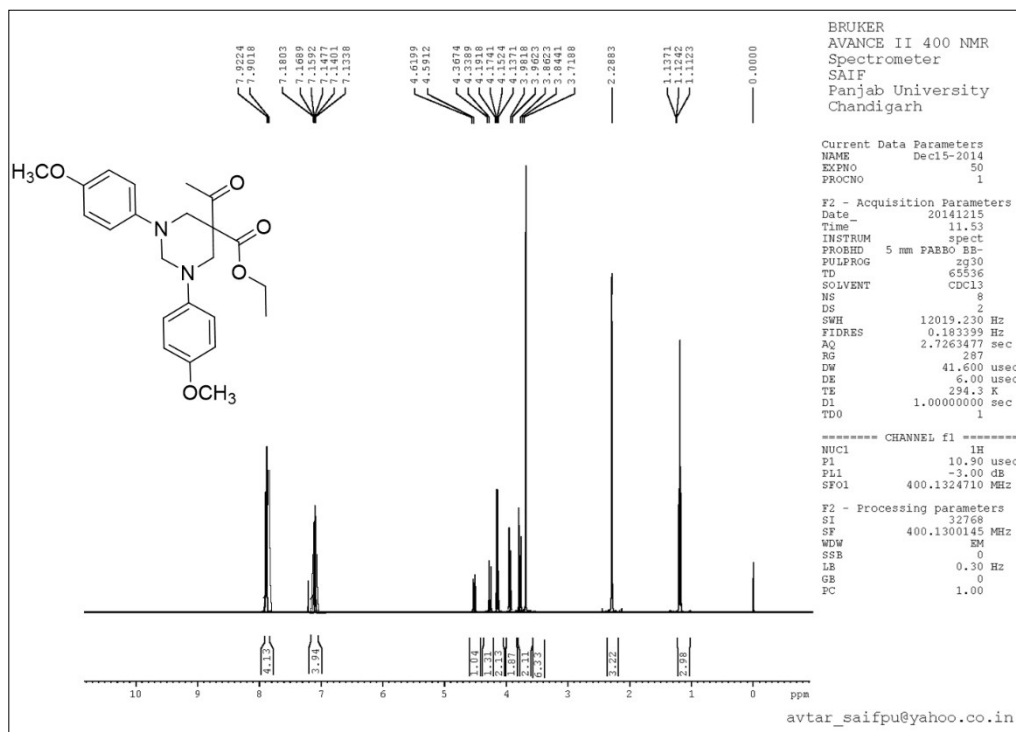
¹³C-NMR Spectra of **3b**¹H-NMR Spectra of **3c**

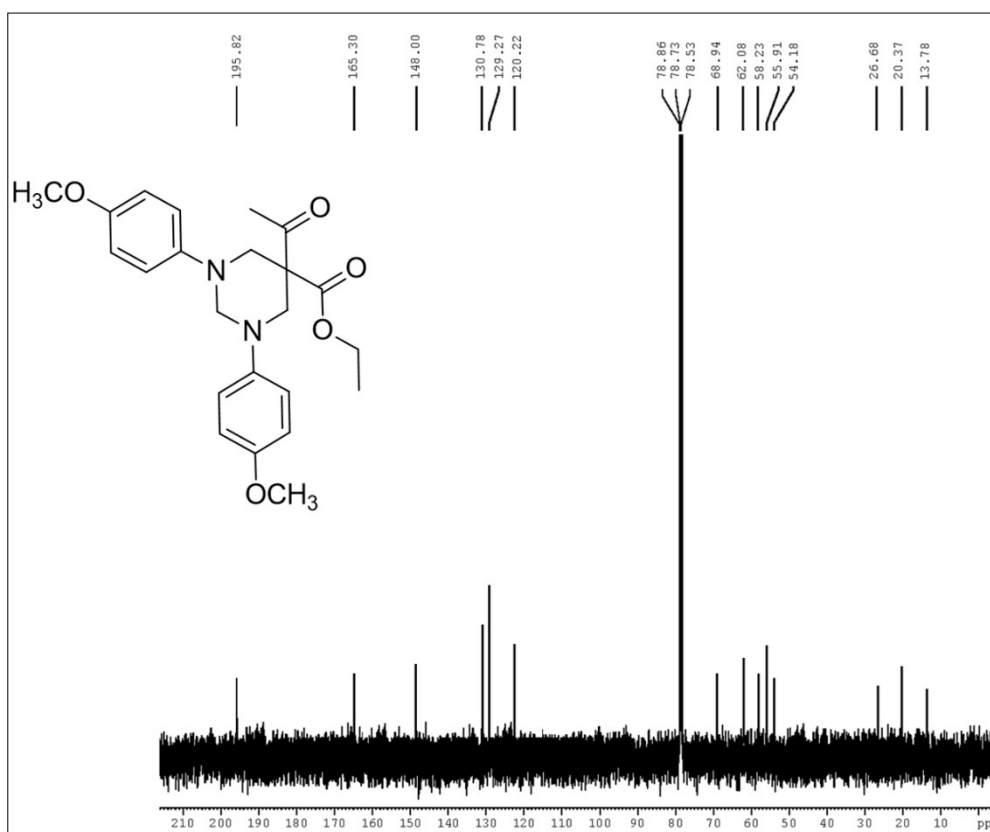
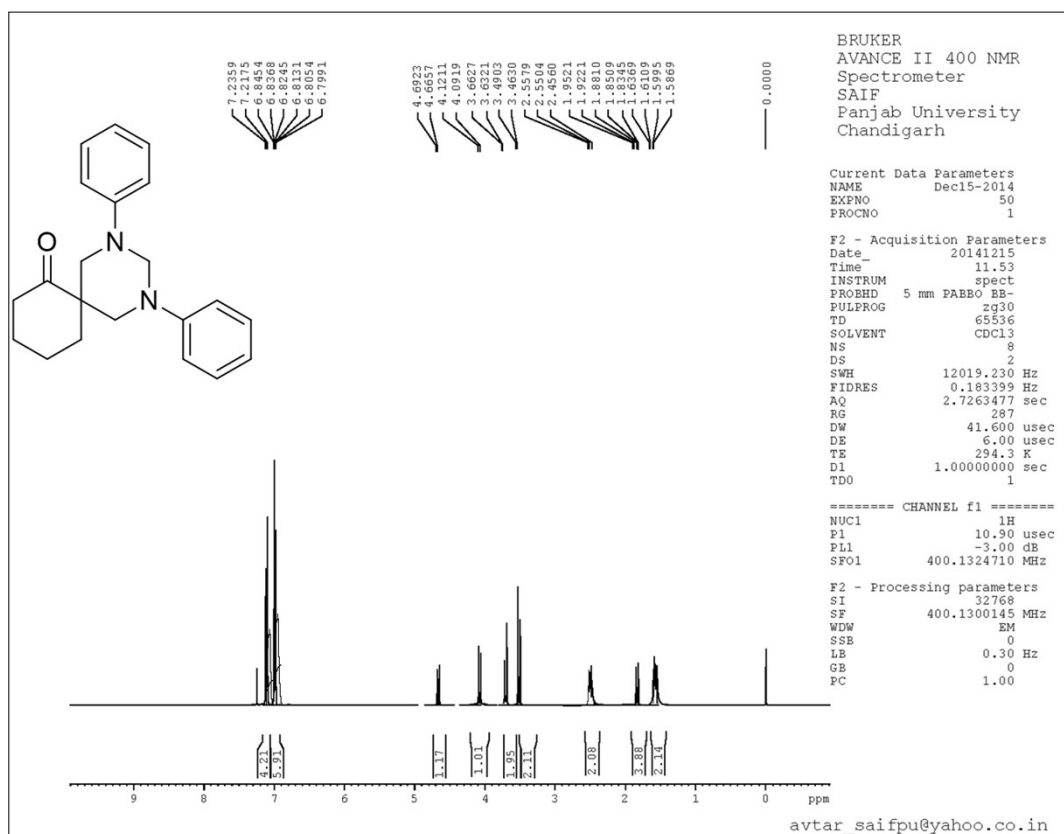
¹³C-NMR Spectra of **3c**¹H-NMR Spectra of **3d**

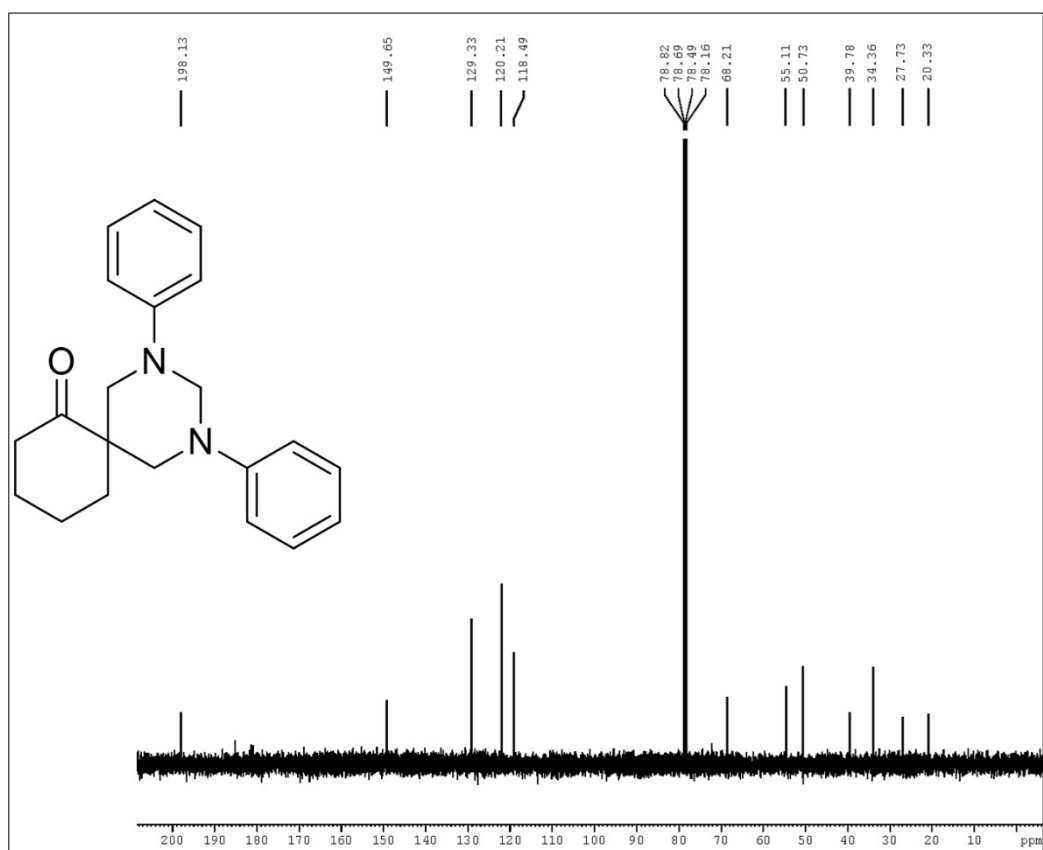
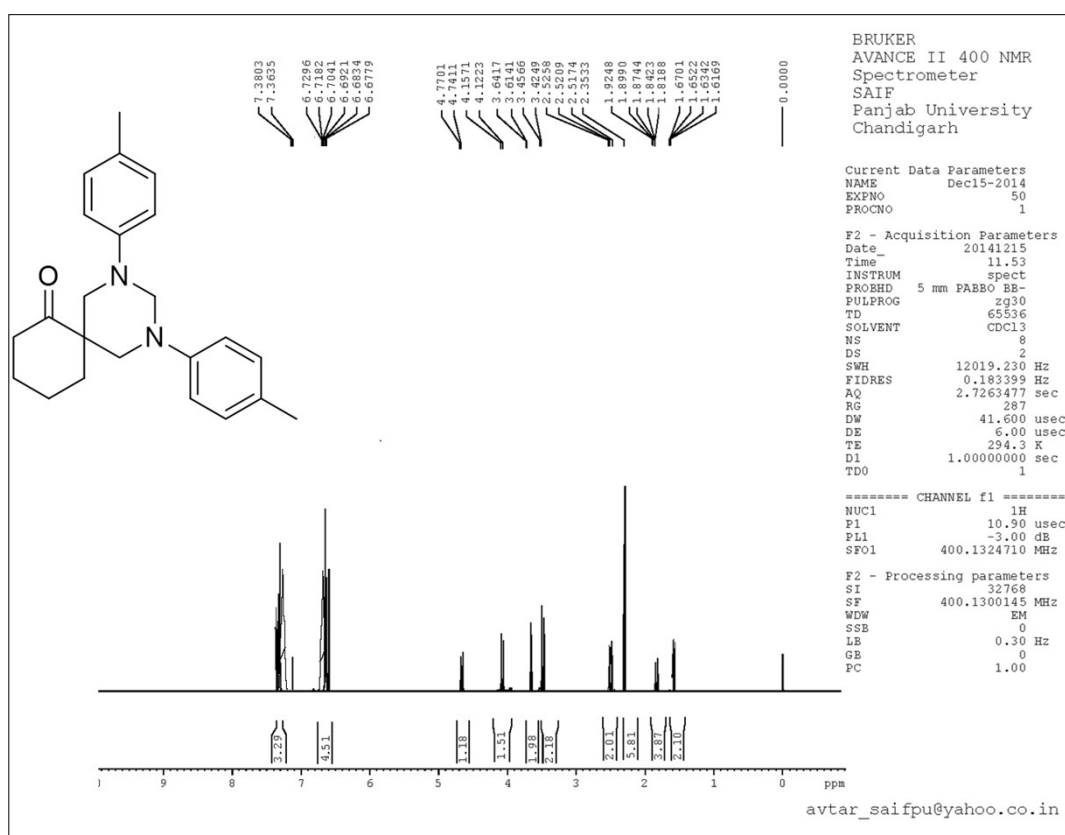
¹³C-NMR Spectra of **3d**¹H-NMR Spectra of **3e**

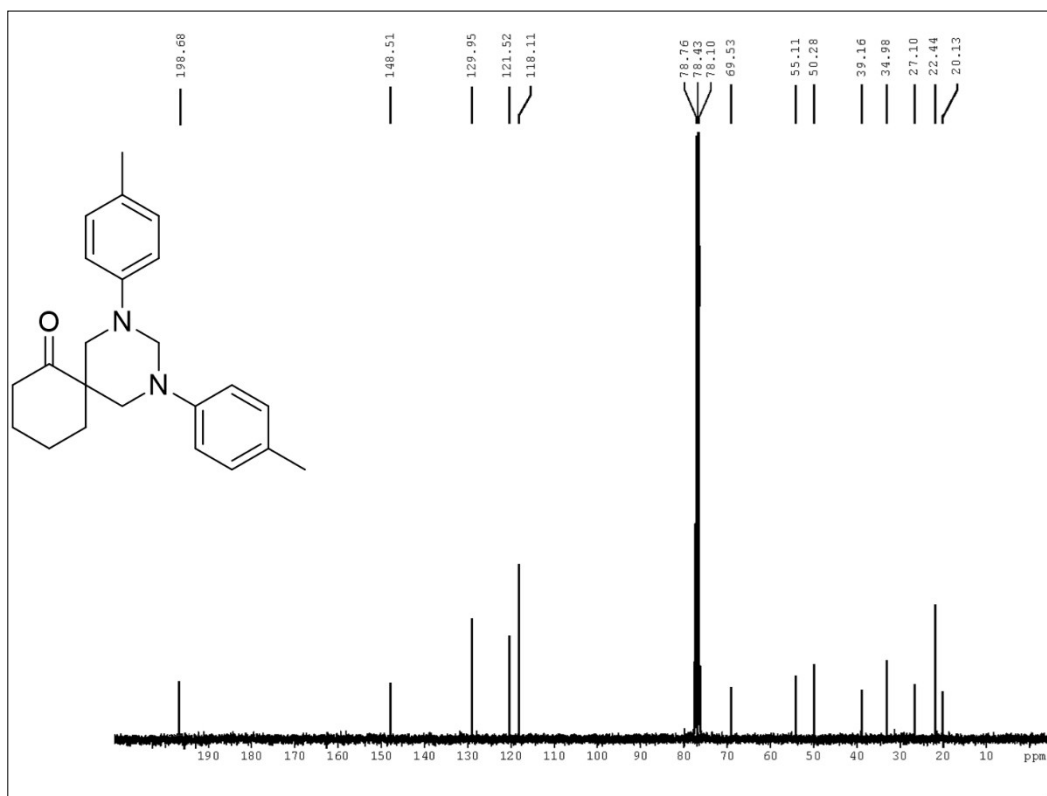
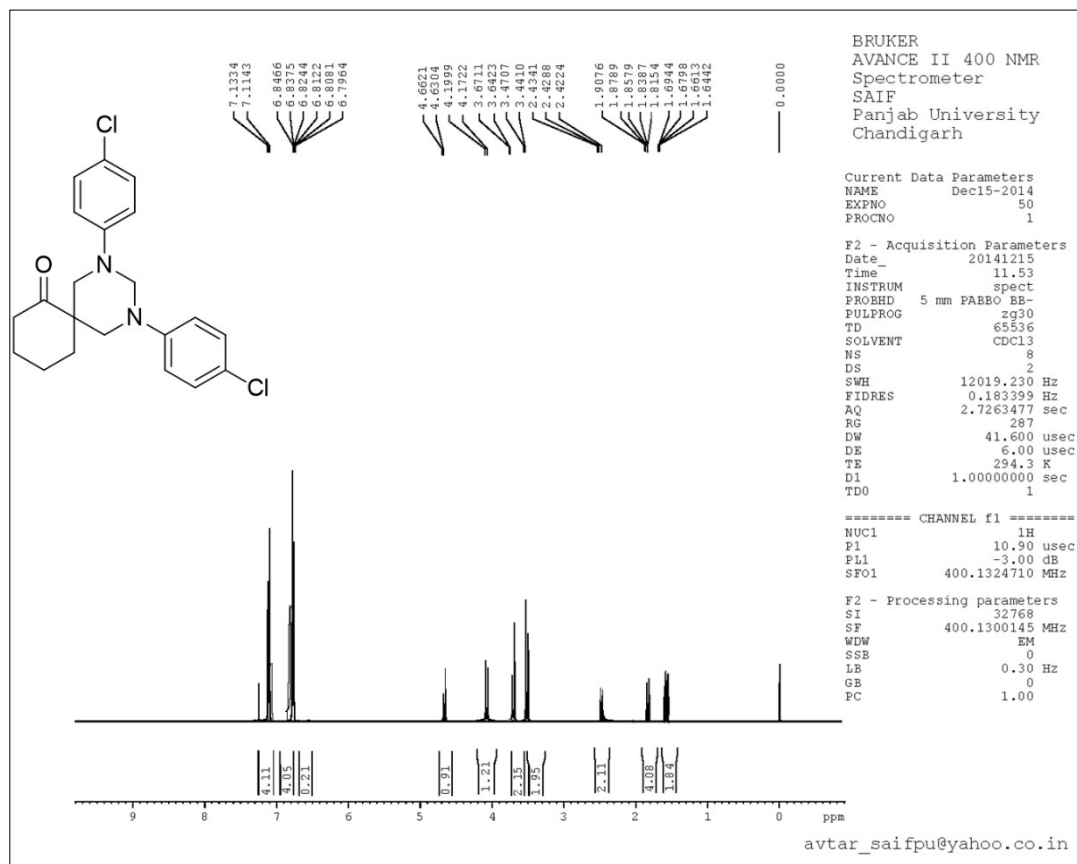
¹³C-NMR Spectra of 3e¹H-NMR Spectra of 3f

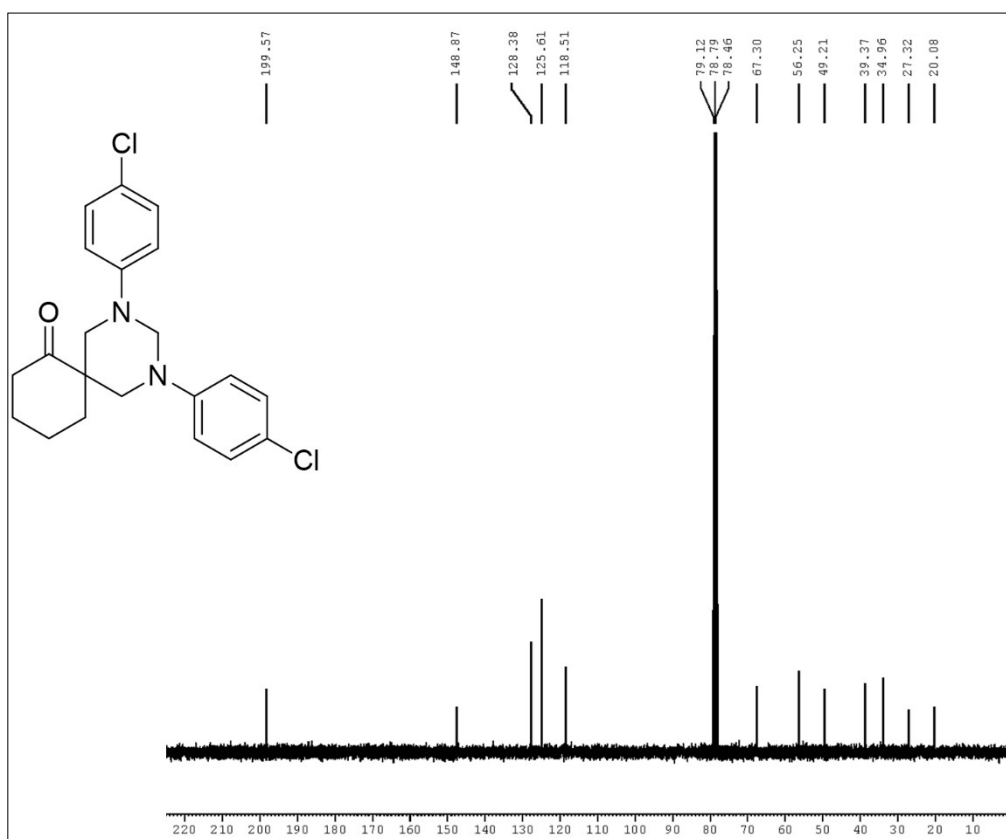
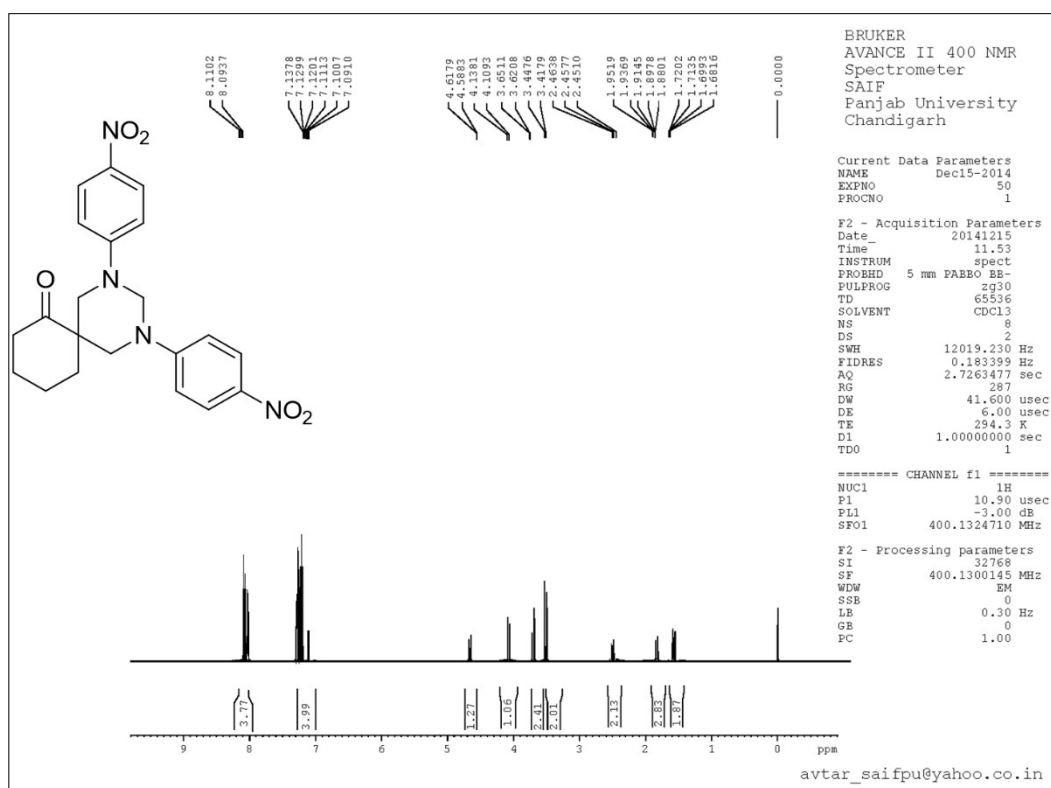
¹³C-NMR Spectra of **3f**¹H-NMR Spectra of **3g**

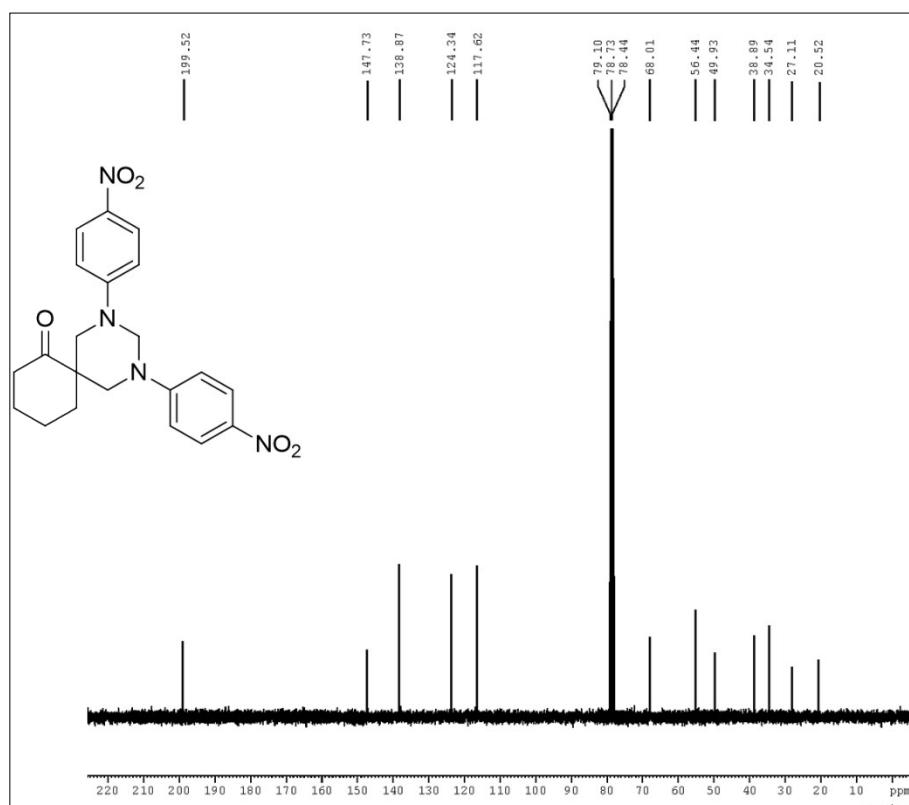
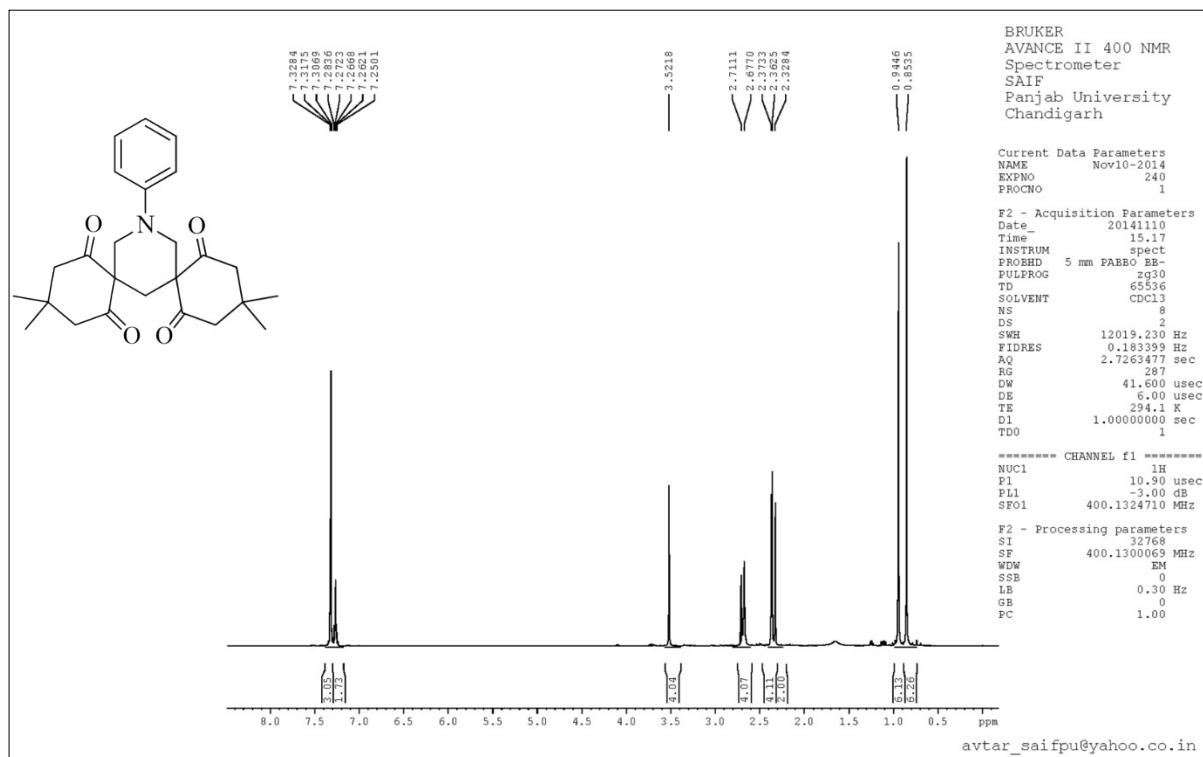
¹³C-NMR Spectra of **3g**¹H-NMR Spectra of **3h**

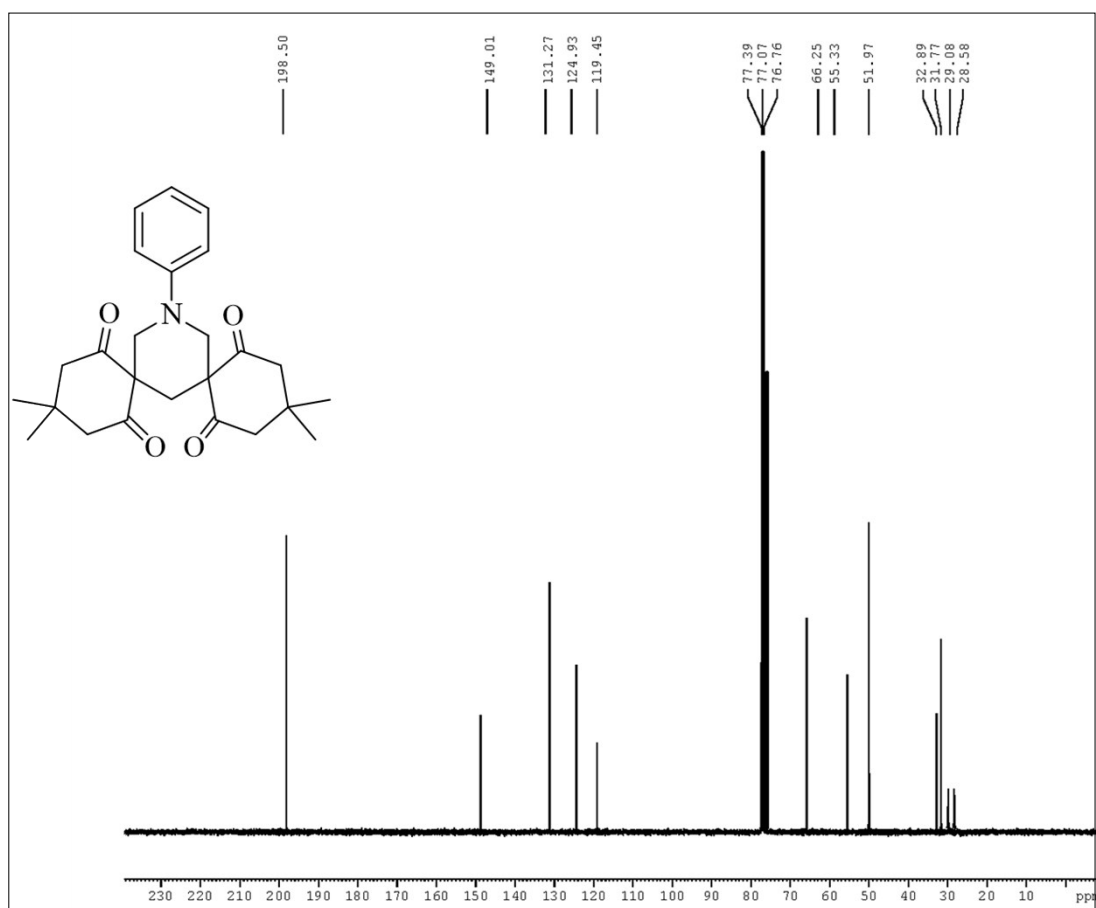
**¹³C-NMR Spectra of 3h****¹H-NMR Spectra of 3i**

¹³C-NMR Spectra of **3i**¹H-NMR Spectra of **3j**

¹³C-NMR Spectra of **3j**¹H-NMR Spectra of **3k**

¹³C-NMR Spectra of **3k**¹H-NMR Spectra of **3l**

¹³C-NMR Spectra of **31**¹H-NMR Spectra of spiropiperidine **4**



^{13}C -NMR Spectra of spiropiperidine 4