

Supporting Information

Org. Commun. 12:4 (2019) 188-201

Gluconic acid aqueous solution: A bio-compatible media for one-pot multicomponent synthesis of dihydropyrano [2,3-*c*] pyrazoles

Furqan Diwan, Mubarak H. Shaikh, Samreen Fatema and
Mazahar Farooqui*

Department of Chemistry, Dr. Rafiq Zakaria, college for women, Aurangabad- 431001, India

Table of Contents	Page
Figure S1: IR spectrum of compound 5a	2
Figure S2: ^1H spectrum of compound 5a	3
Figure S3: ^{13}C NMR spectrum of compound 5a	4
Figure S4: Mass spectrum of compound 5a	5
Figure S5: ^1H NMR spectrum of compound 5c	6
Figure S6: ^{13}C NMR spectrum of compound 5c	7
Figure S7: Mass spectrum of compound 5c	8
Figure S8: IR spectrum of compound 5h	9
Figure S9: ^1H NMR spectrum of compound 5h	10
Figure S10: Q-TOF MS spectrum of compound 5h	11
Figure 11: IR spectrum of compound 5l	12
Figure 12: ^1H NMR spectrum of compound 5l	13
Figure S13: Q-TOF spectrum of compound 5l	14

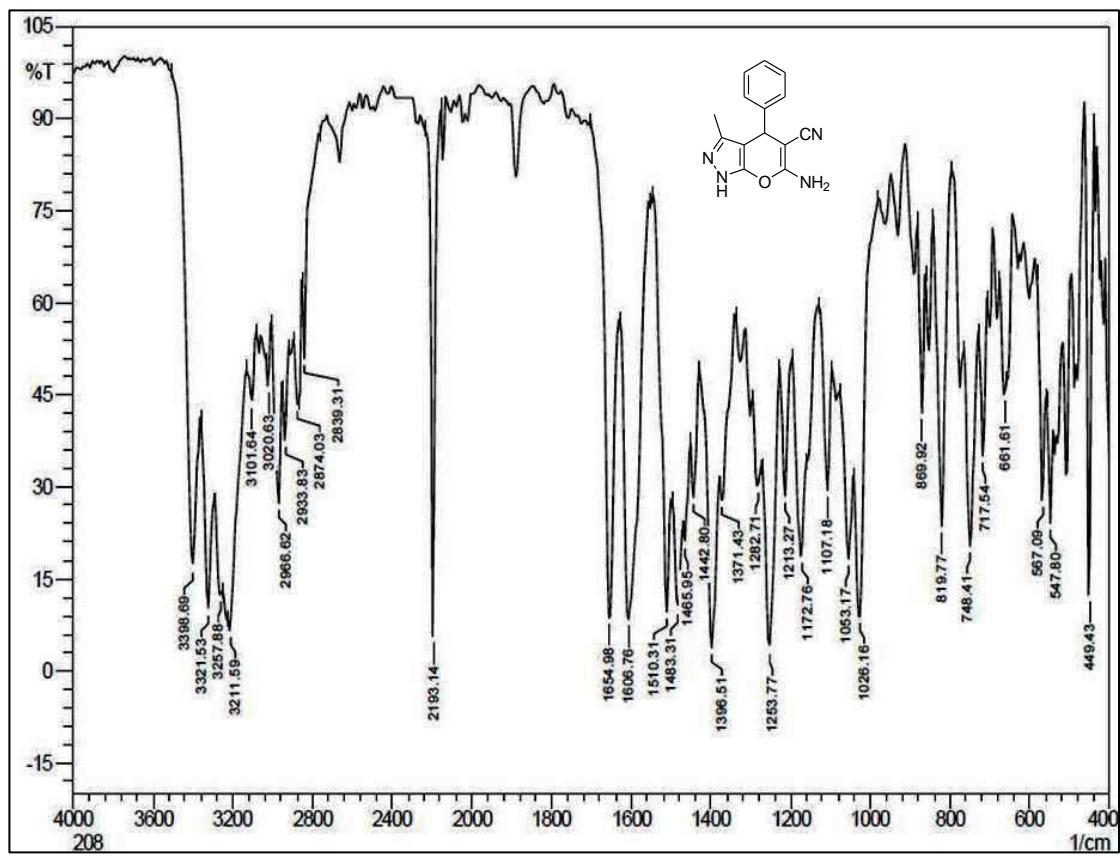


Figure S1:IR spectrum of compound **5a**

TEST : ¹H NMR ANALYSIS
SOLVENT : DMSO-d₆

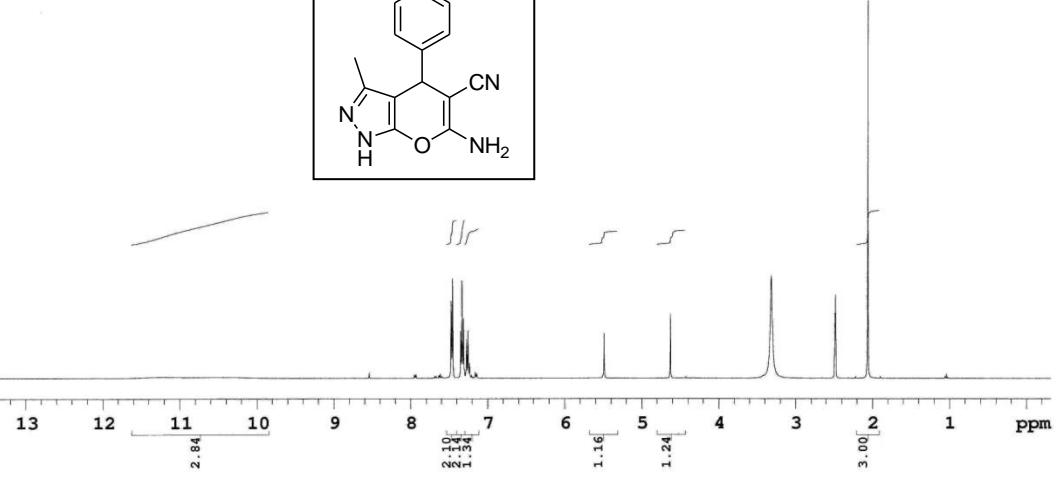
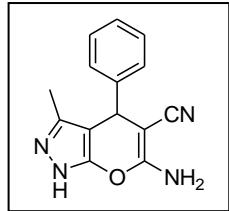


Figure S2: ¹H spectrum of compound 5a

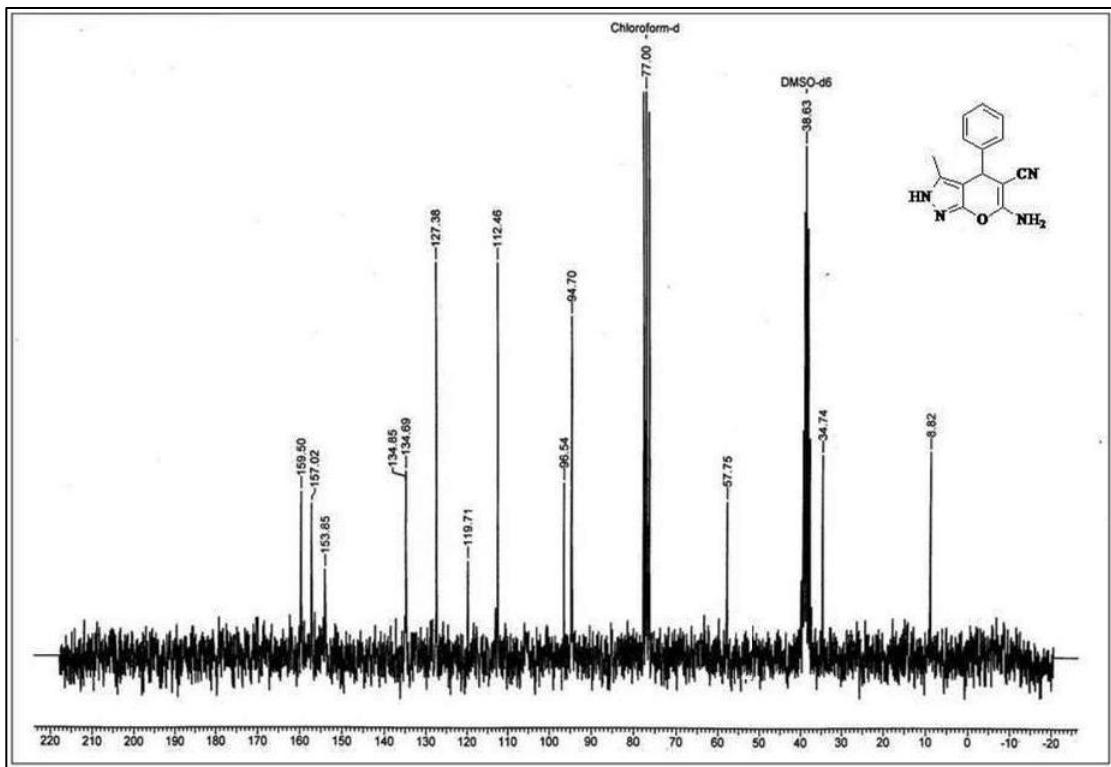


Figure S3: ¹³C NMR spectrum of compound 5a

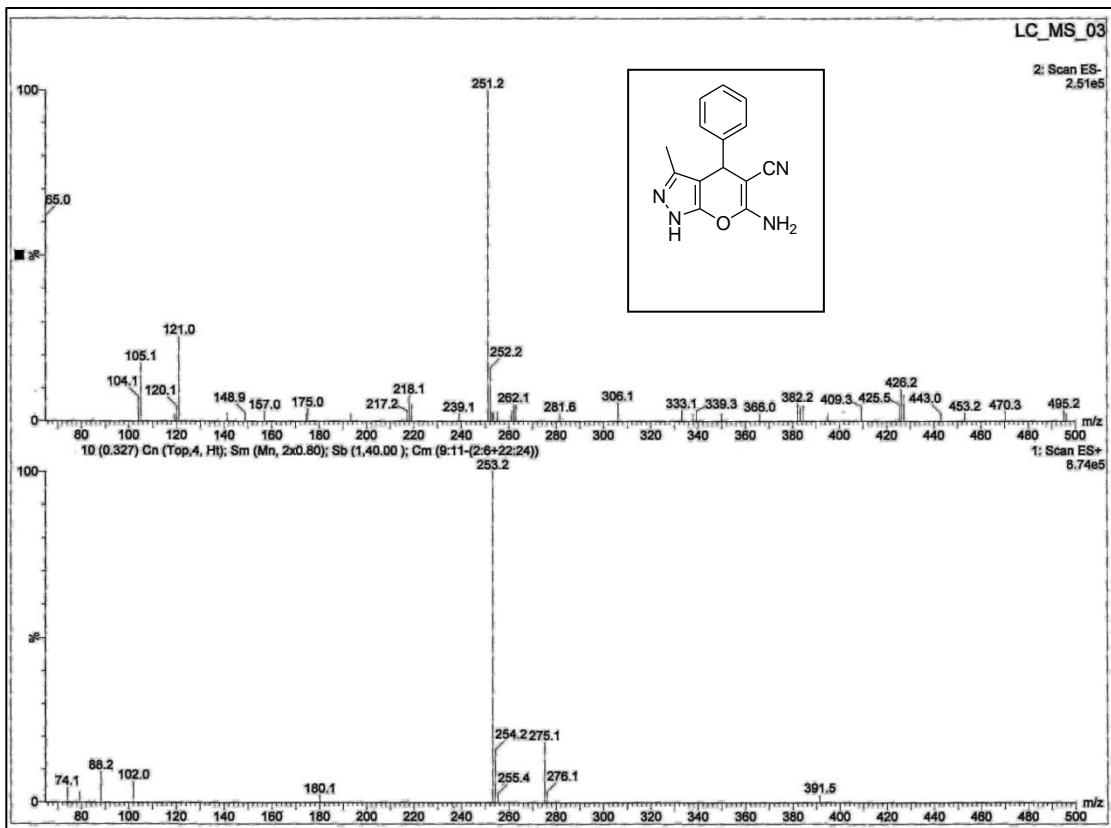


Figure S4: Mass spectrum of compound **5a**

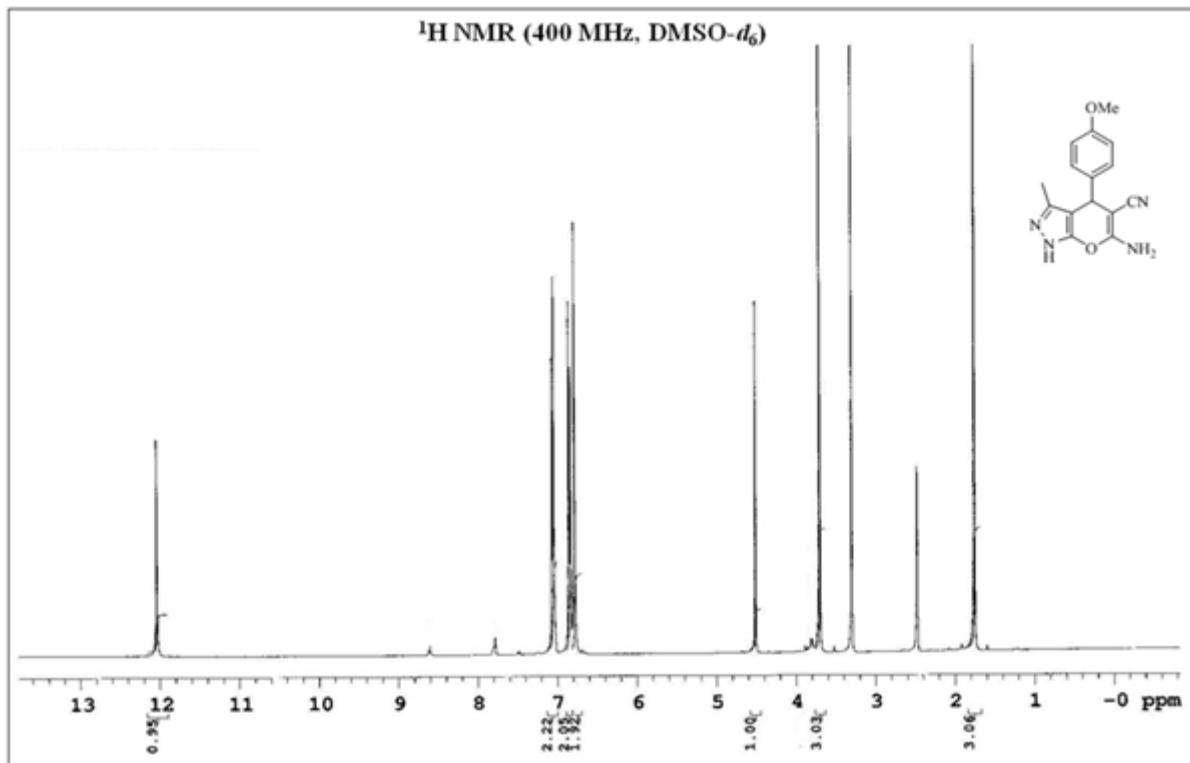


Figure S5: ¹H NMR spectrum of compound 5c

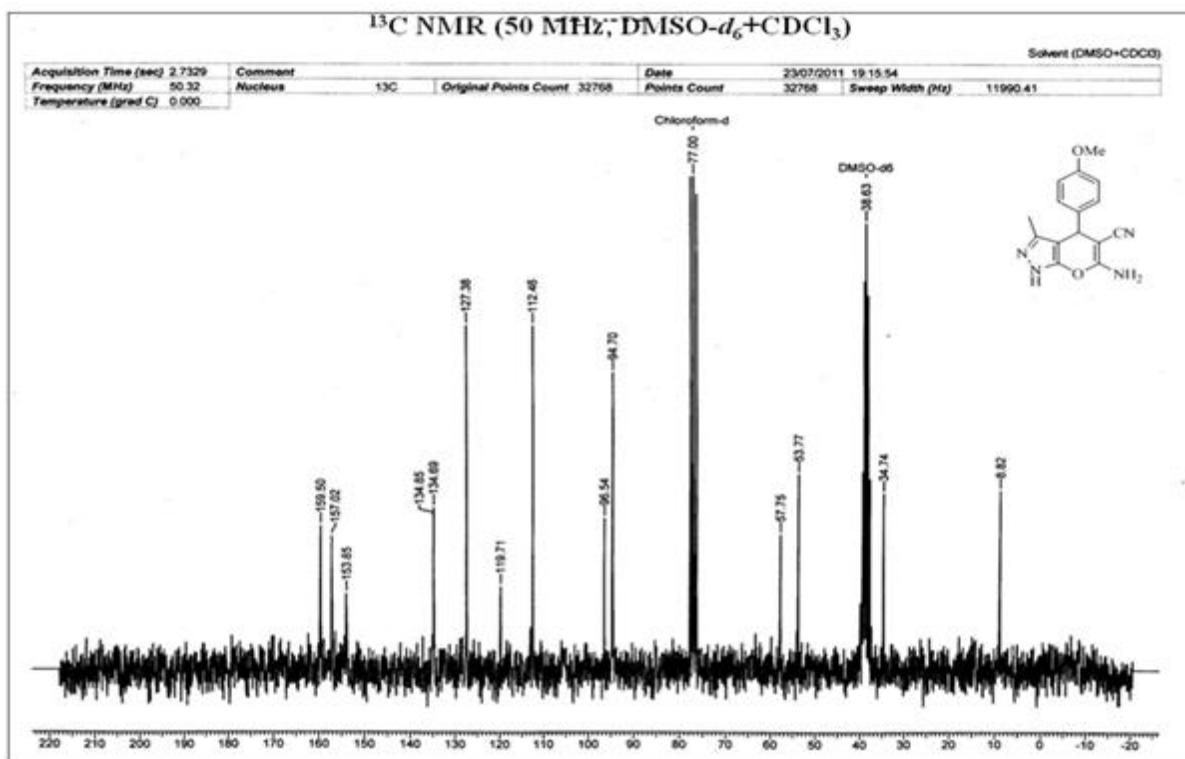


Figure S6: ¹³C NMR spectrum of compound **5c**

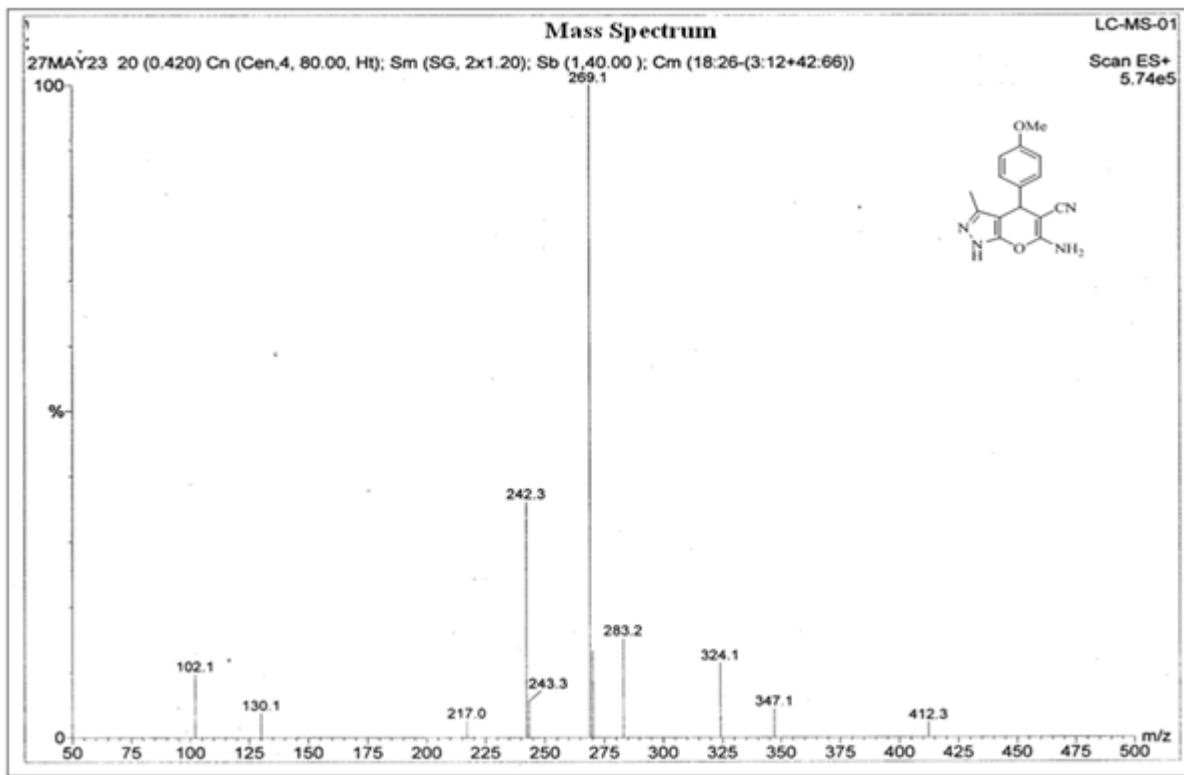


Figure S7: Mass spectrum of compound **5c**

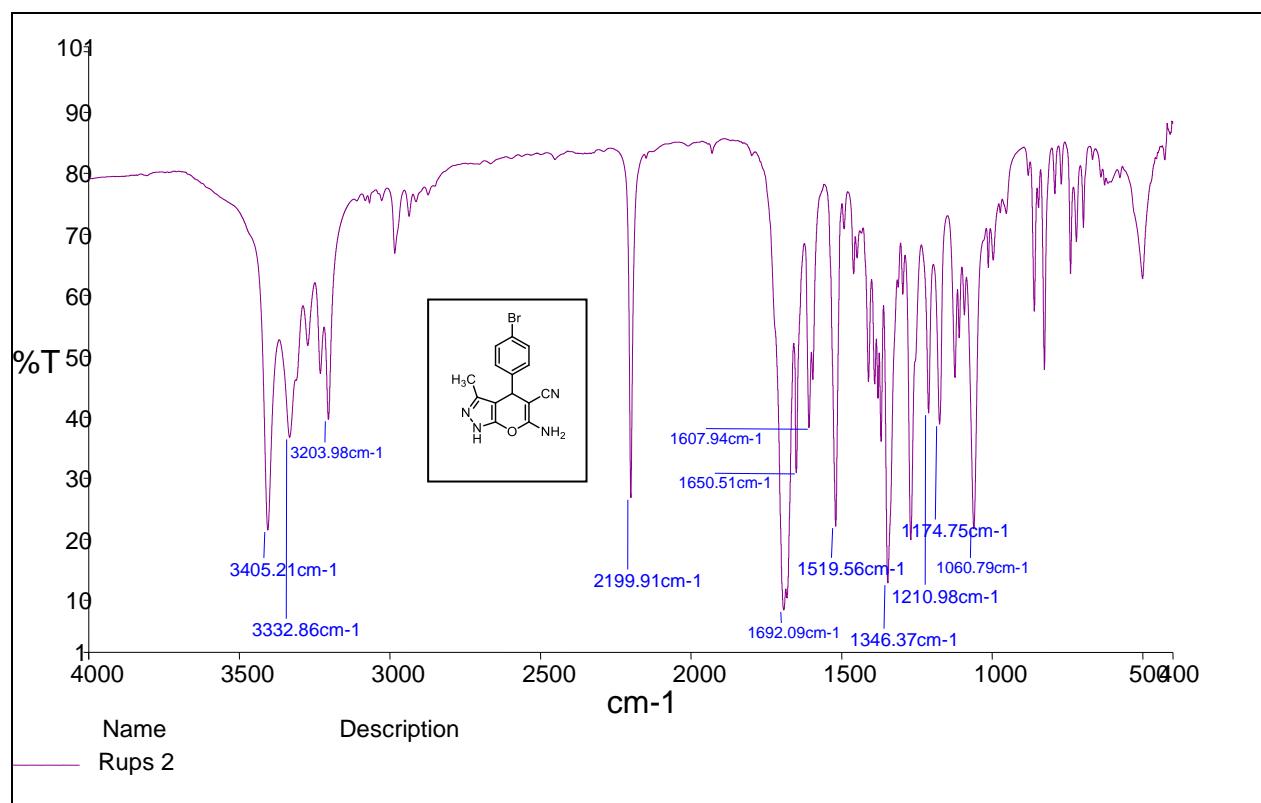


Figure S8: IR spectrum of compound **5h**

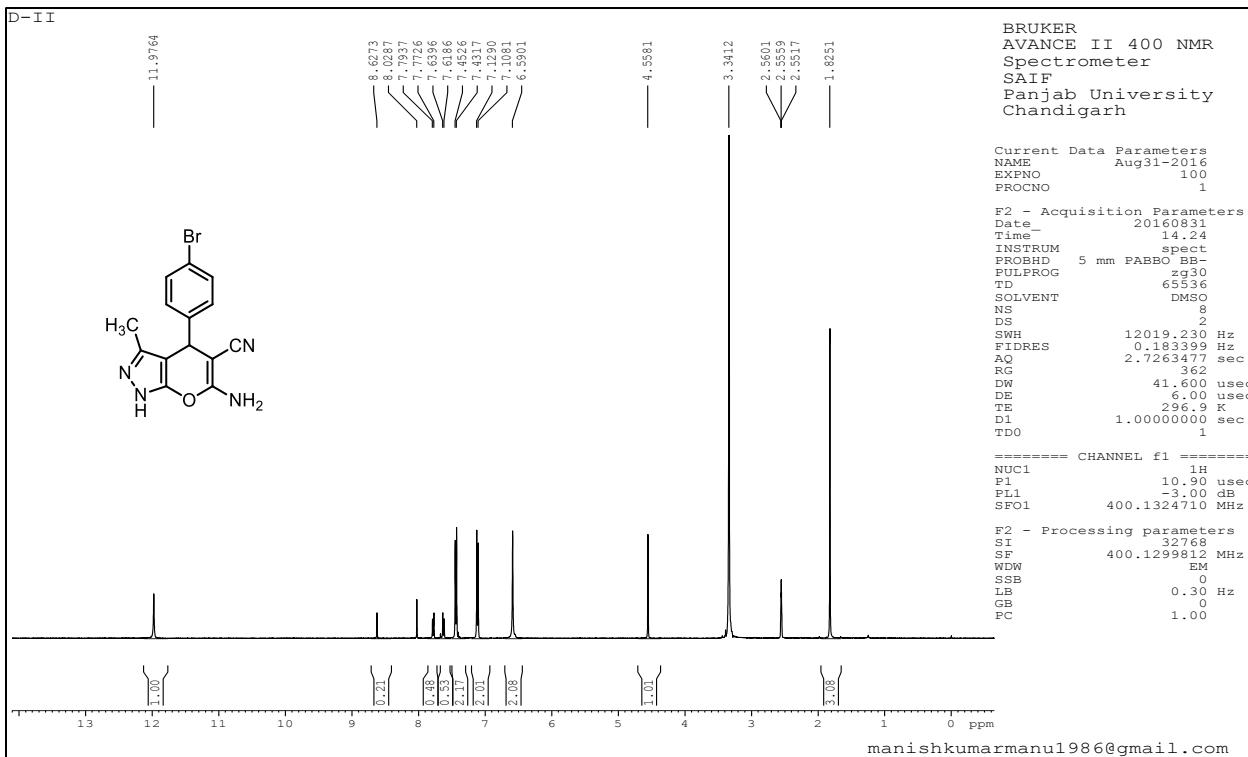


Figure S9: ^1H NMR spectrum of compound **5h**

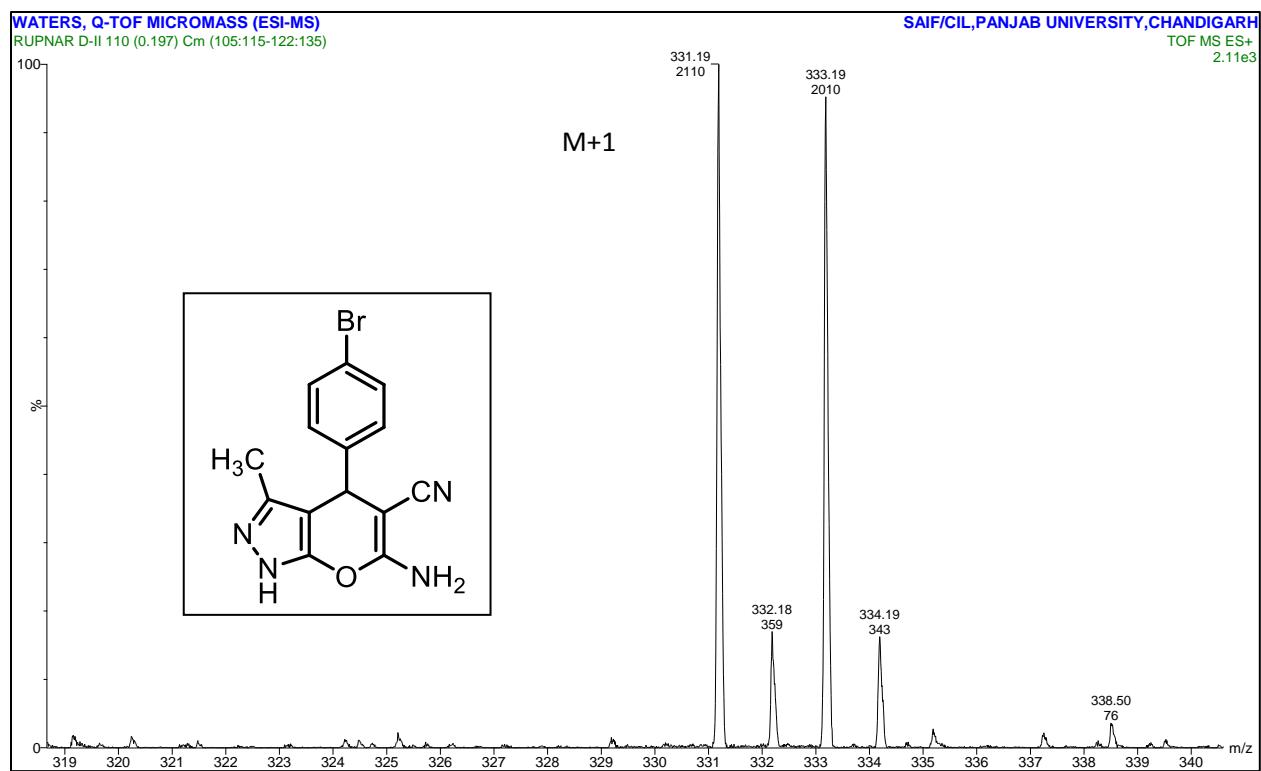


Figure S10: Q-TOF MS spectrum of compound **5h**

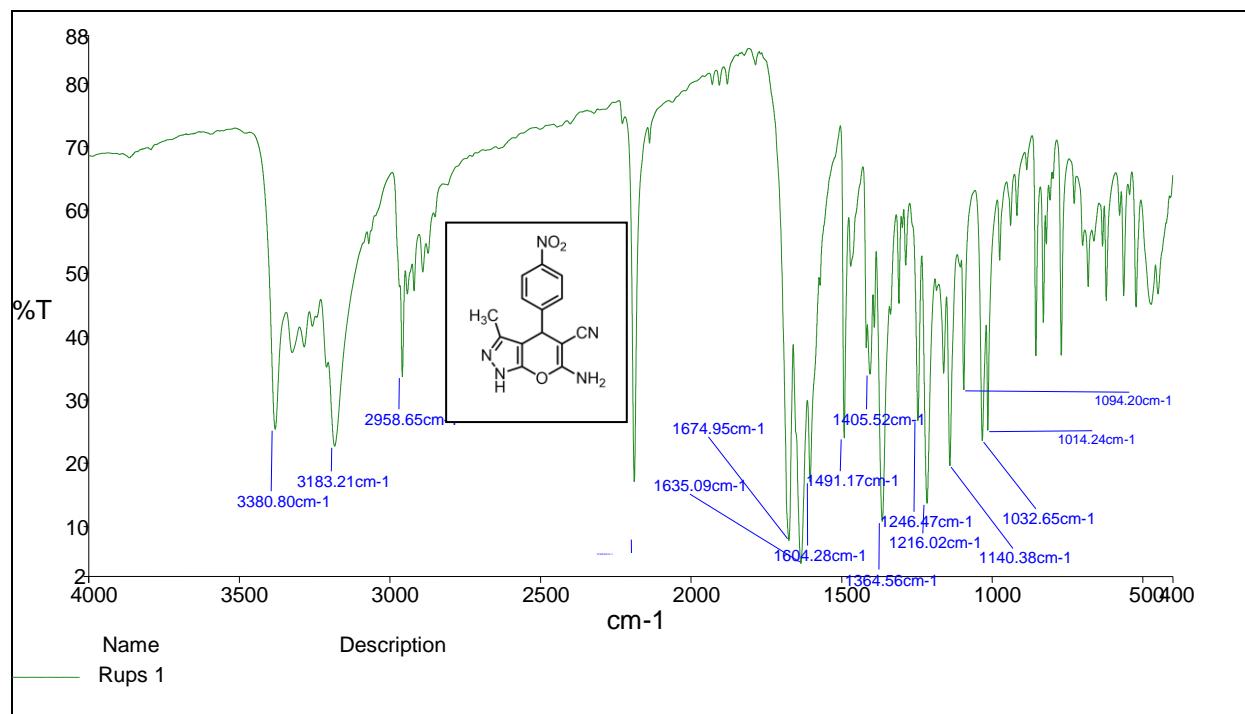


Figure 11: IR spectrum of compound **5l**

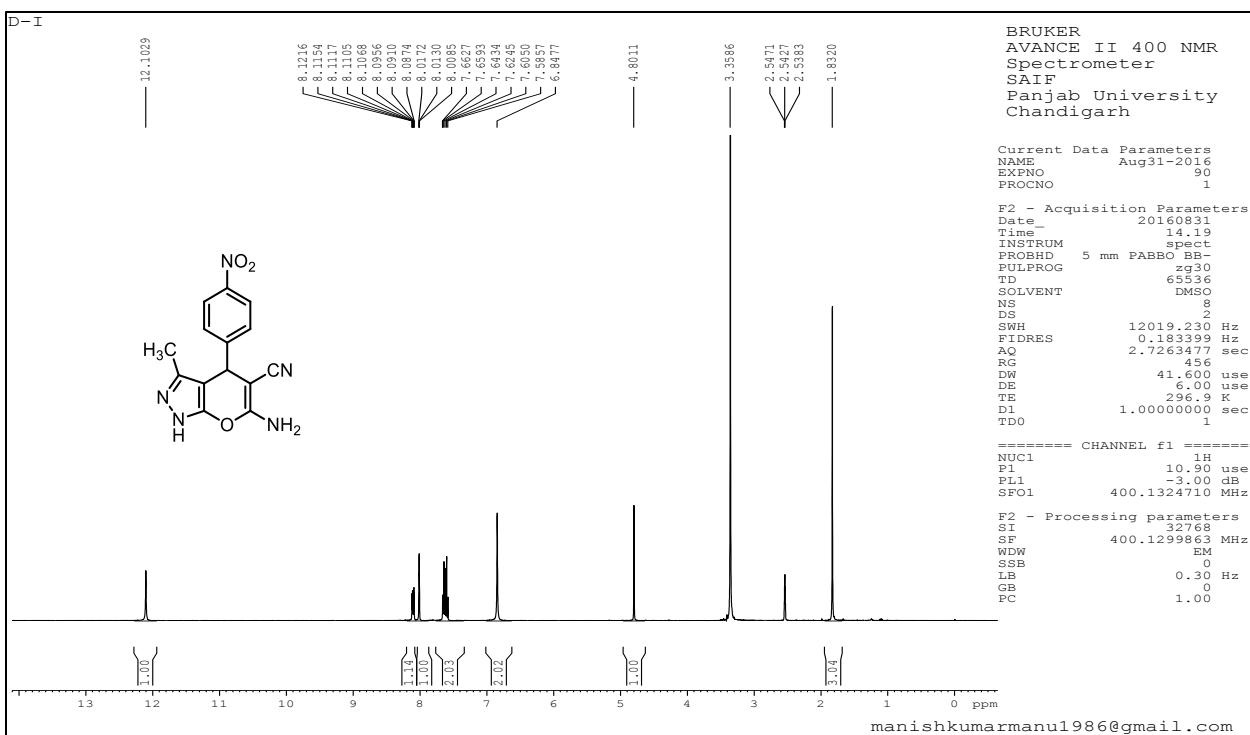


Figure 12: ^1H NMR spectrum of compound **5I**

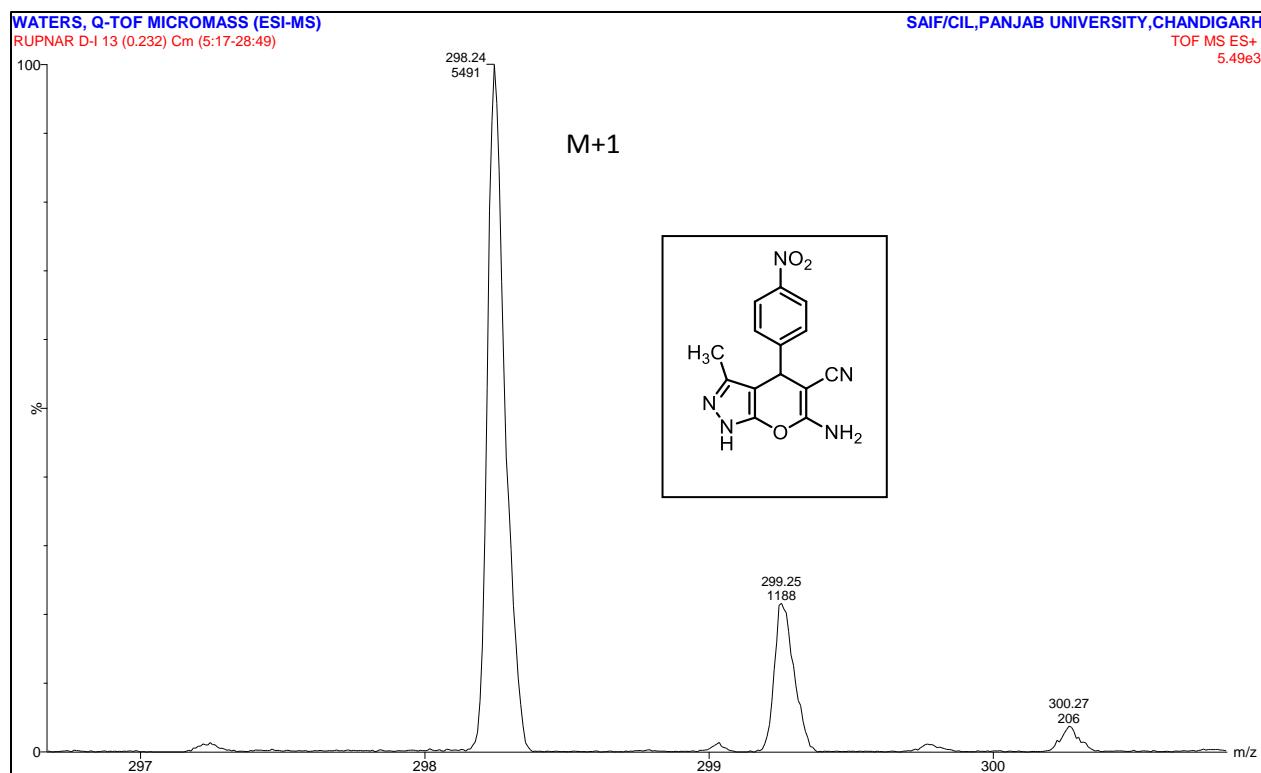


Figure S13: Q-TOF spectrum of compound **5l**