

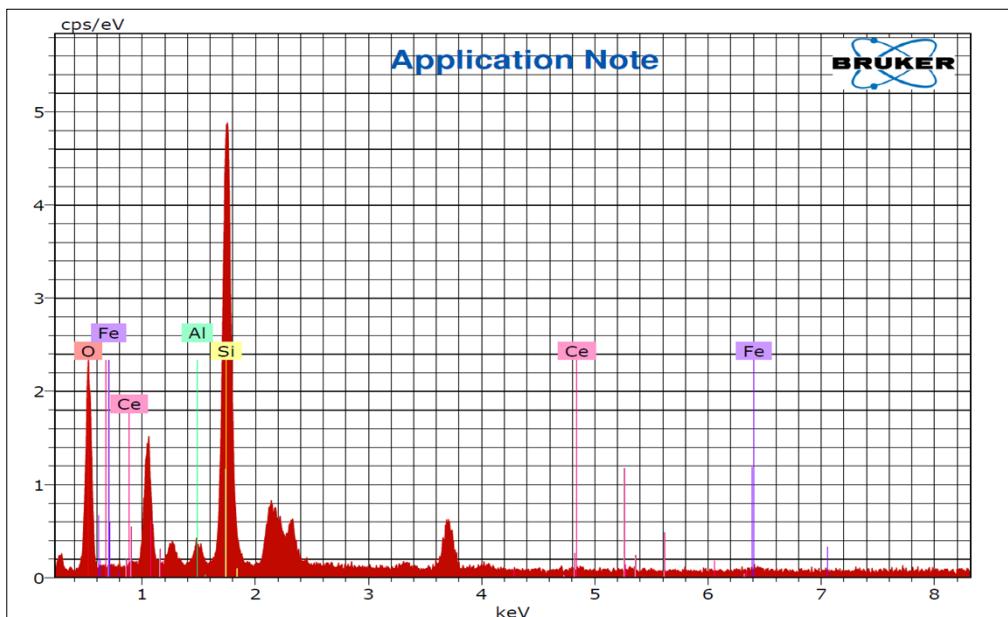
Green and Efficient Synthesis of Azomethine Derivatives of INH: MFA as an Excellent Zeotype Catalyst

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EDXS Analysis of MFA

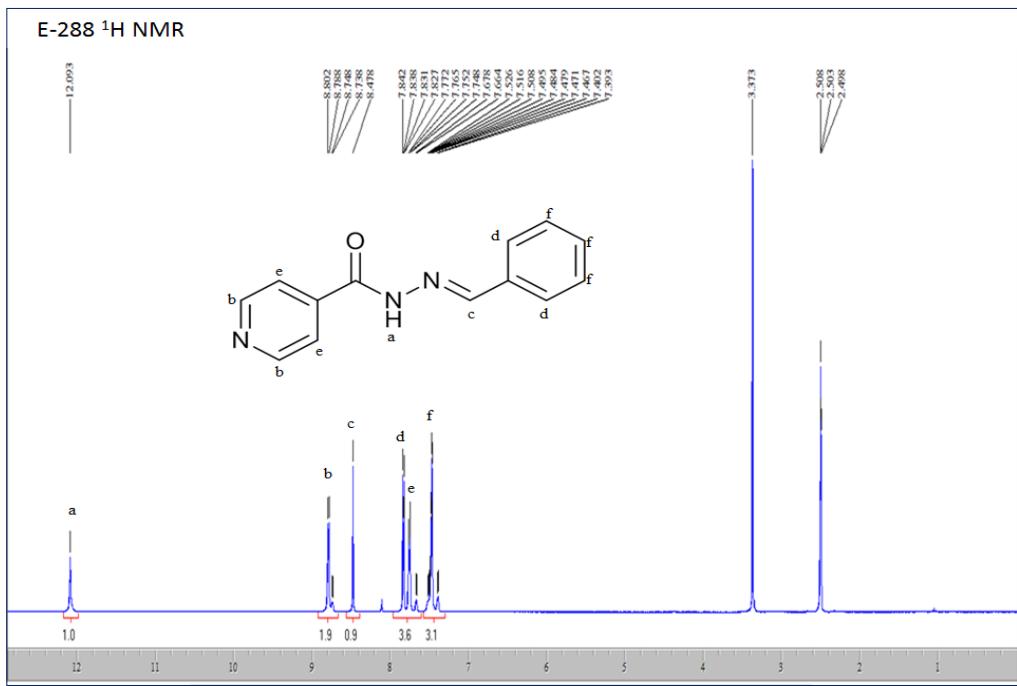


| El | AN | Series | unn. | C | norm. | C | Atom. | C | Error (1 Sigma) |
|--------|----|----------|--------|--------|--------|---|--------|---|-----------------|
| | | | [wt.%] | | [wt.%] | | [at.%] | | [wt.%] |
| O | 8 | K-series | 22.38 | 34.42 | 60.86 | | | | 3.39 |
| Al | 13 | K-series | 0.76 | 1.16 | 1.22 | | | | 0.08 |
| Si | 14 | K-series | 17.87 | 27.48 | 27.68 | | | | 0.79 |
| Fe | 26 | K-series | 5.95 | 9.15 | 4.63 | | | | 0.08 |
| Ce | 58 | L-series | 18.06 | 27.79 | 5.61 | | | | 0.75 |
| <hr/> | | | | | | | | | |
| Total: | | | 65.01 | 100.00 | 100.00 | | | | |

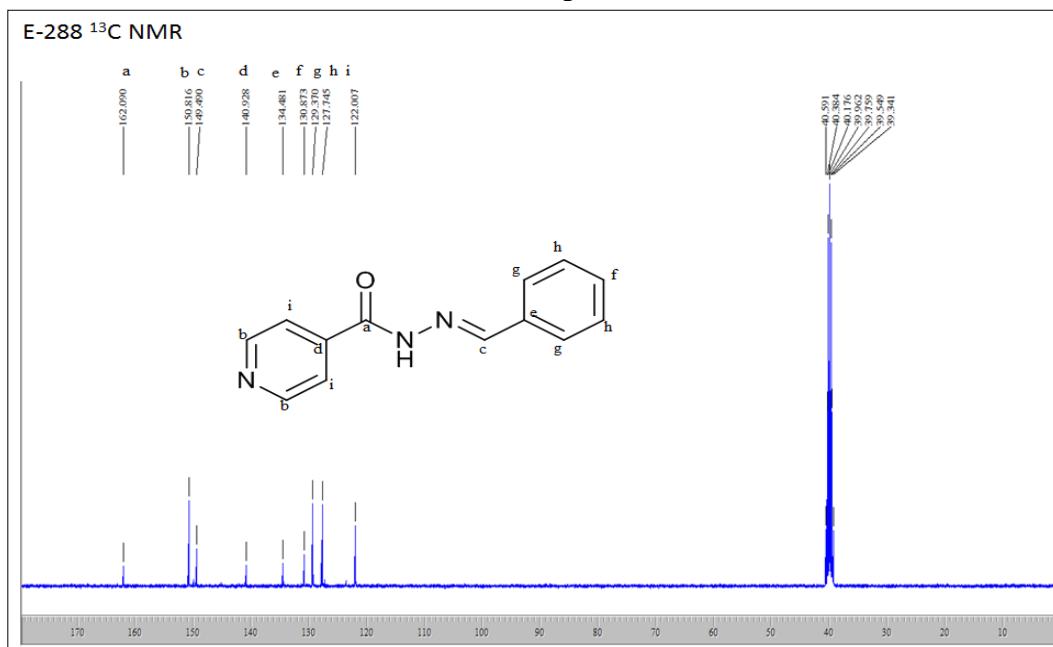
Characterizations of (E)-N'-(Substituted-benzylidene) isonicotinohydrazide Derivatives

3a: (E)-N'-benzylidene isonicotinohydrazide

Mass Analysis

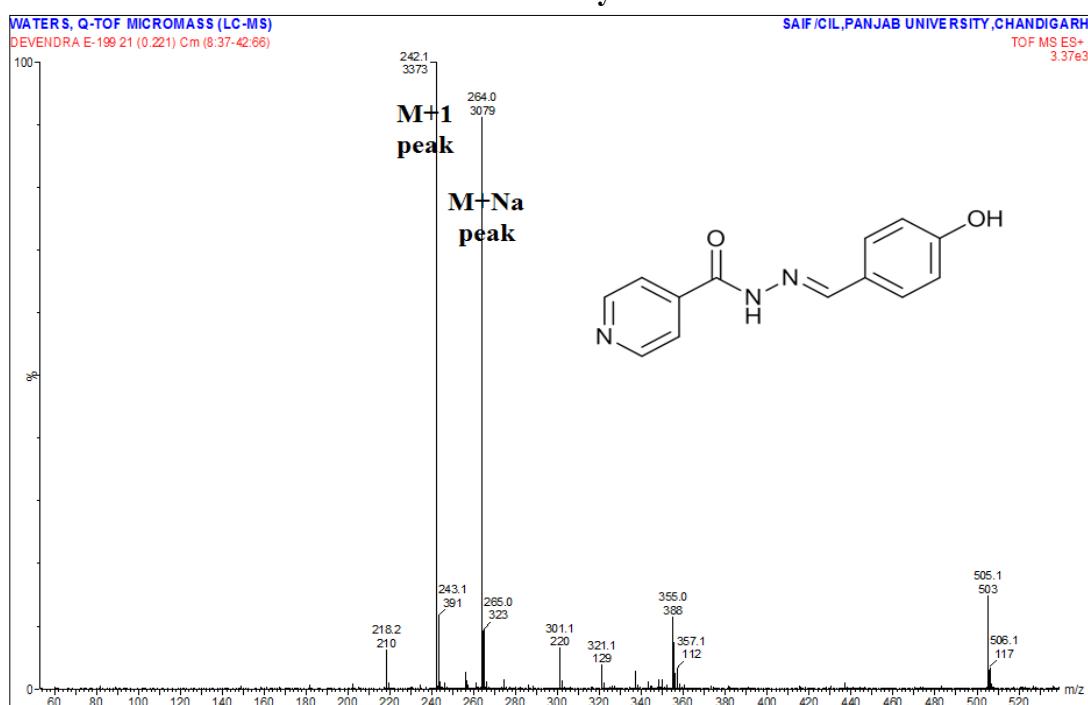


^1H NMR Spectra

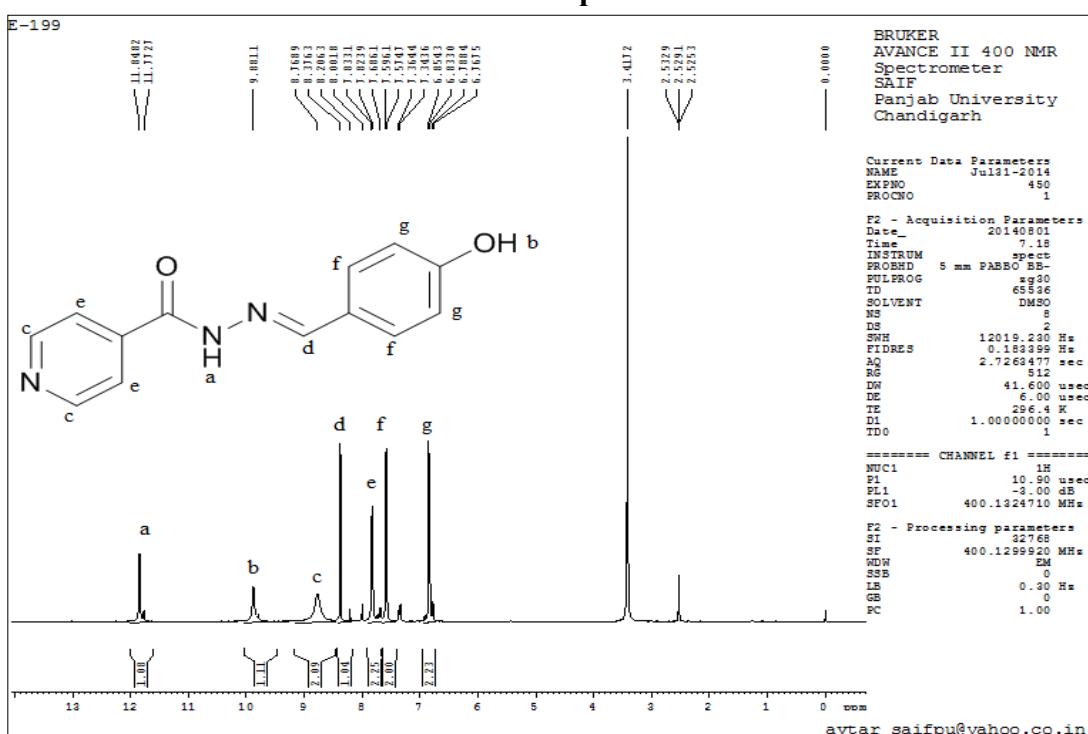


3b: (E)-N'-(4-hydroxybenzylidene) isonicotinohydrazide

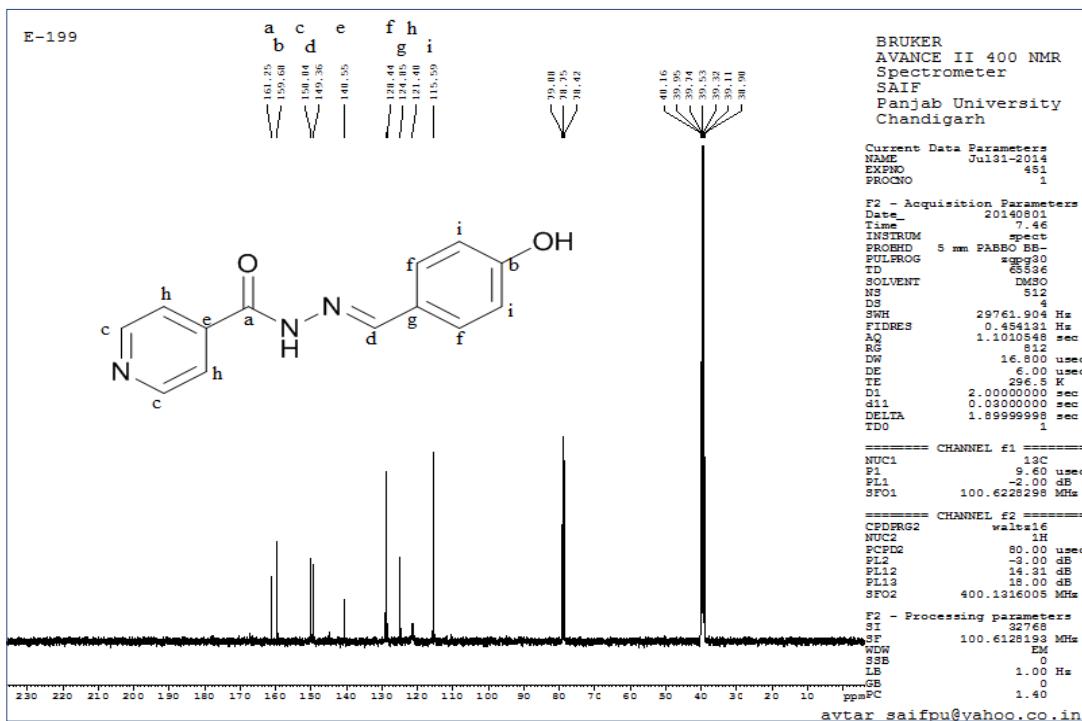
Mass Analysis



H¹ NMR Spectra

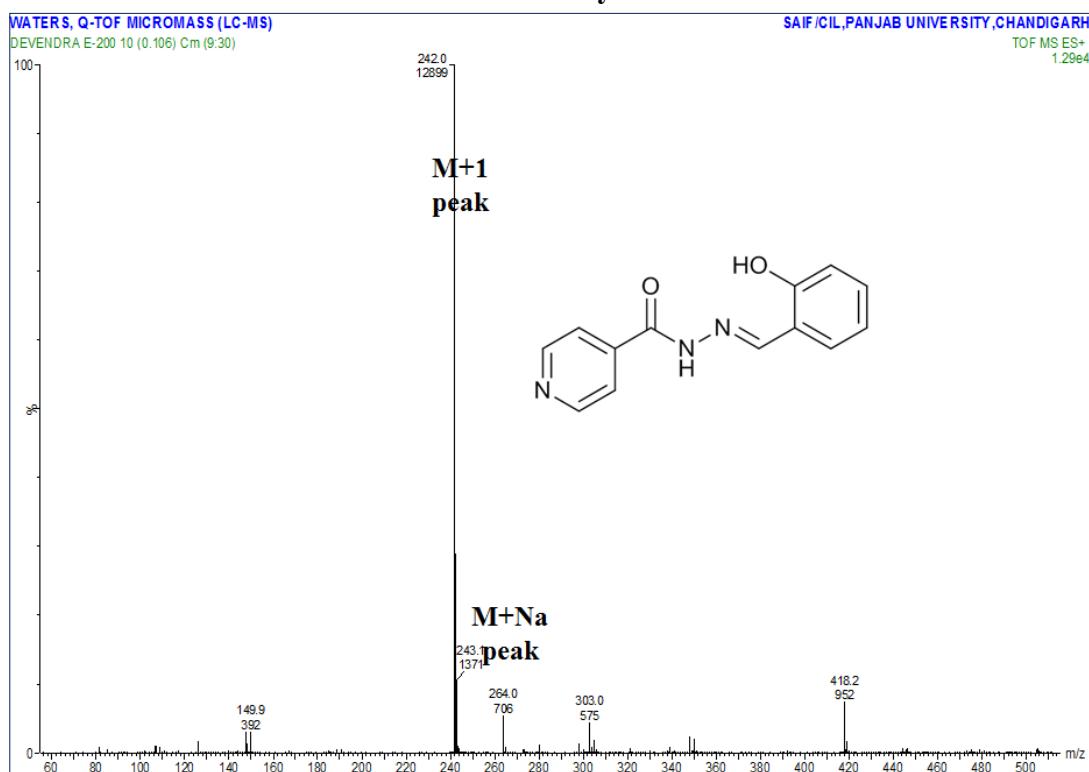


C¹³ NMR Spectra

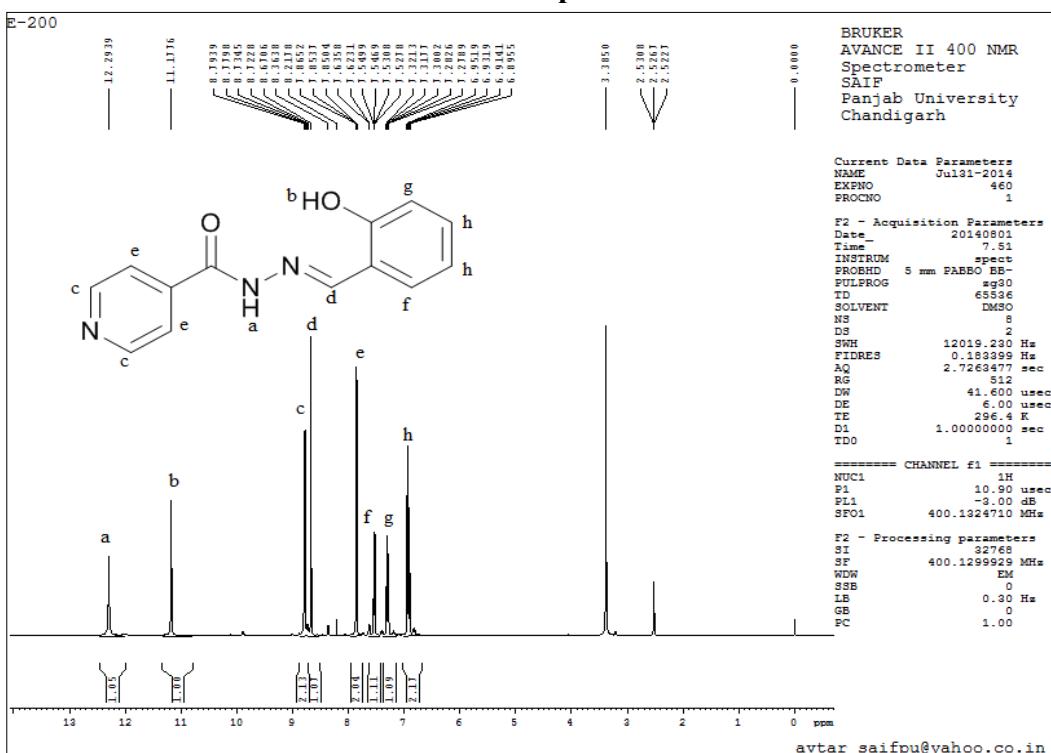


3c: (E)-N'-(2-hydroxybenzylidene) isonicotinohydrazide

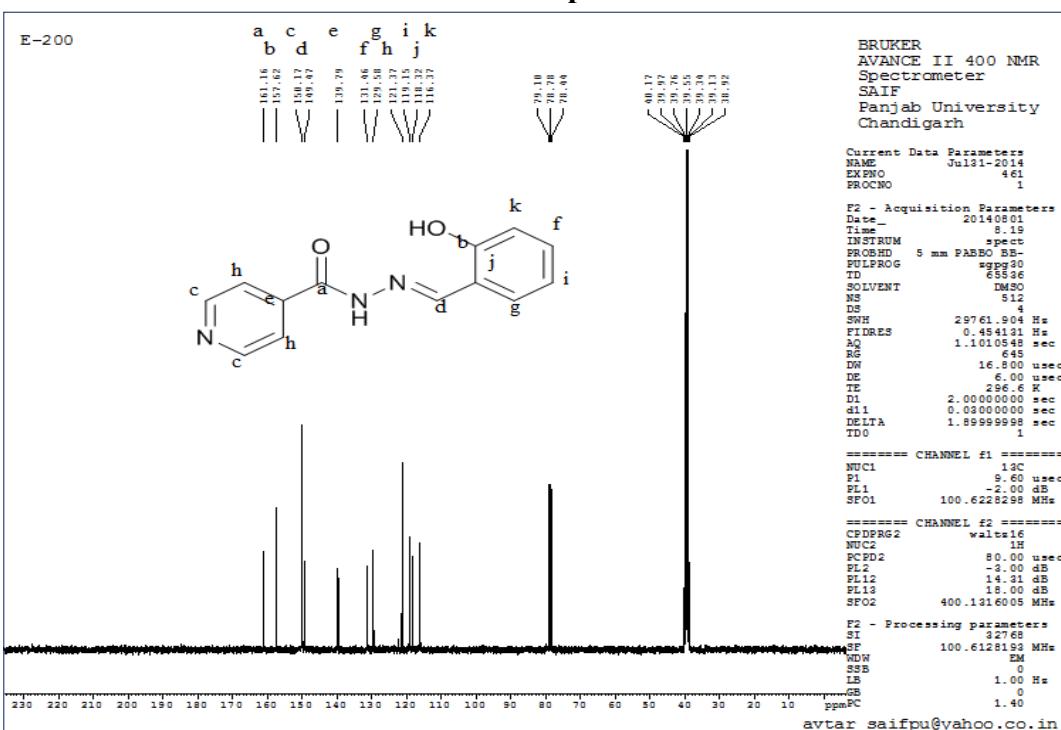
Mass Analysis



H¹ NMR Spectra

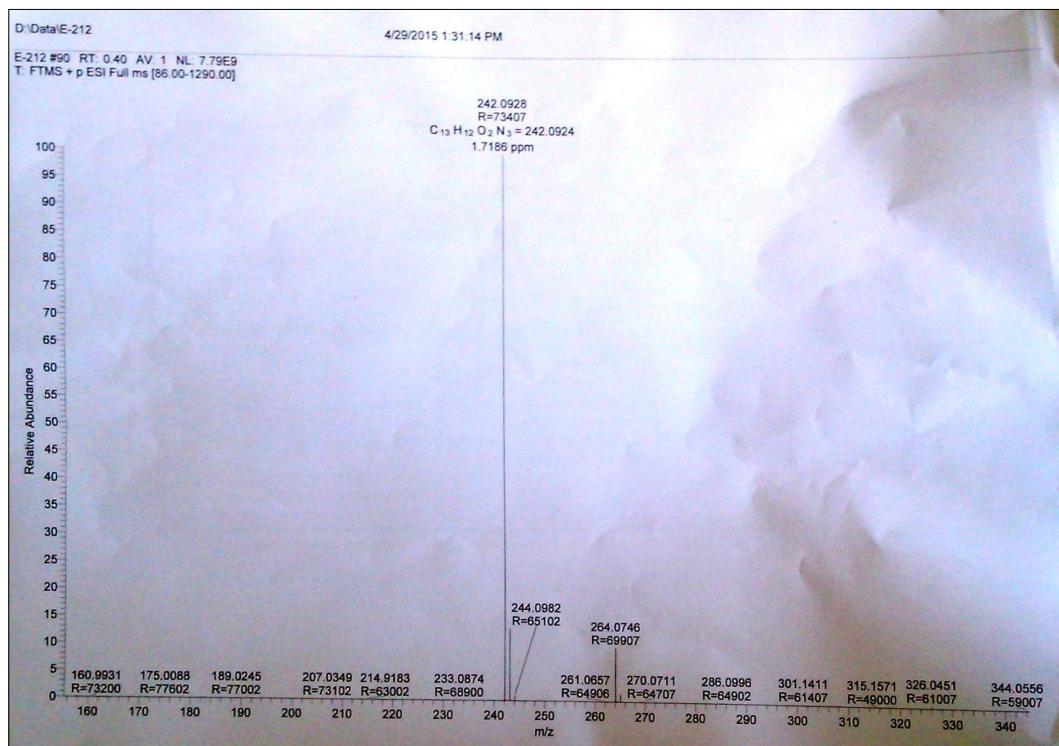


C¹³ NMR Spectra

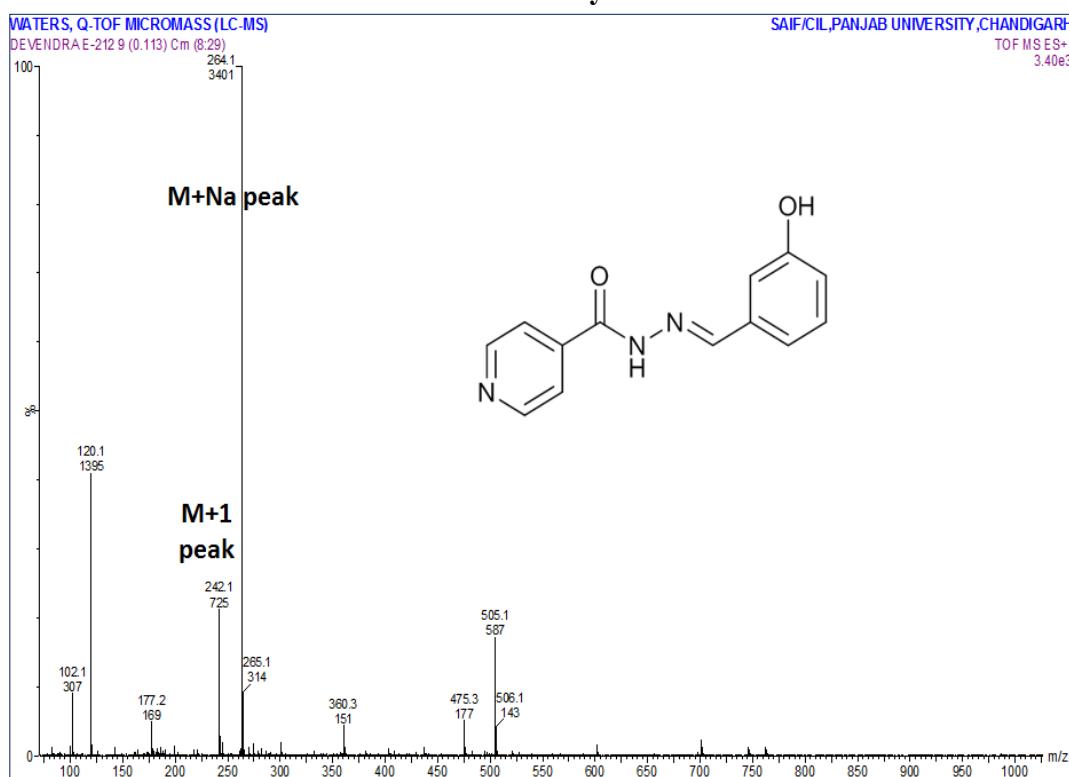


3d: (E)-N'-(3-hydroxybenzylidene) isonicotinohydrazide

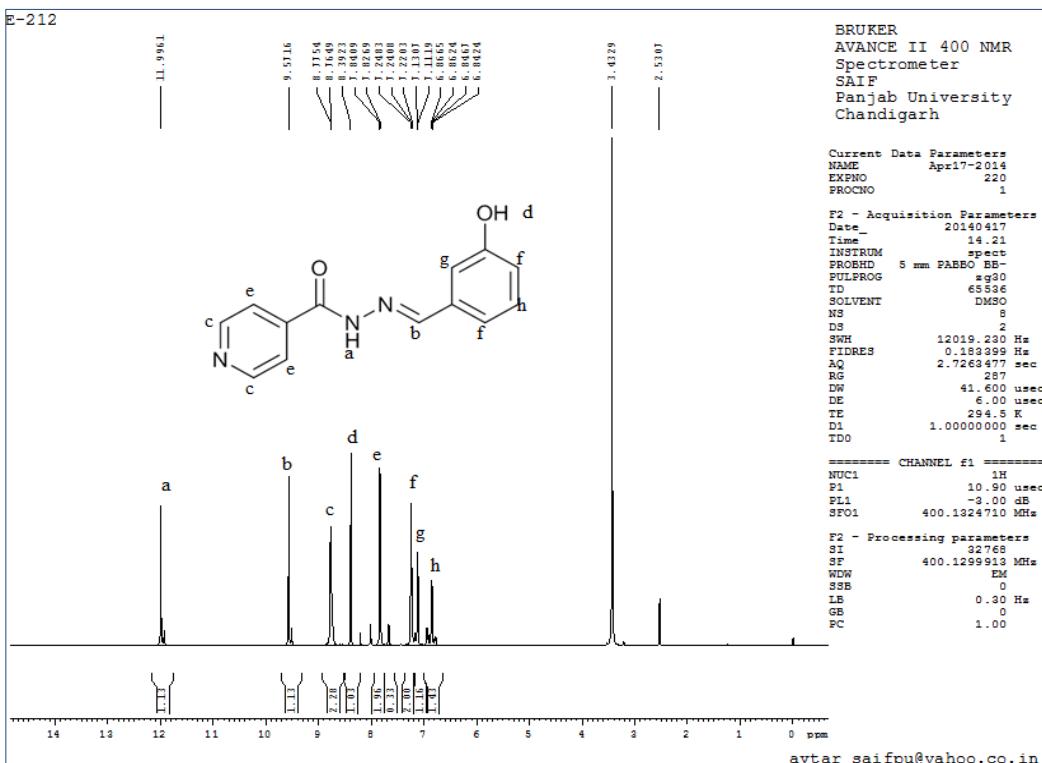
HRMS Analysis



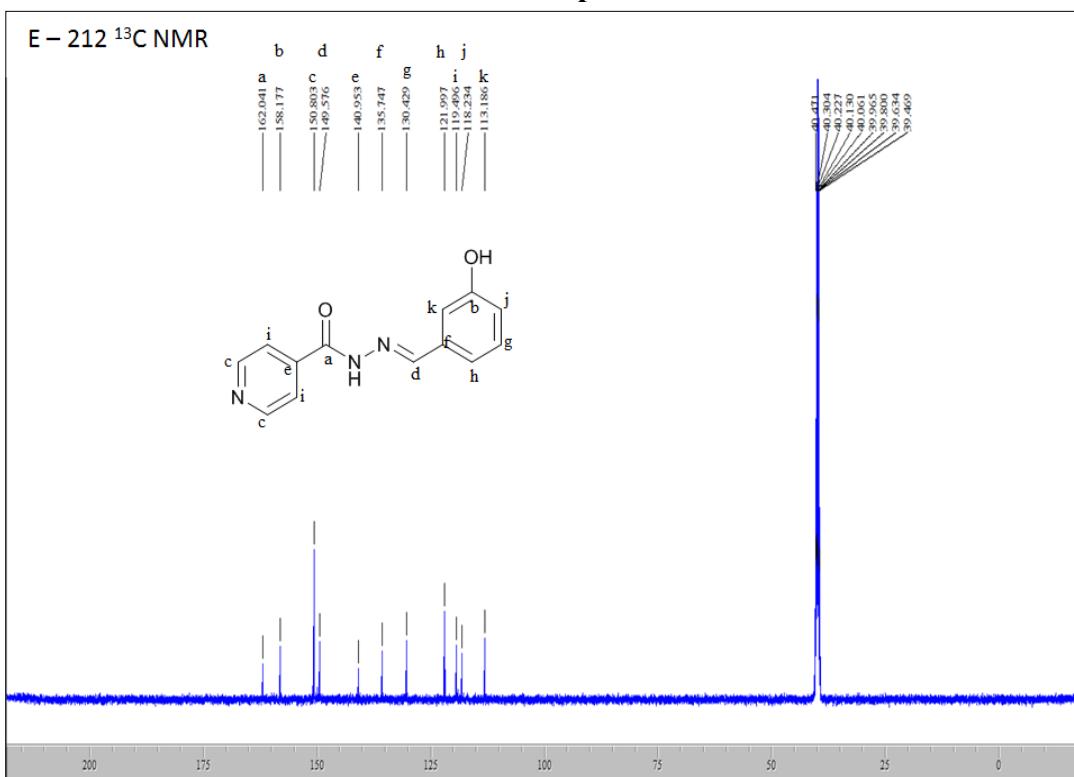
Mass Analysis



H¹ NMR Spectra

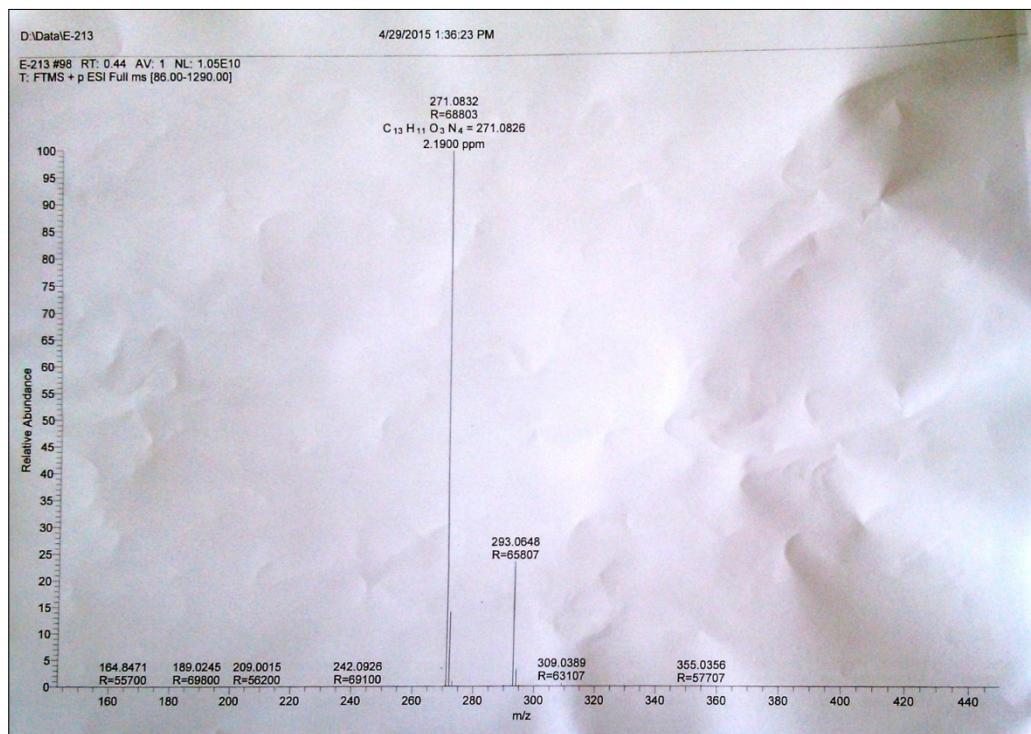


C¹³ NMR Spectra

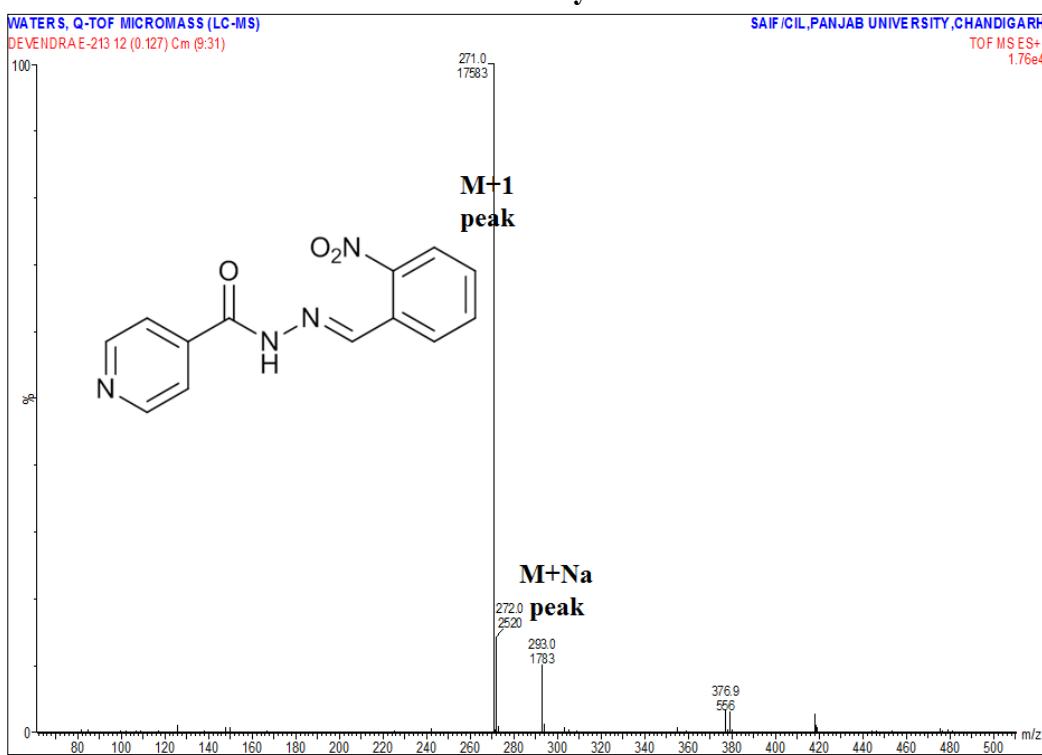


3e: (*E*)-*N'*-(2-nitrobenzylidene) isonicotinohydrazide

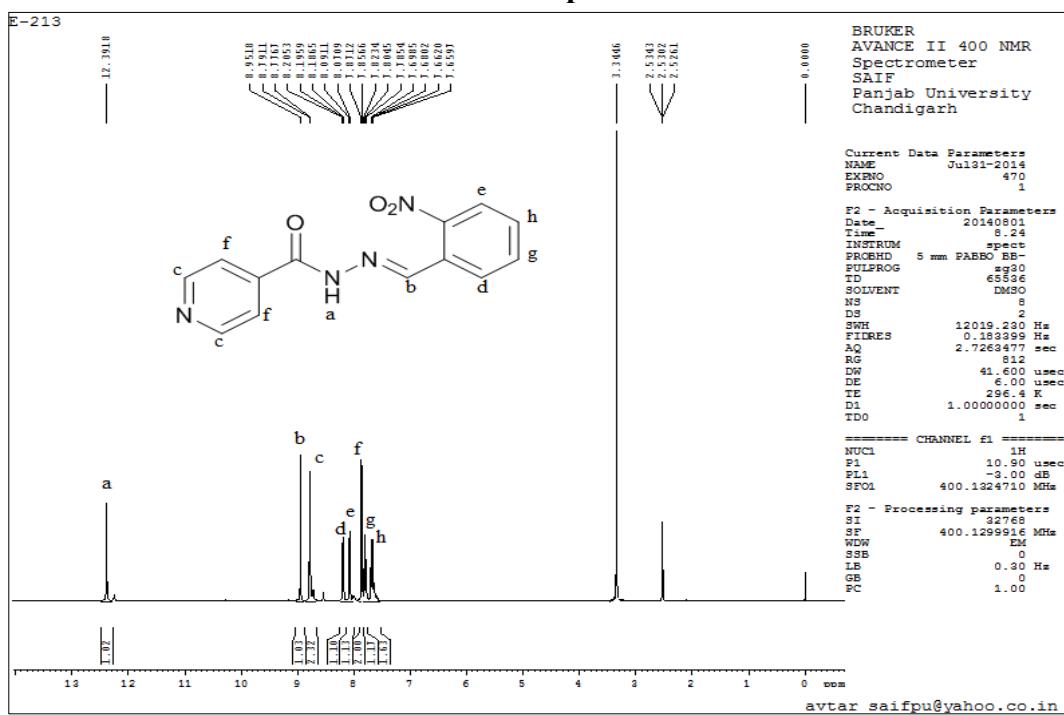
HRMS Analysis



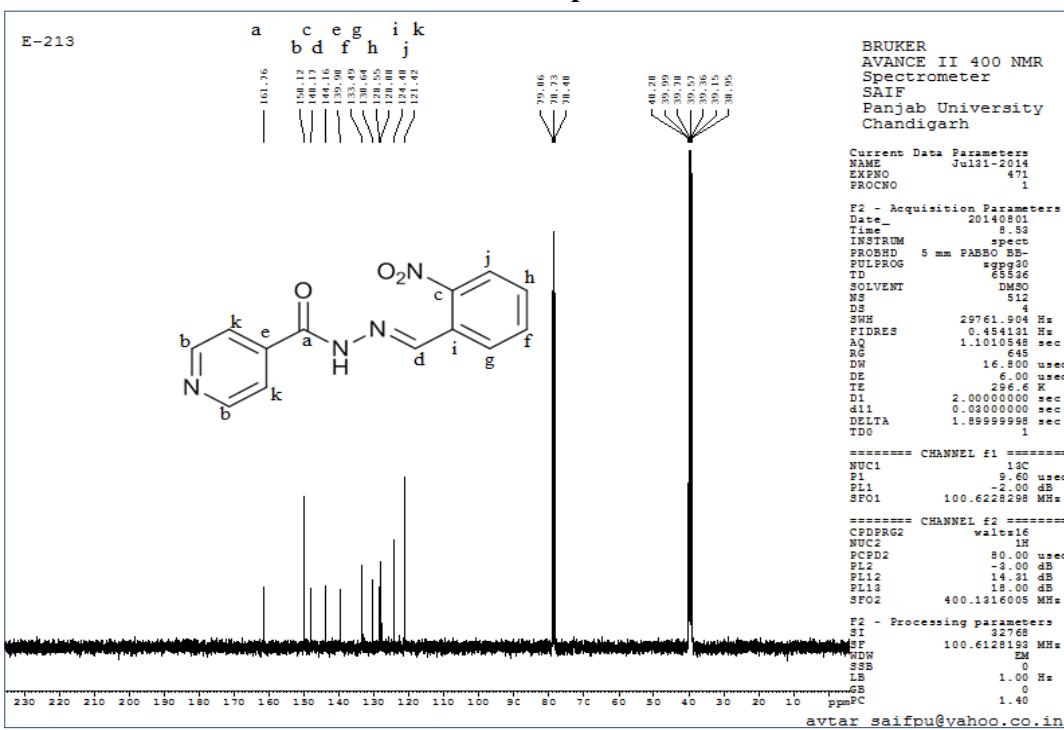
Mass Analysis



H¹ NMR Spectra

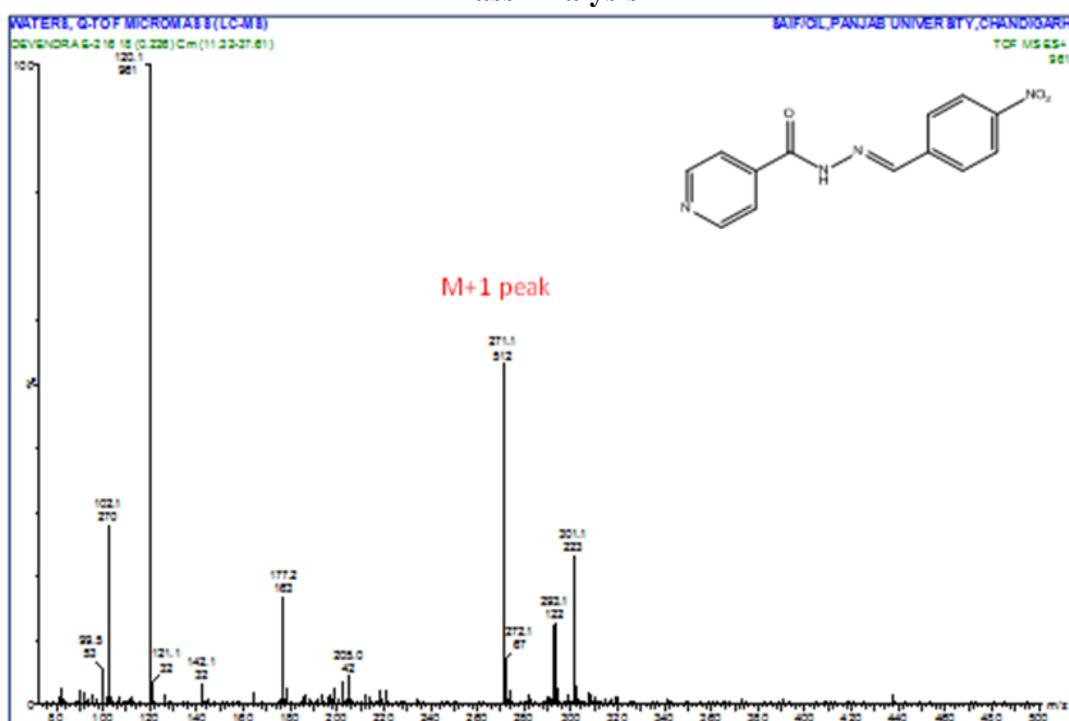


C¹³ NMR Spectra

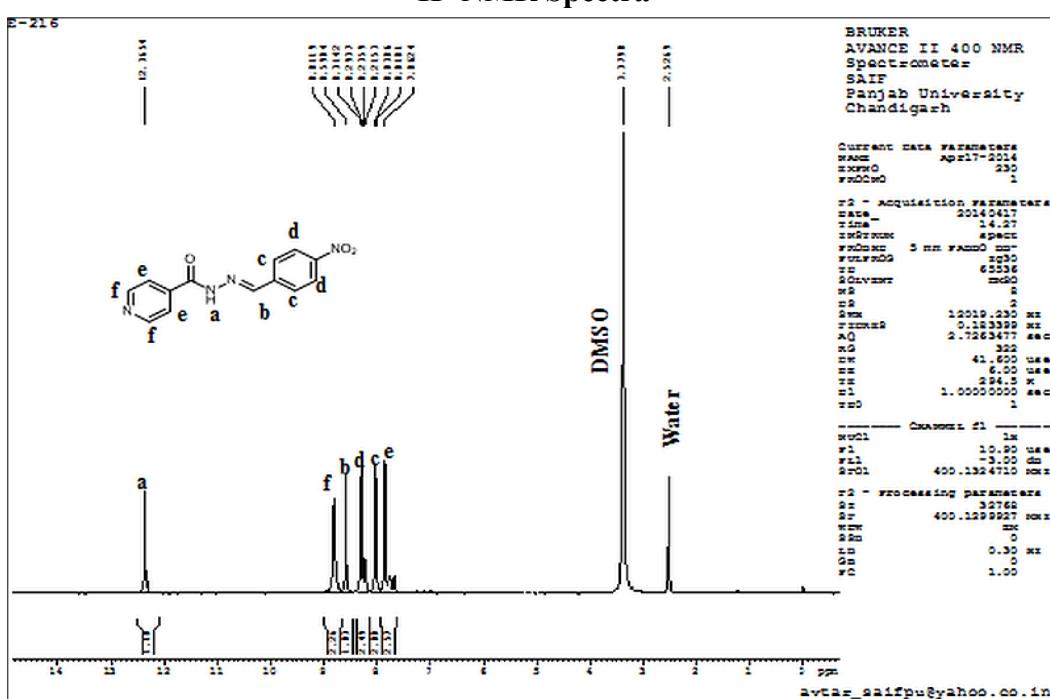


3f: (E)-N'-(4-nitrobenzylidene) isonicotinohydrazide

Mass Analysis

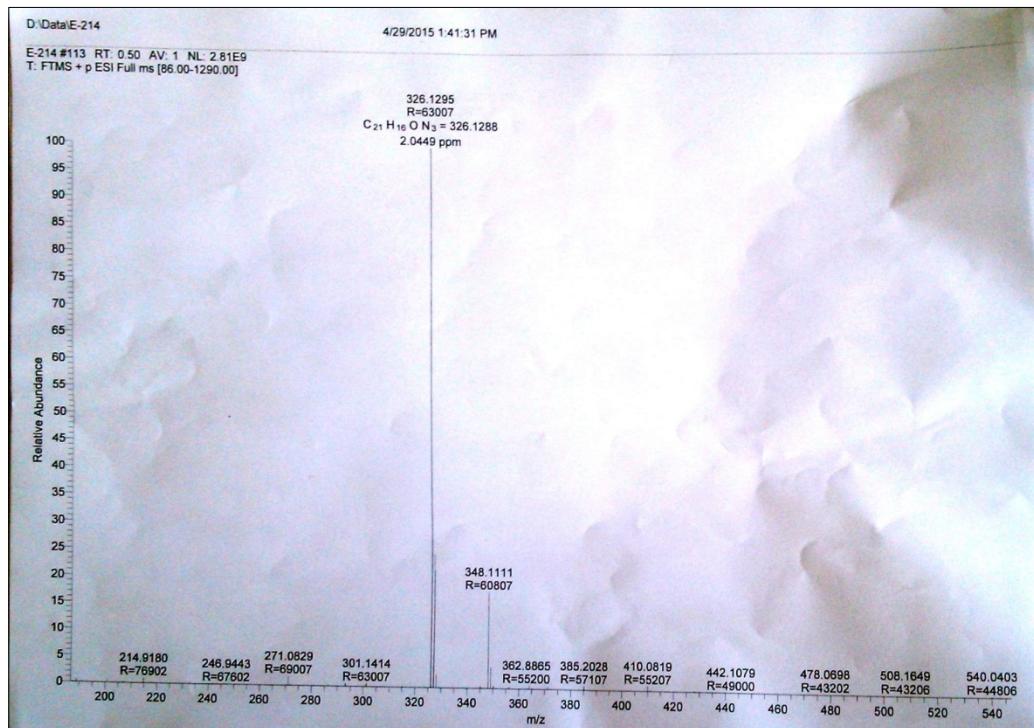


H¹ NMR Spectra

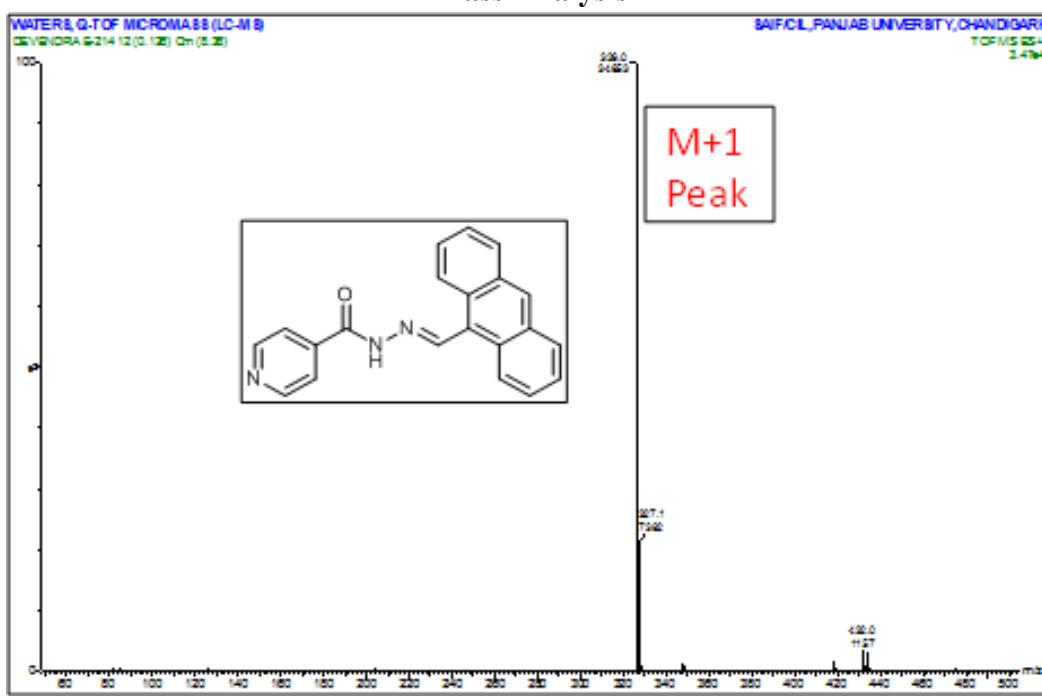


3g: (E)-N'-(anthracene-9-ylmethylene) isonicotinohydrazide

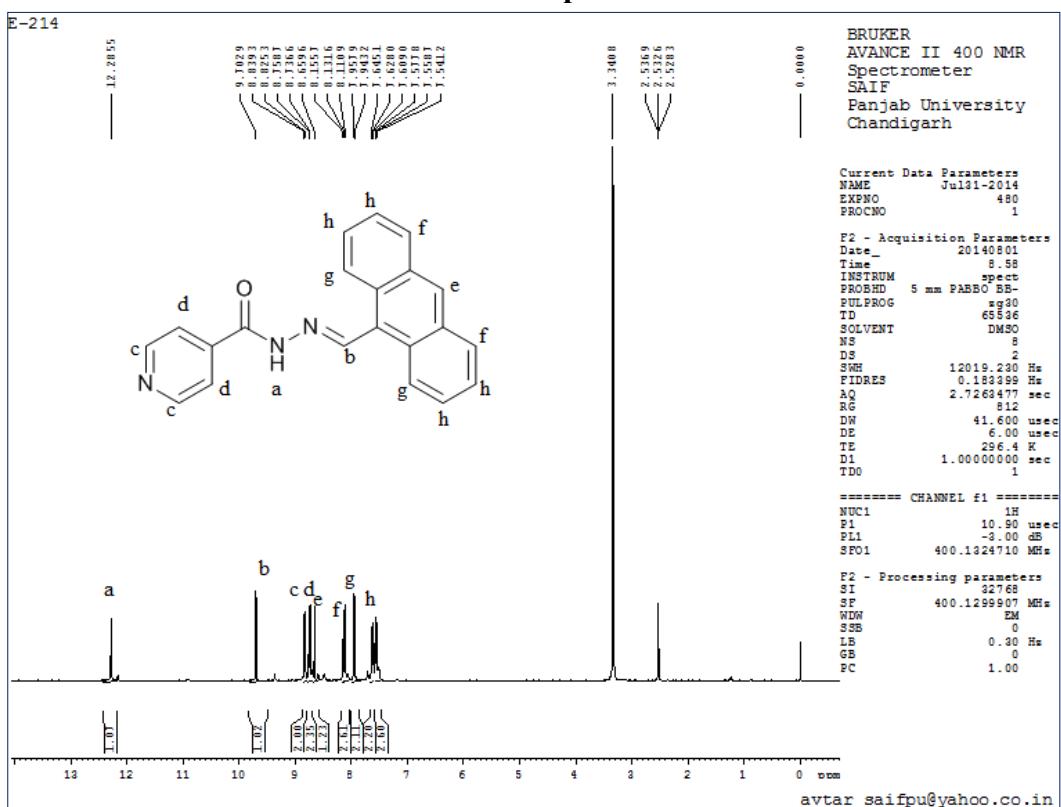
HRMS Analysis



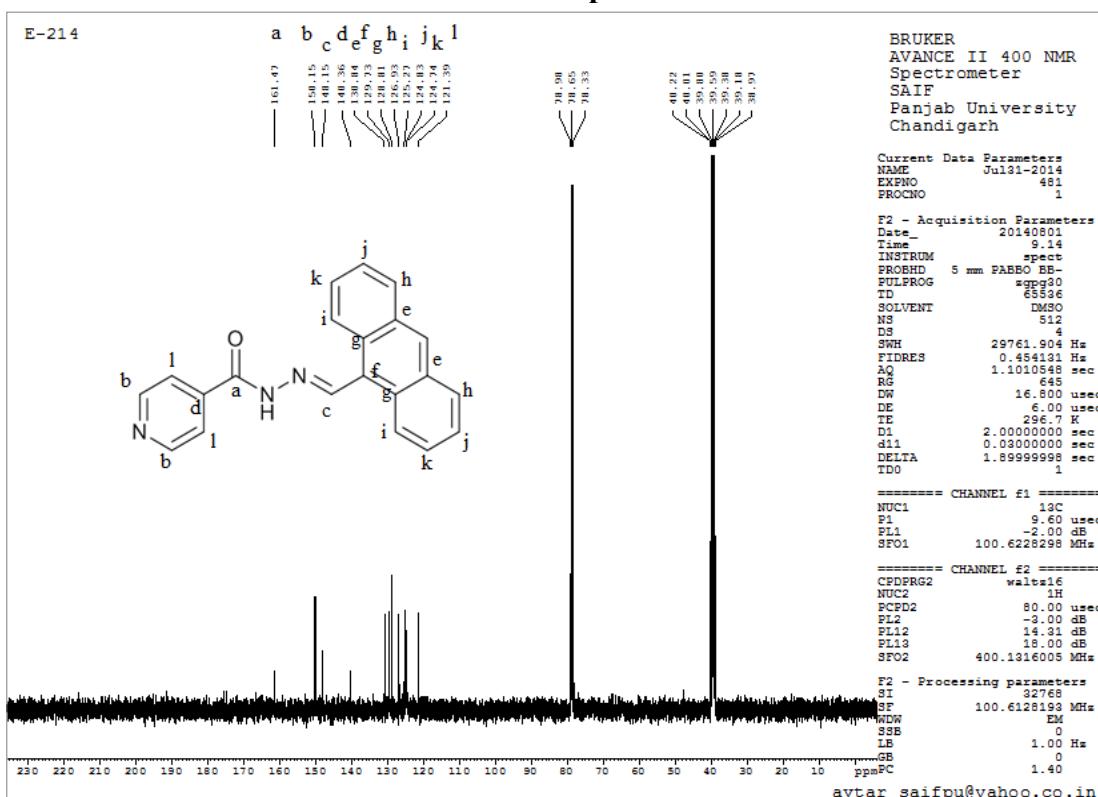
Mass Analysis



H¹ NMR Spectra

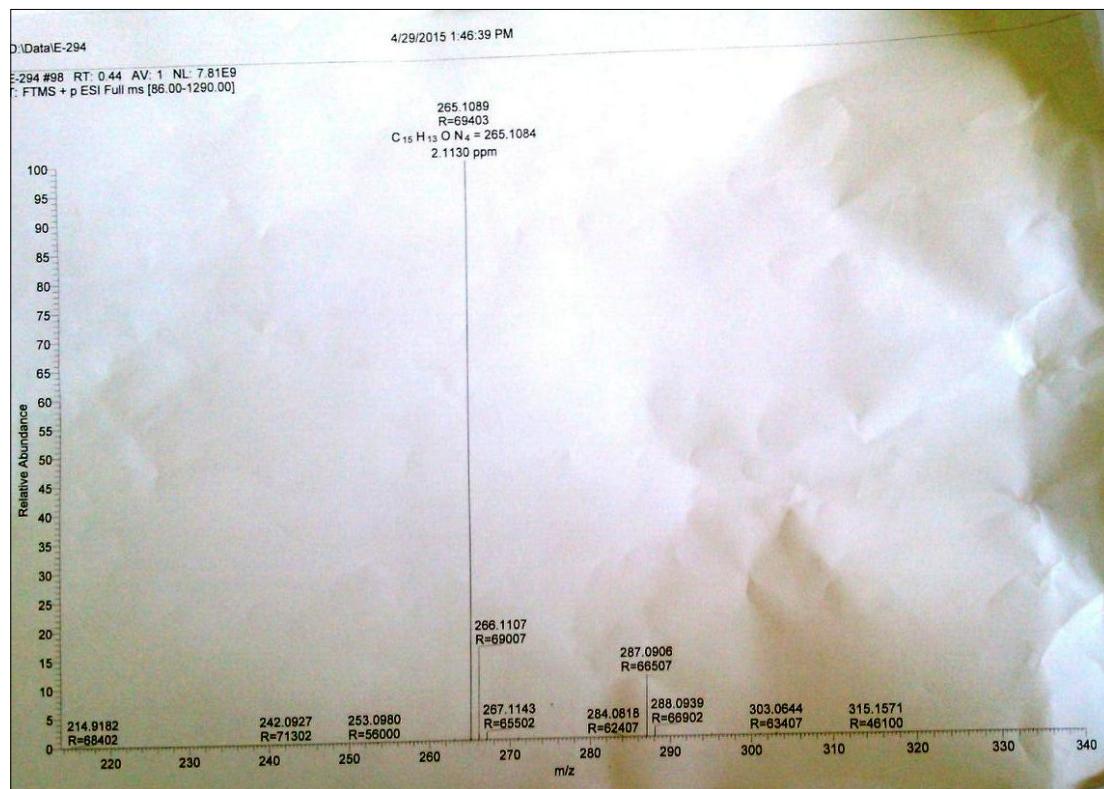


C¹³ NMR Spectra

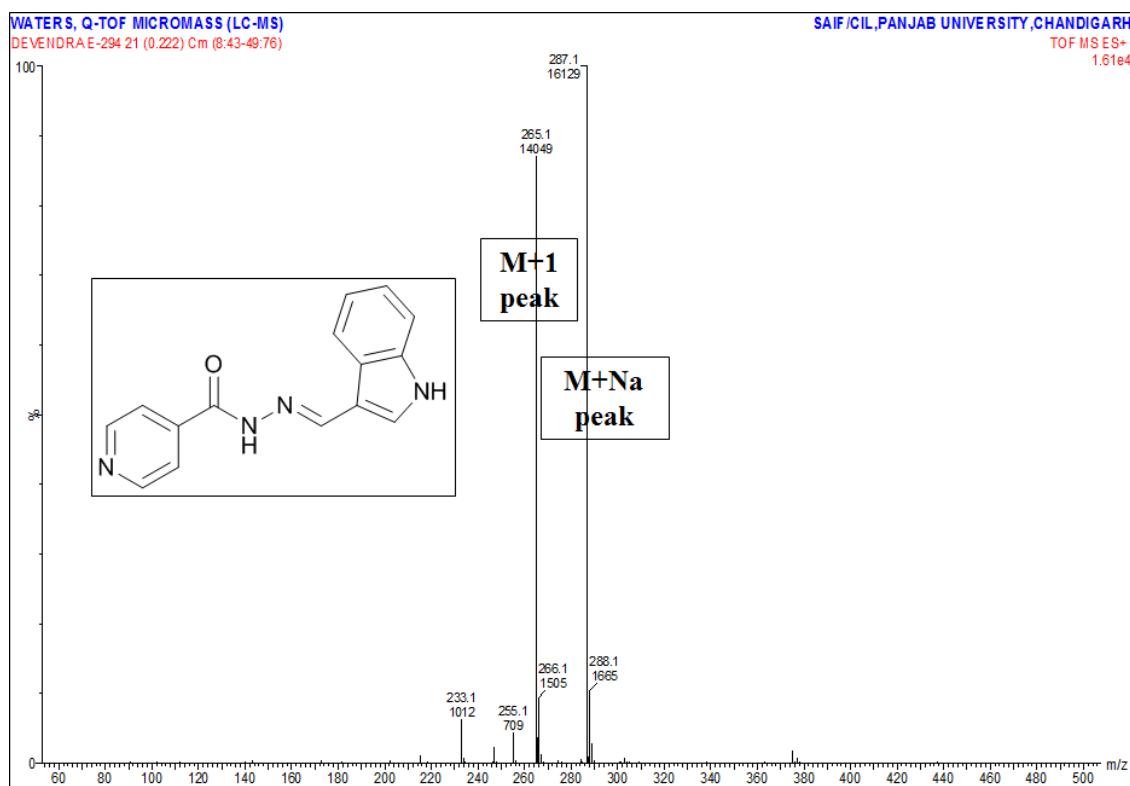


3h: (E)-N'-((1H-indole-3-yl) methylene) isonicotinohydrazide

HRMS Analysis



Mass Analysis



H¹ NMR Spectra

