

## Supplementary Information

### Microwave assisted expeditious approach towards benzimidazole acrylonitrile derivatives exploring new silica supported SBPTS catalyst

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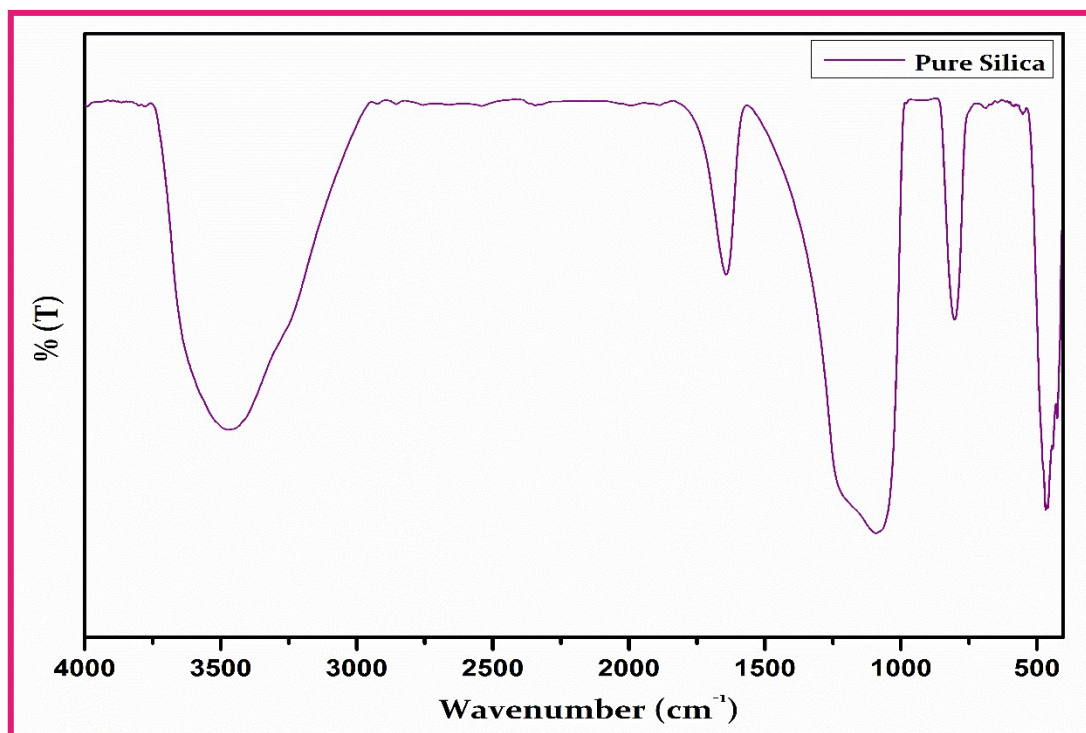


Fig. S1(a) FT-IR spectrum of pure silica

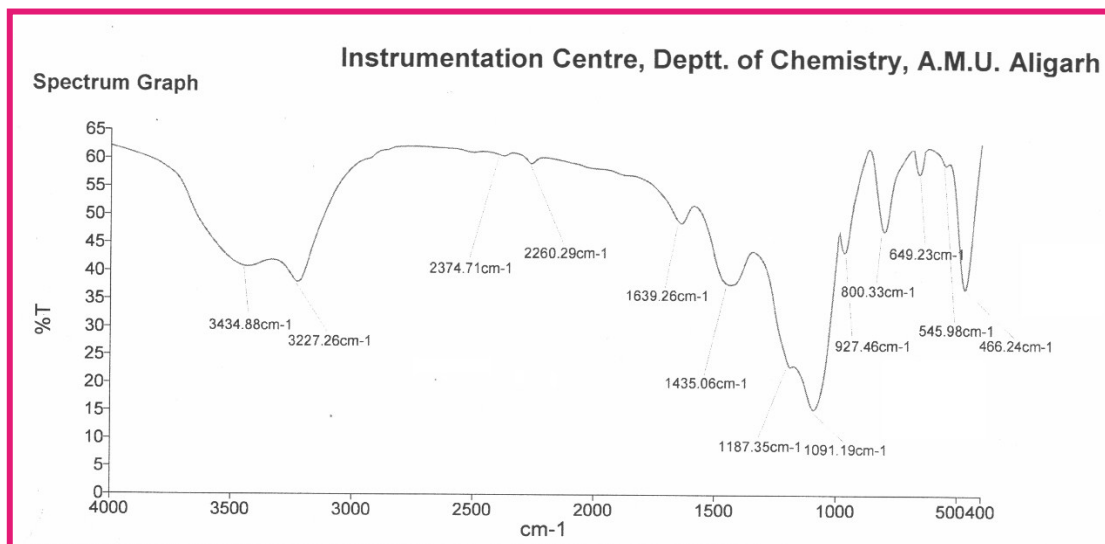


Fig. S1(b) FT-IR spectrum of pure silica-boric acid

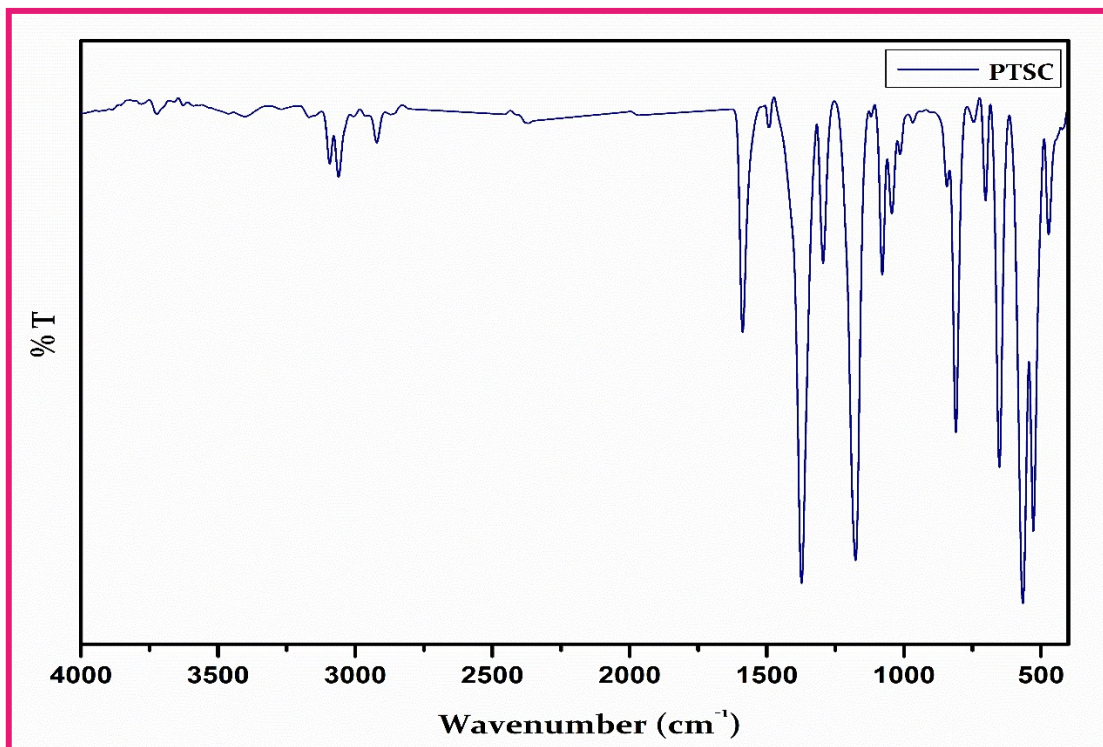


Fig. S1(c) FT-IR spectrum of *p*-toluenesulfonyl chloride

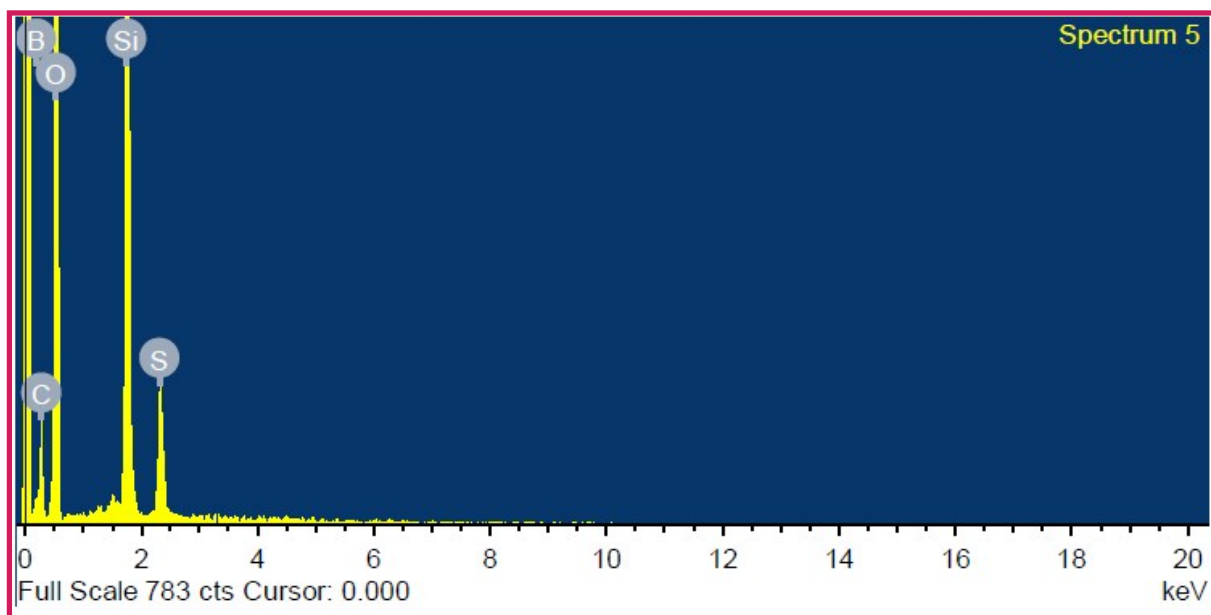
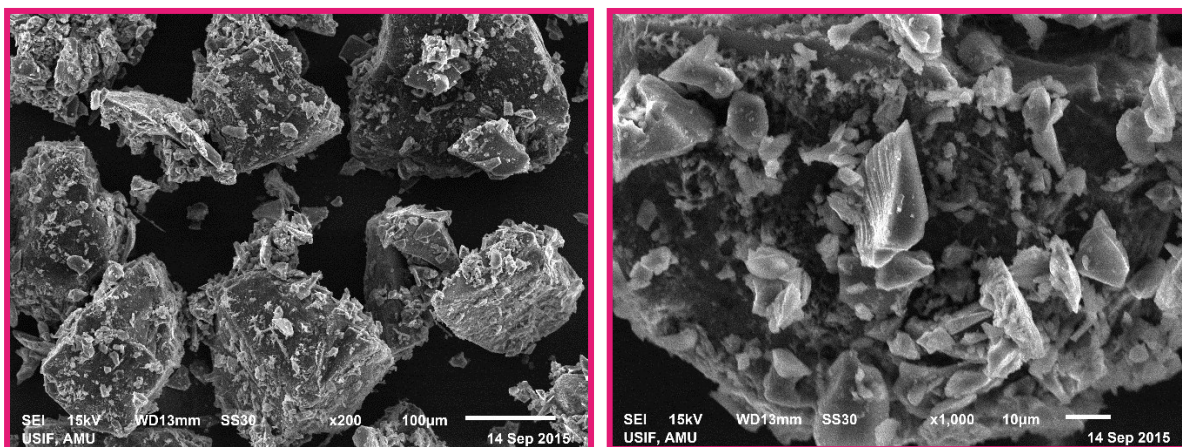
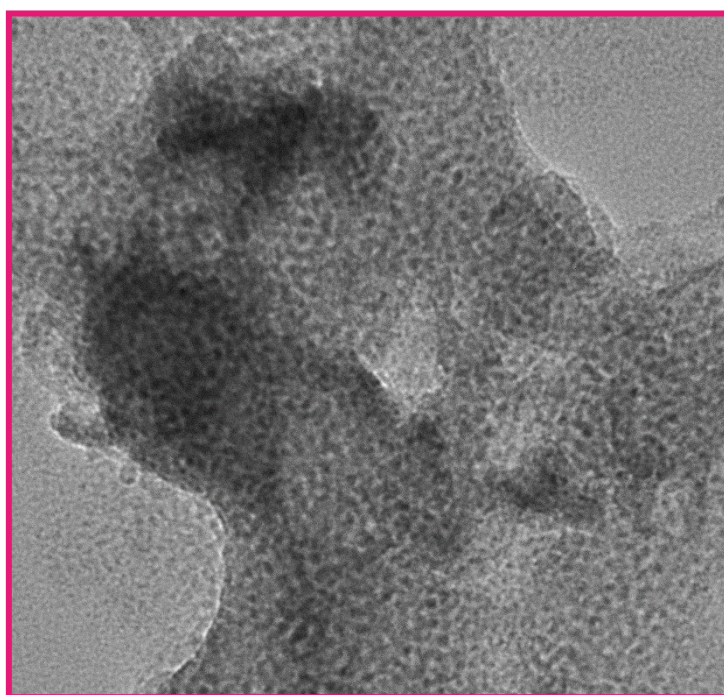


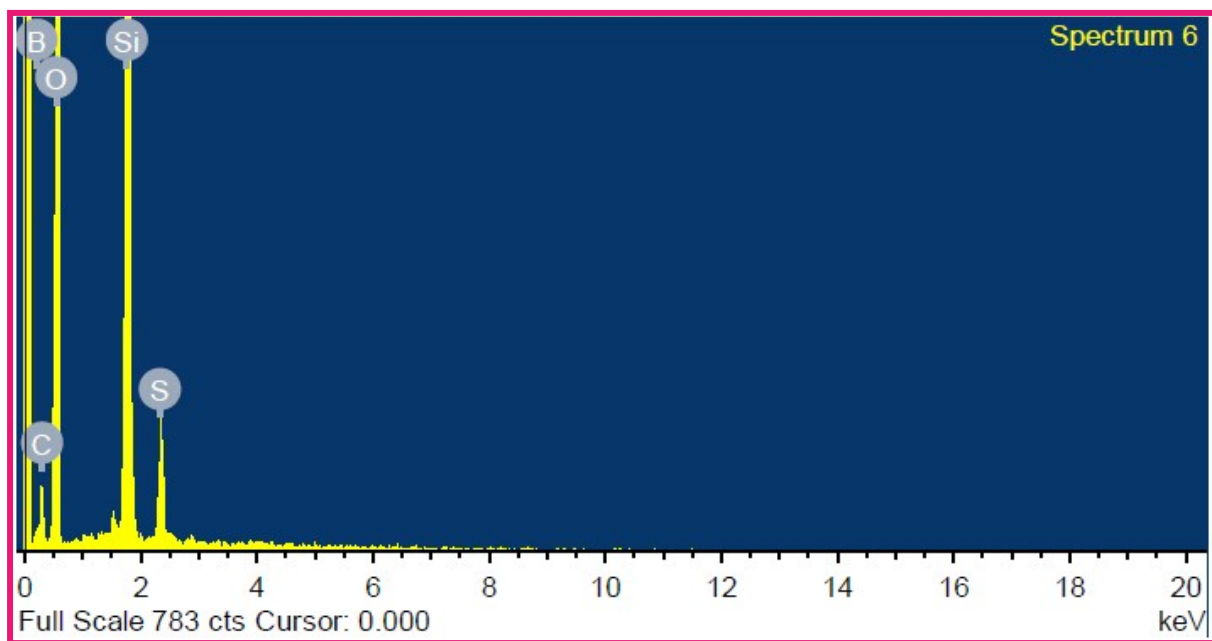
Fig. S2 EDX analysis of the SBPTS catalyst



**Fig. S3** SEM micrograph of the recovered catalyst

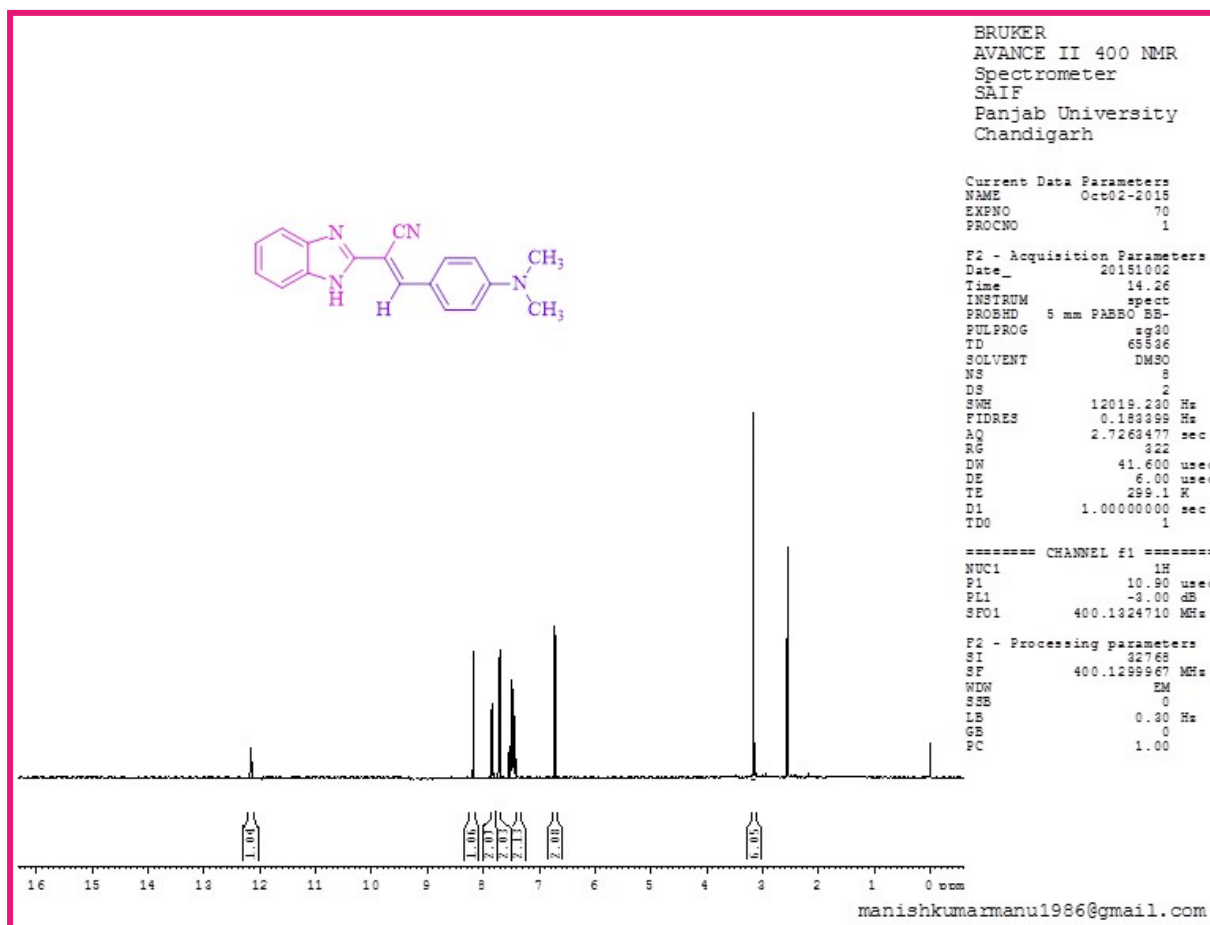


**Fig. S4** TEM micrograph of the recovered catalyst

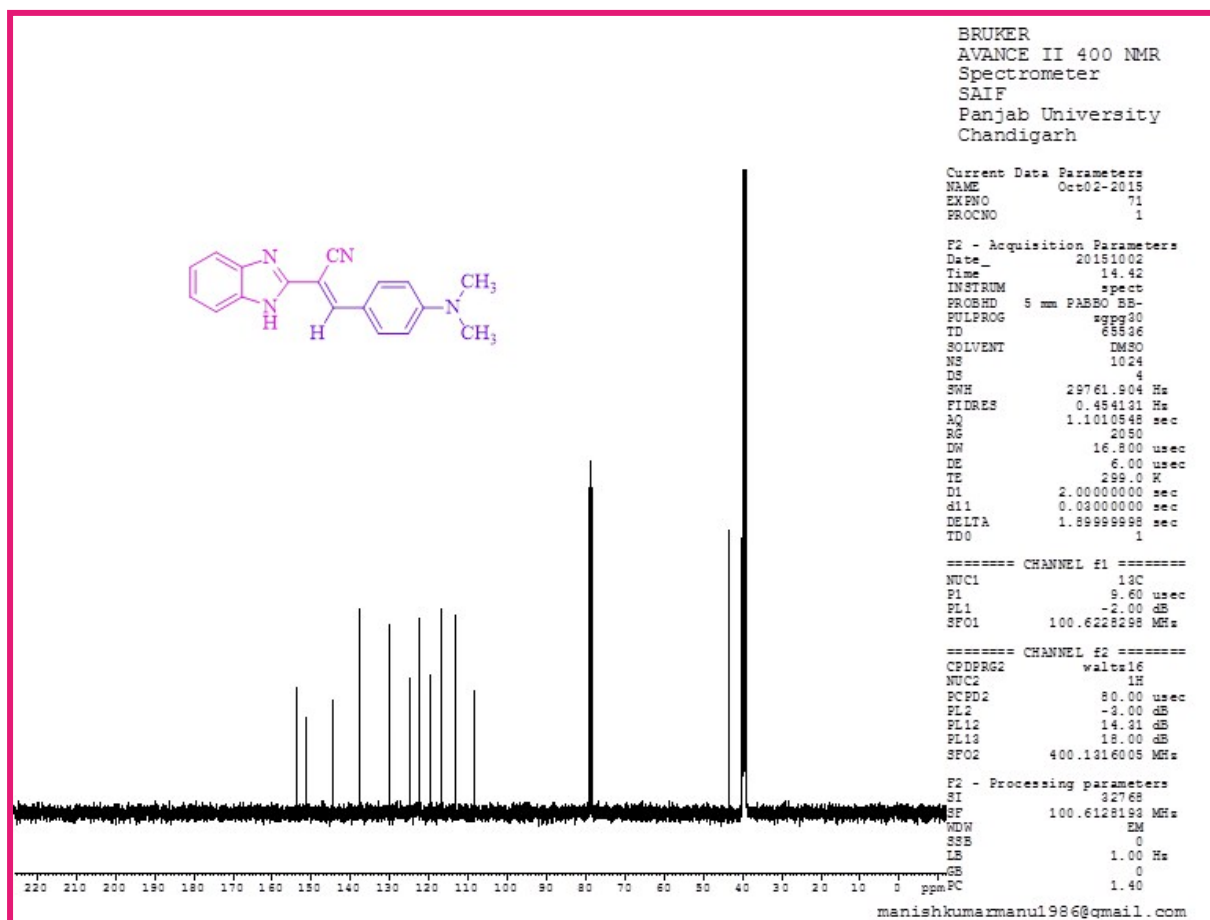


**Fig. S5** EDX analysis of the recovered catalyst





**Fig. S6**  $^1\text{H}$  NMR spectrum of compound **3a**



**Fig. S7**  $^{13}\text{C}$  NMR spectrum of compound **3a**

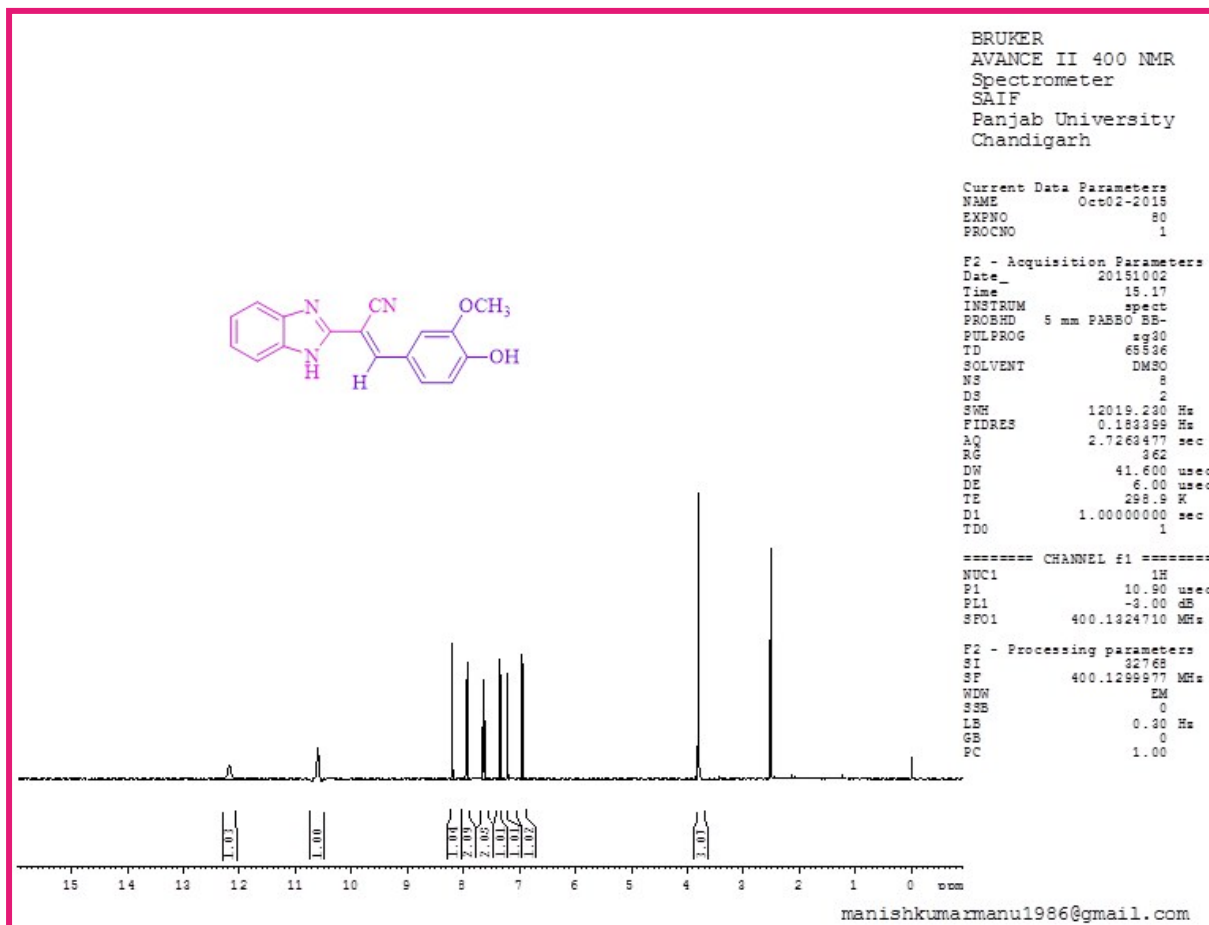
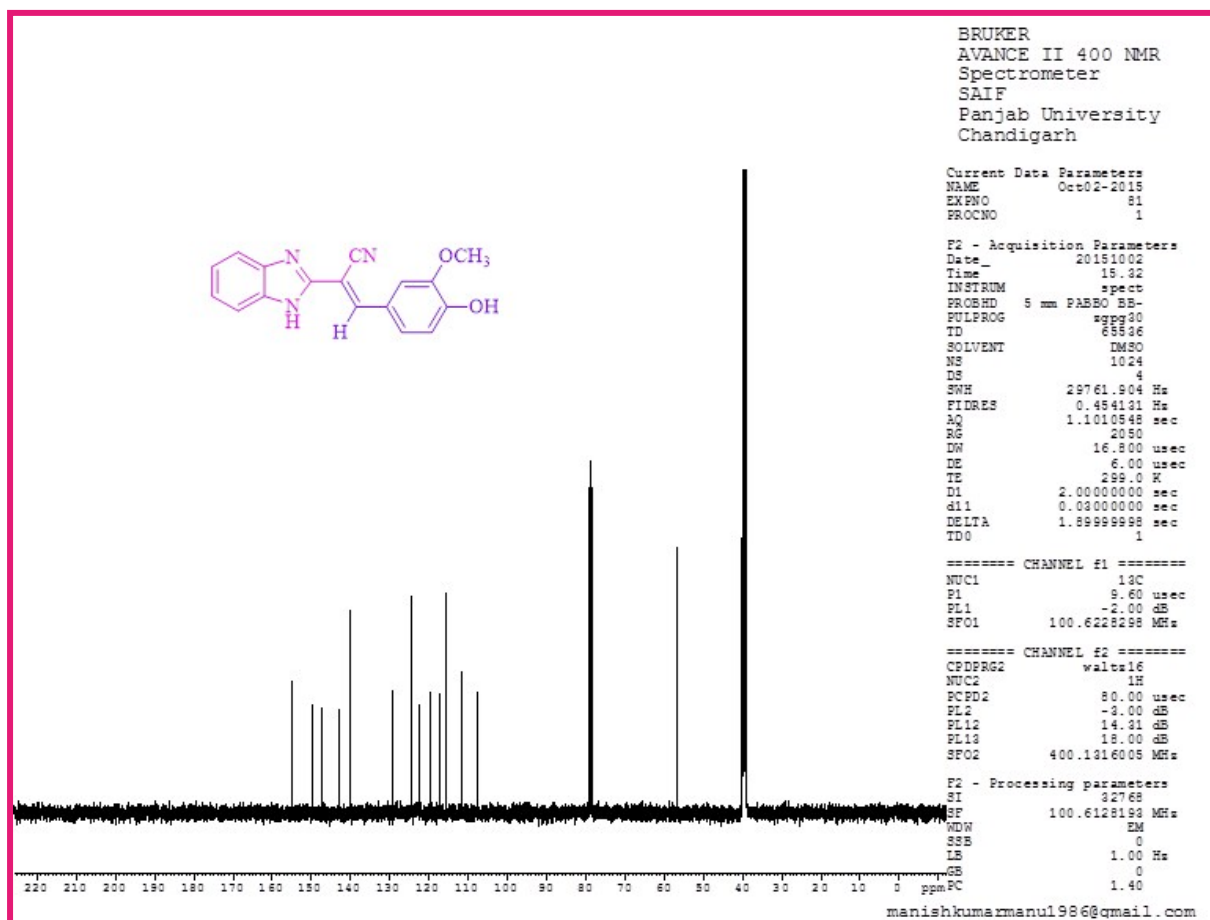
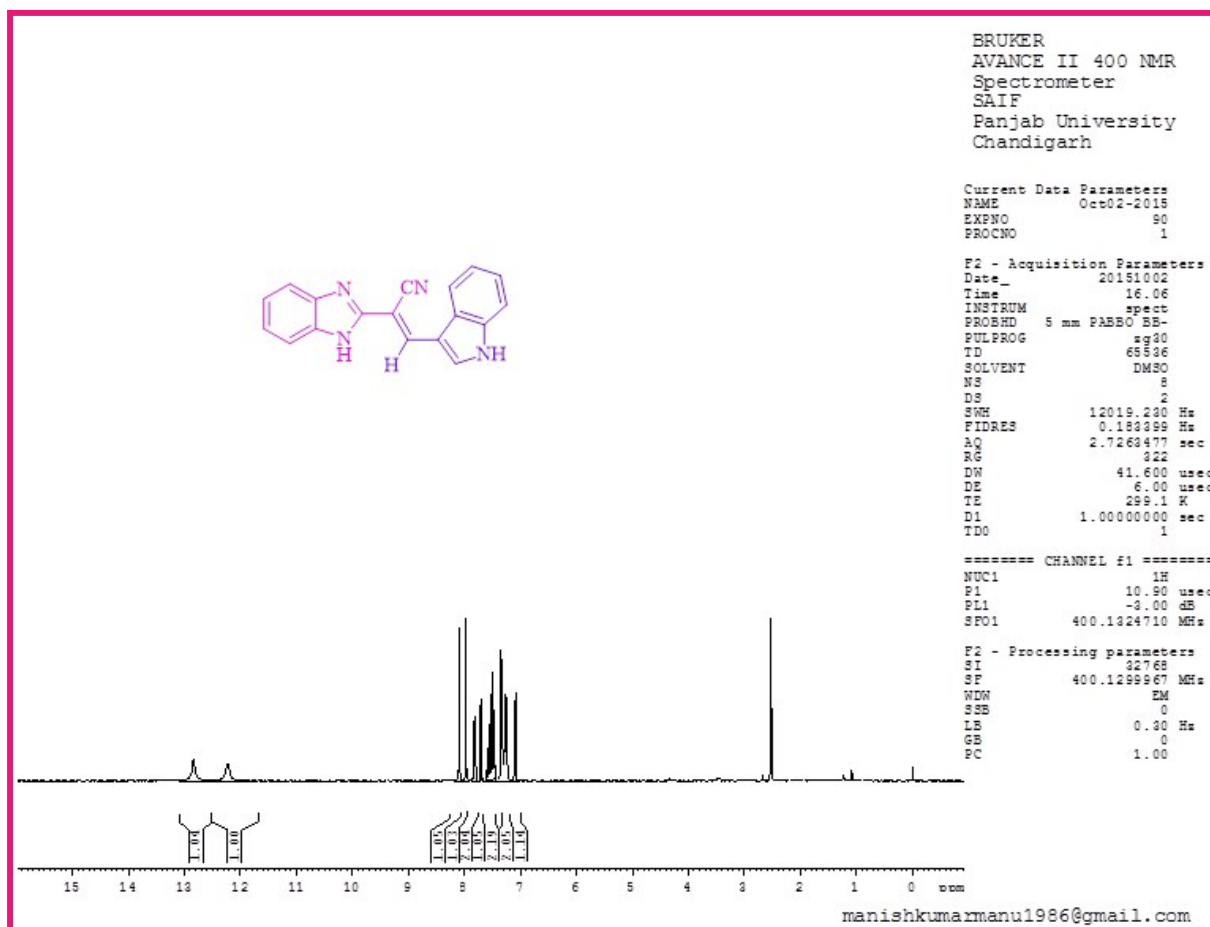


Fig. S8 <sup>1</sup>H NMR spectrum of compound **3e**





**Fig. S9**  $^{13}\text{C}$  NMR spectrum of compound **3e**



**Fig. S10** <sup>1</sup>H NMR spectrum of compound **3g**

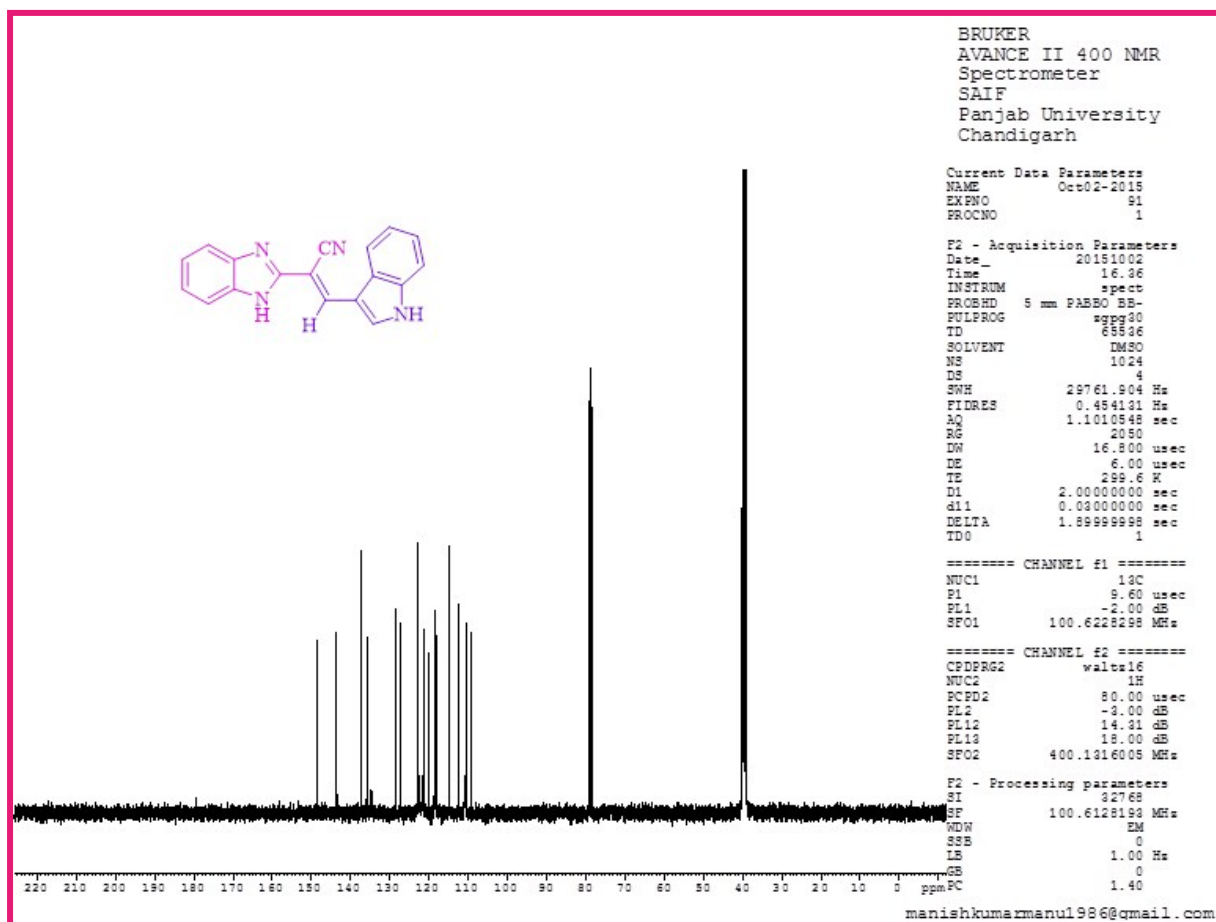
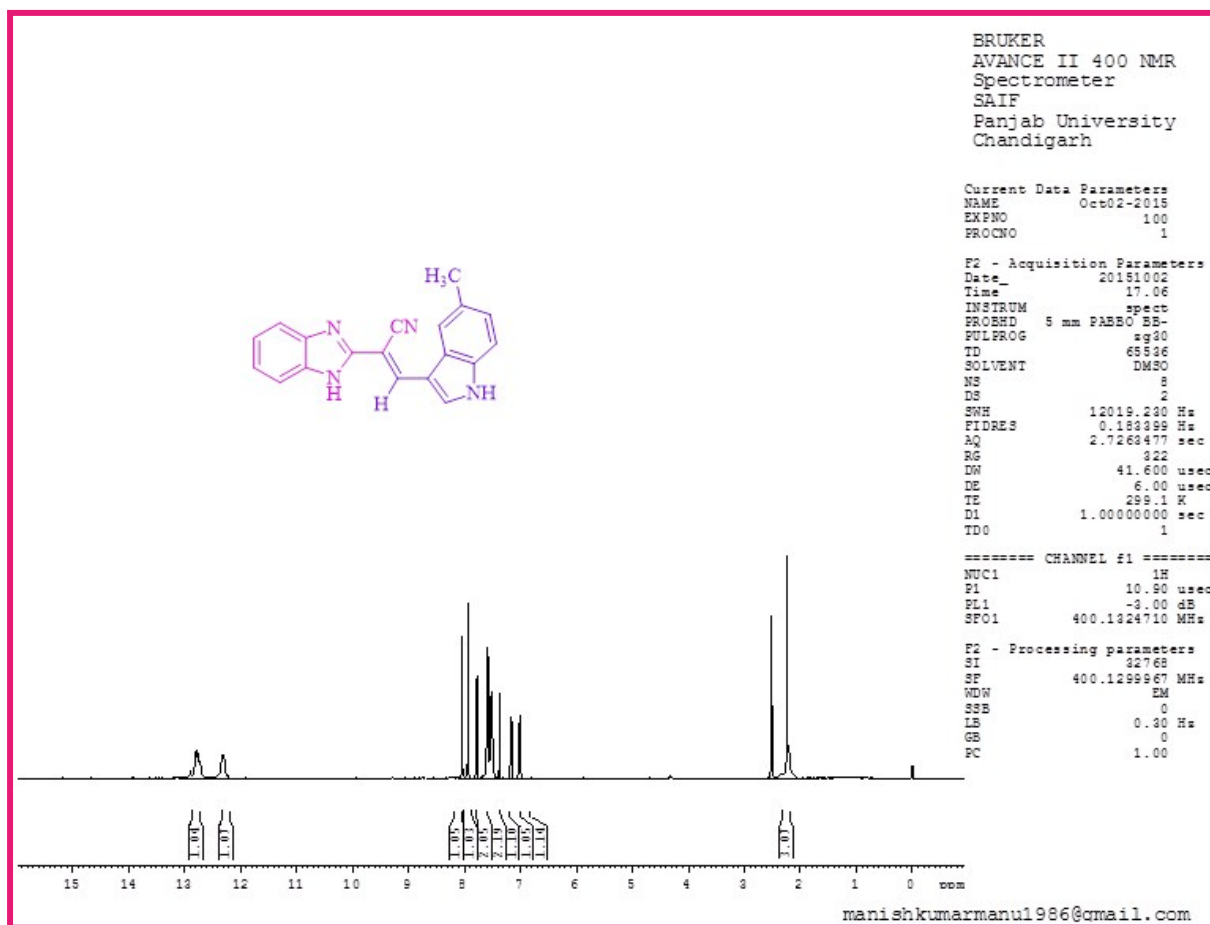


Fig. S11 <sup>13</sup>C NMR spectrum of compound 3g



**Fig. S12**  $^1\text{H}$  NMR spectrum of compound **3i**

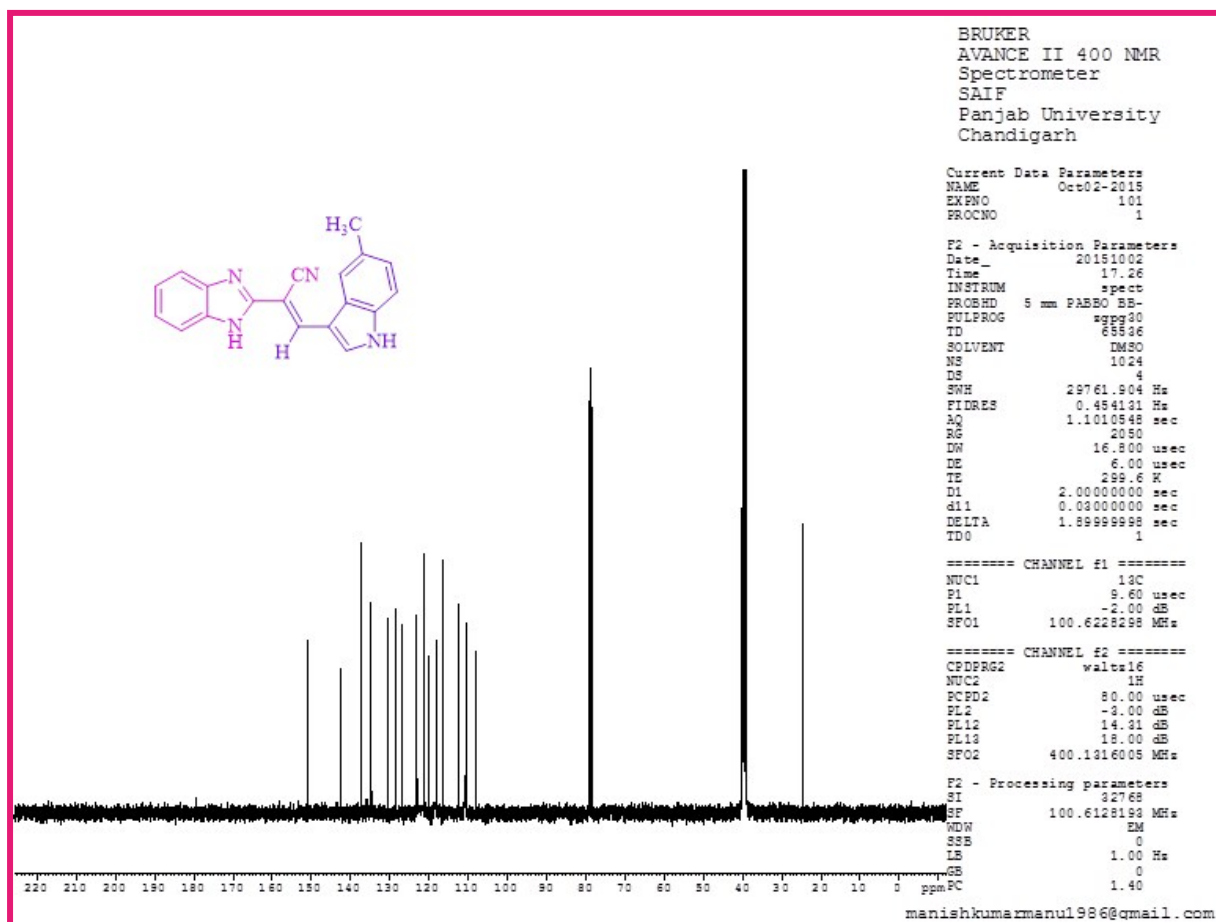
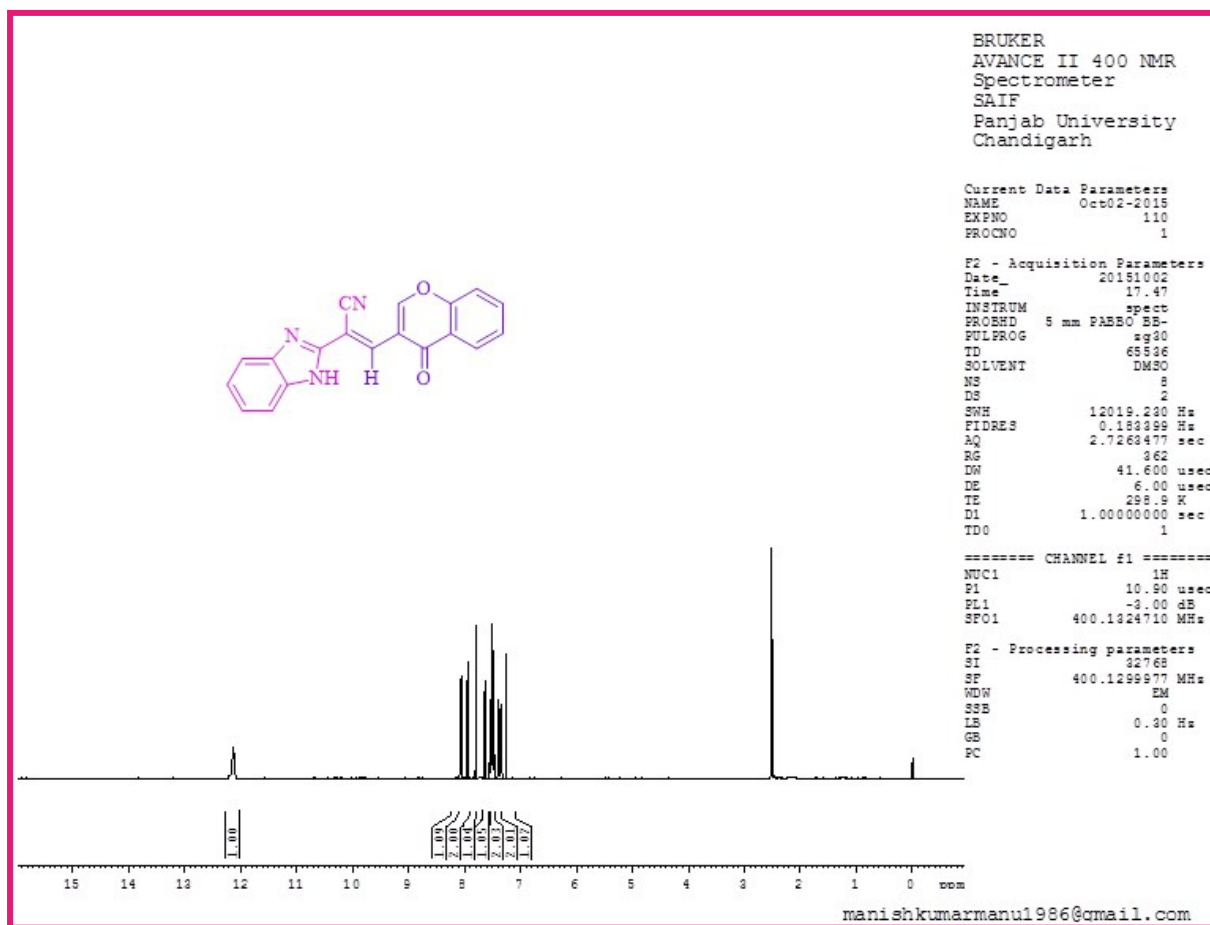


Fig. S13 <sup>13</sup>C NMR spectrum of compound 3i



**Fig. S14**  $^1\text{H}$  NMR spectrum of compound **3j**



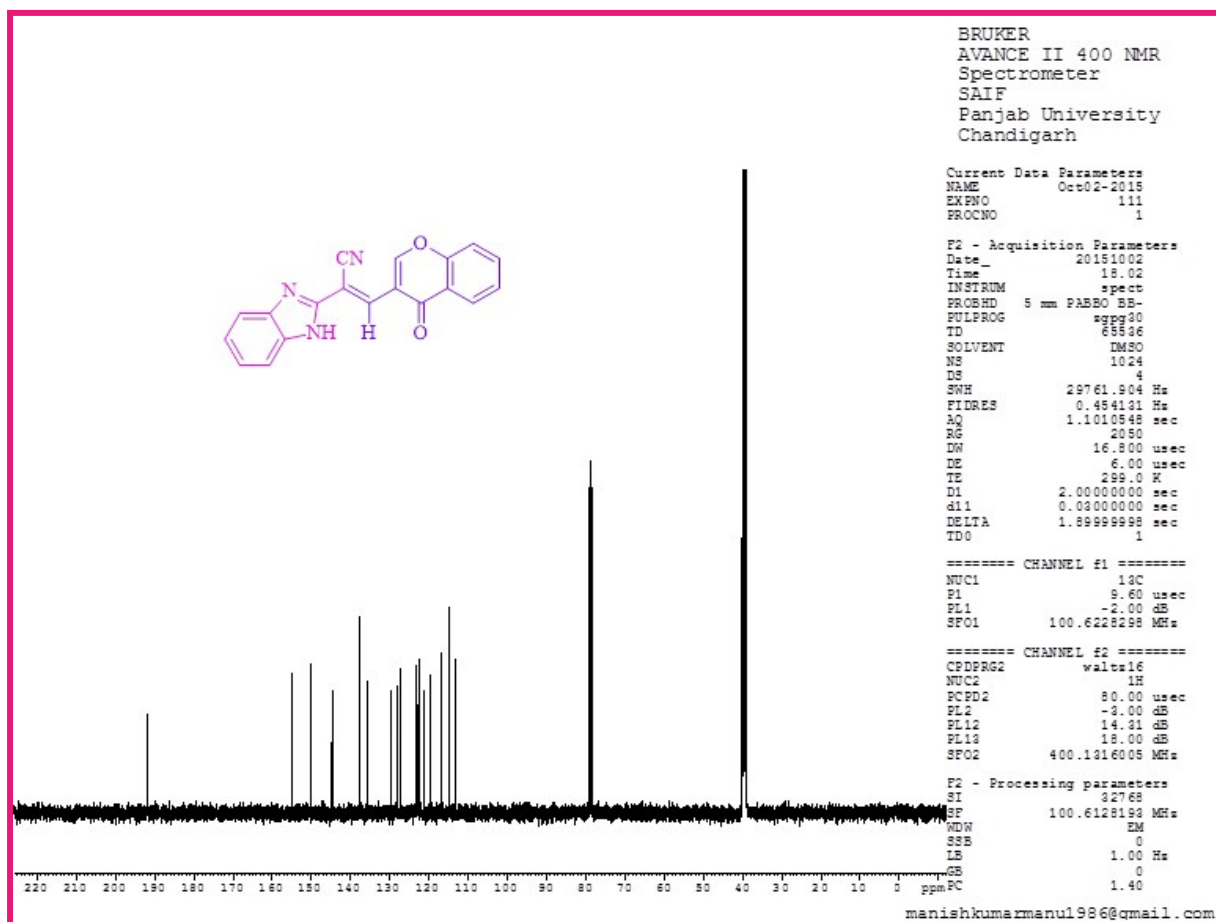
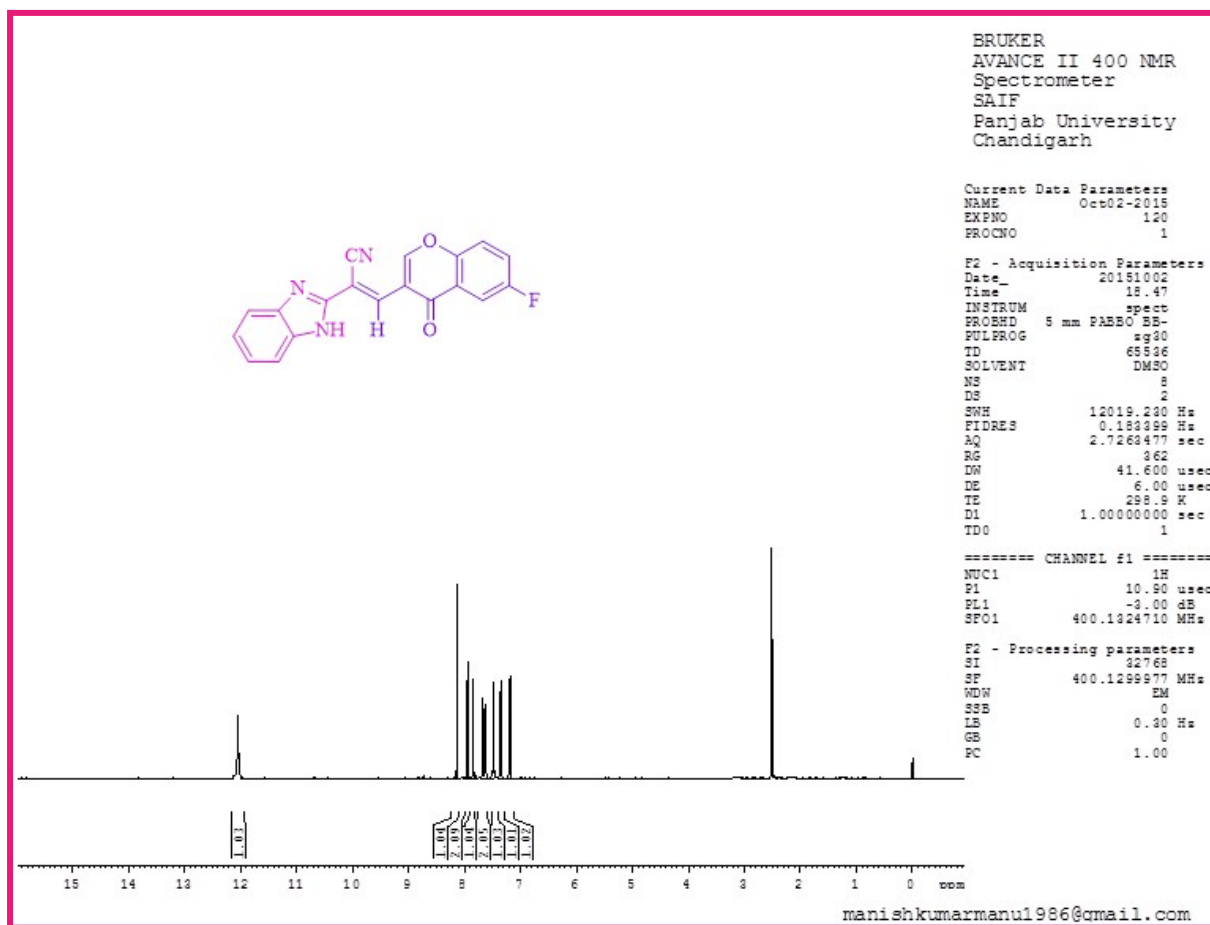


Fig. S15 <sup>13</sup>C NMR spectrum of compound 3j



**Fig. S16**  $^1\text{H}$  NMR spectrum of compound **31**

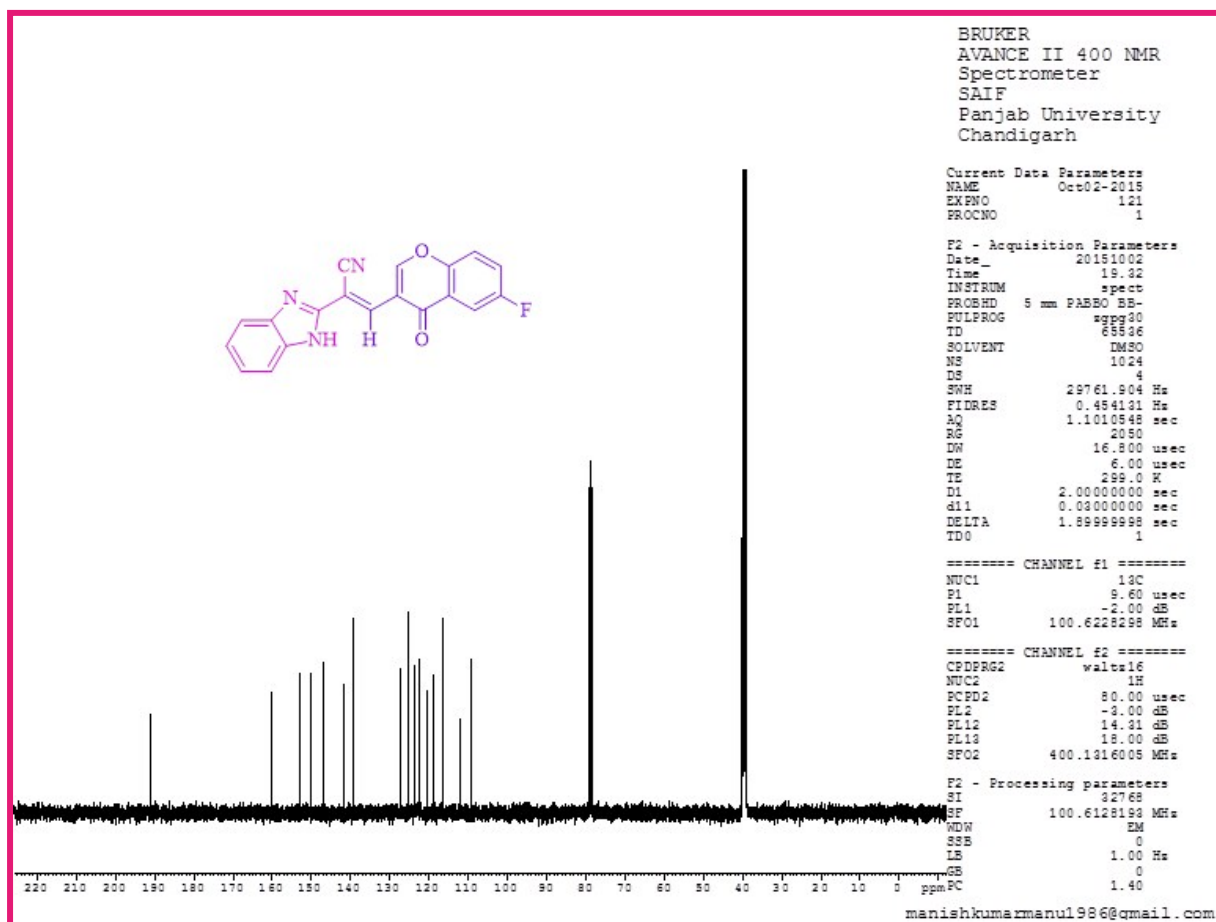


Fig. S17 <sup>13</sup>C NMR spectrum of compound 31