

Supporting Information

Ethylenediammonium-diformate (EDDF) in PEG: An efficient ambiphilic novel catalytic system for the one-pot synthesis of 4*H*-pyrans via Knoevenagel condensation

Anuj Thakur,^a Mohit Tripathi,^a U. Chinna Rajesh^a and Diwan S. Rawat,^{*a}

Department of Chemistry, University of Delhi, Delhi-110007, India

Fax: 91-11-27667501; Tel: 91-11-27662683

**E-mail: dsrawat@chemistry.du.ac.in*

Fig 1: ¹ H NMR of EDDF.....	1
Fig 2: ¹³ C NMR of EDDF.....	1
Fig 3: ¹ H NMR of 4 <i>H</i> -pyran 7i	2
Fig 4: ¹³ C NMR of 4 <i>H</i> -pyran 7i	2
Fig 5: ¹ H NMR of 4 <i>H</i> -pyran 7t	3
Fig 6: ¹³ C NMR of 4 <i>H</i> -pyran 7t	3
Fig 7: ¹ H NMR of 4 <i>H</i> -pyran 7u	4
Fig 8: ¹³ C NMR of 4 <i>H</i> -pyran 7u	4
Fig 9: ¹ H NMR of 4 <i>H</i> -pyran 7v	5
Fig 10: ¹³ C NMR of 4 <i>H</i> -pyran 7v	5
Fig 11: ¹ H NMR of 4 <i>H</i> -pyran 8a	6
Fig 12: ¹³ C NMR of 4 <i>H</i> -pyran 8a	6
Fig 13: ¹ H NMR of 4 <i>H</i> -pyran 9a	7
Fig 14: ¹ H NMR of spirooxindole 11a	7
Fig 15: ¹³ C NMR of spirooxindole 11a	8
Fig 16: ¹ H NMR of spirooxindole 12a	8
Fig 17: ¹³ C NMR of spirooxindole 12a	9
Fig 18: ¹ H NMR of spirooxindole 13a	9
Fig 19: ¹³ C NMR of spirooxindole 13a	10

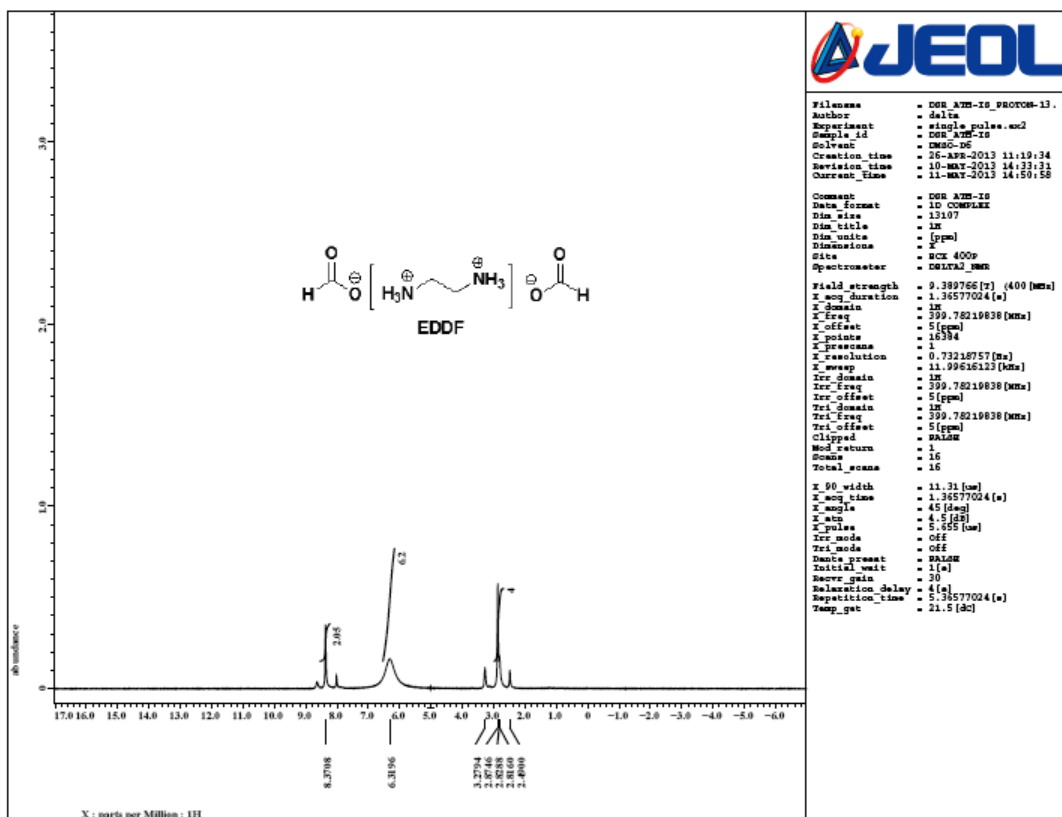


Fig 1: ¹H NMR of Ethylenediammonium-diformate (EDDF)

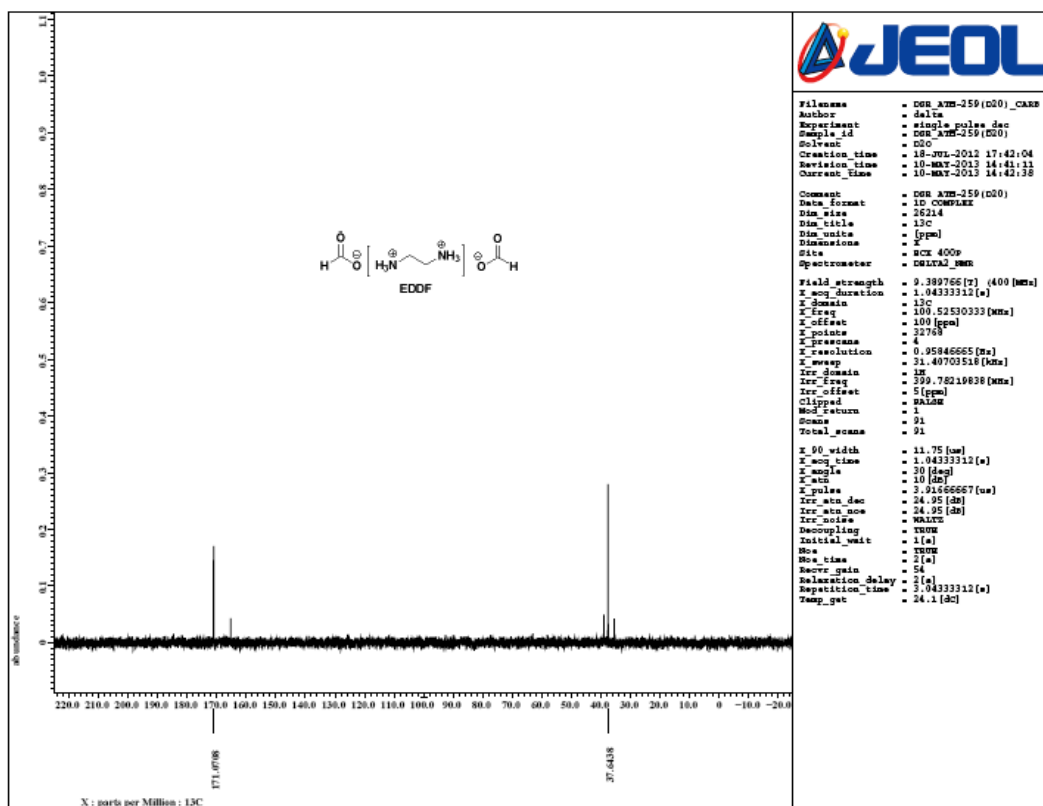


Fig 2: ¹³C NMR of Ethylenediammonium-diformate (EDDF)

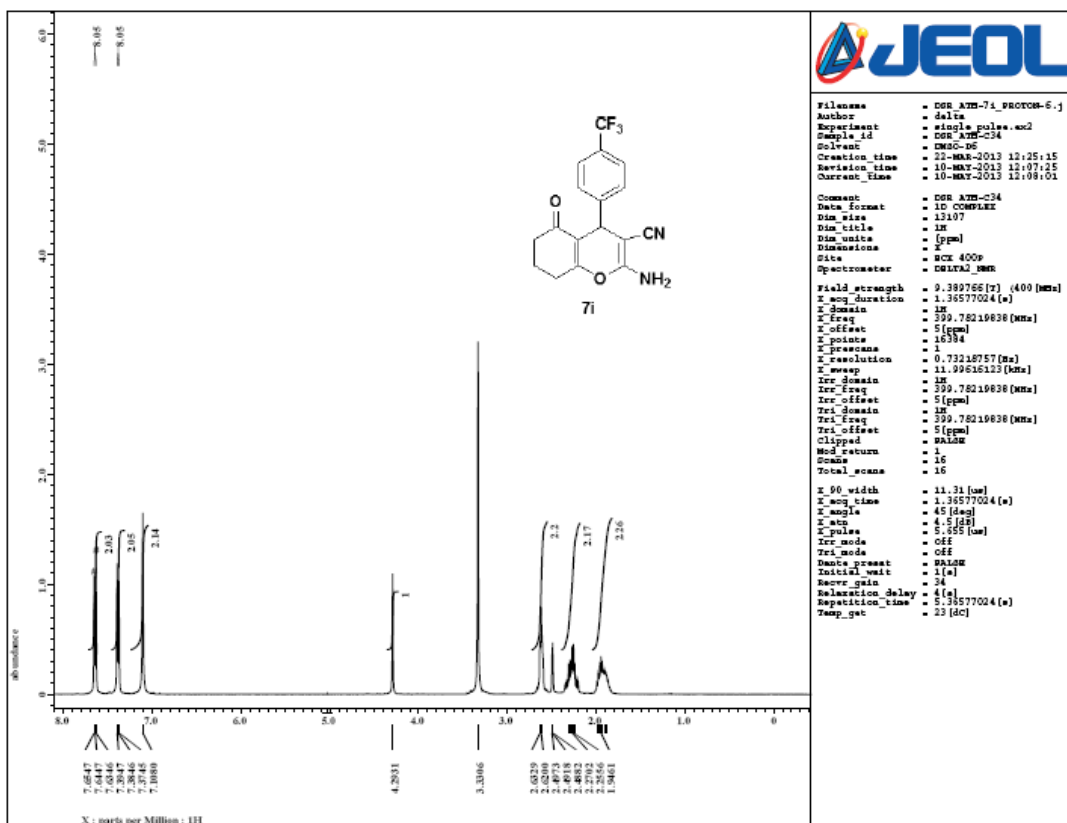


Fig 3: ¹H NMR of 4H-pyran 7i

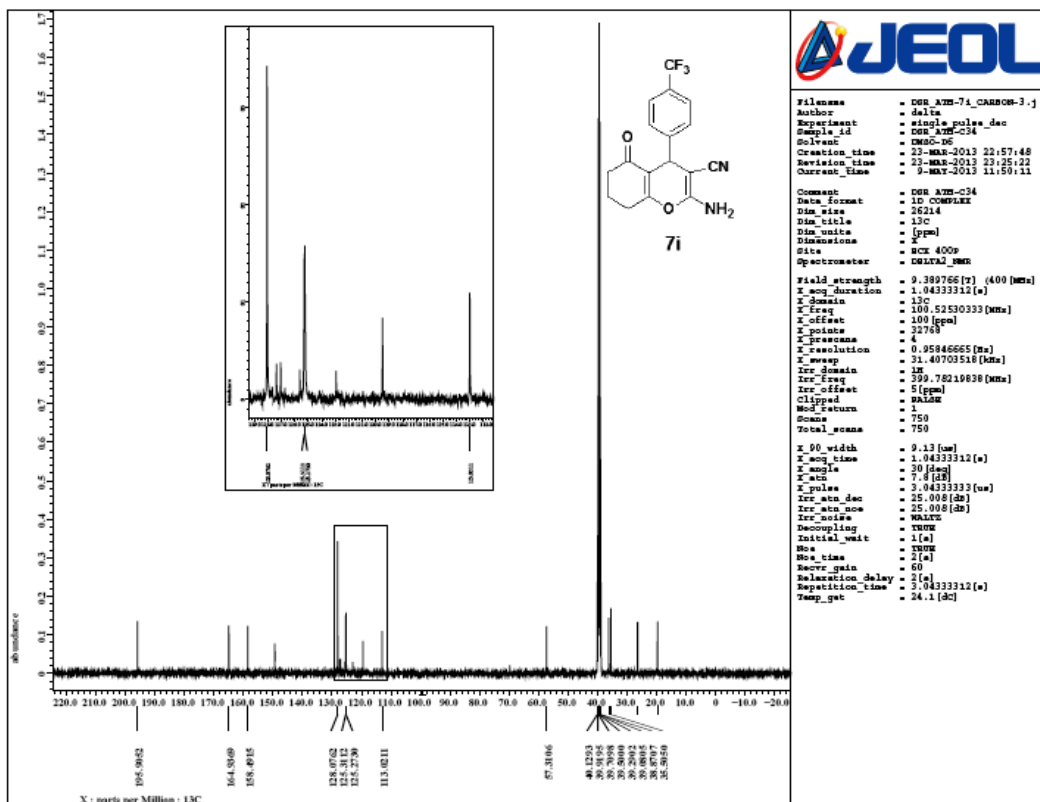


Fig 4: ¹³C NMR of 4H-pyran 7i

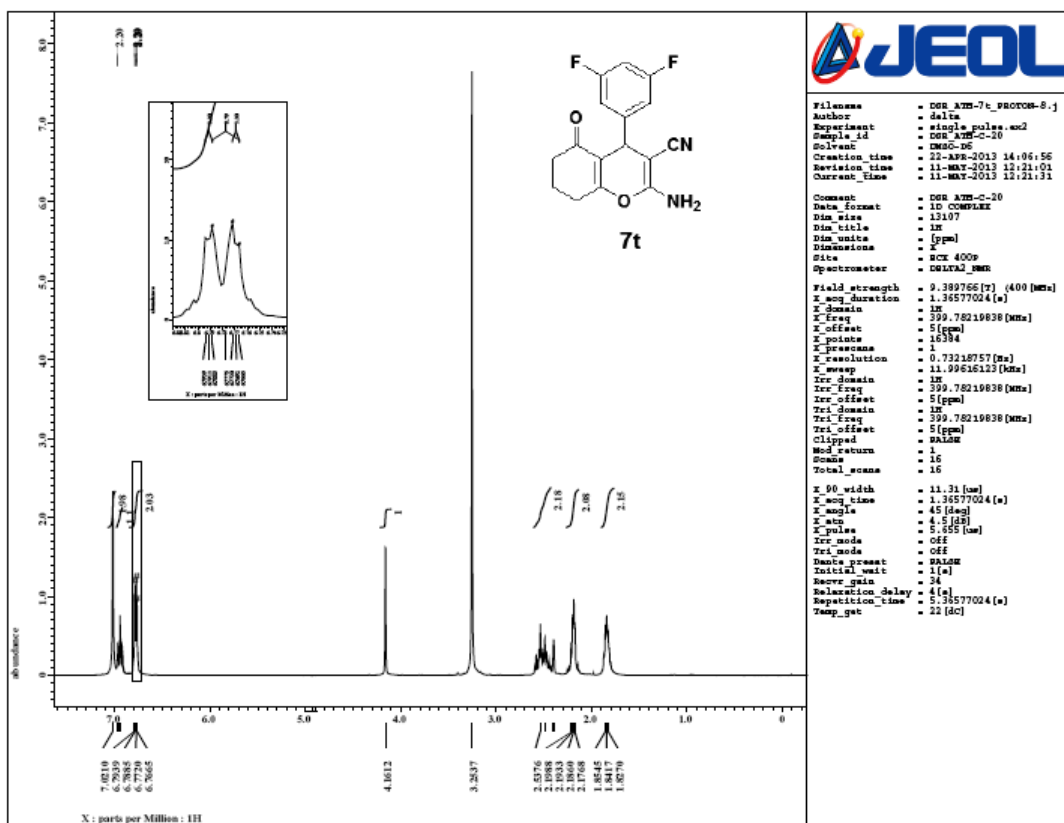


Fig 5: ¹H NMR of 4H-pyran 7t

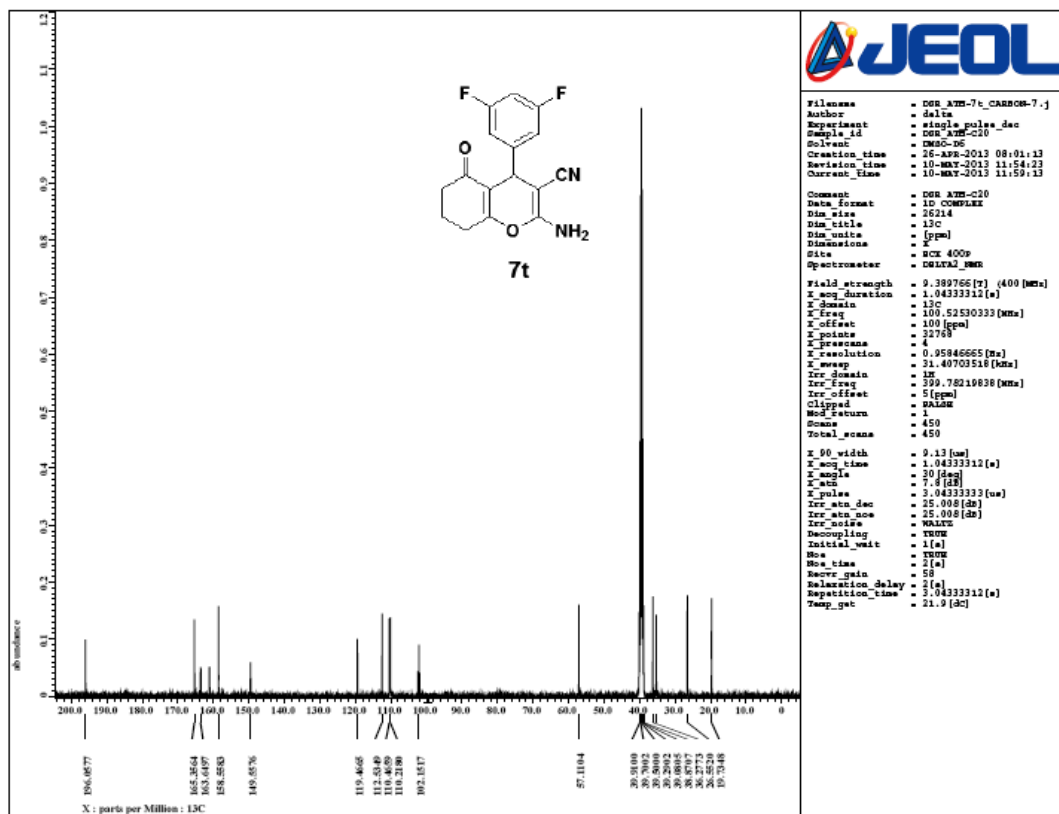


Fig 6: ¹³C NMR of 4H-pyran 7t

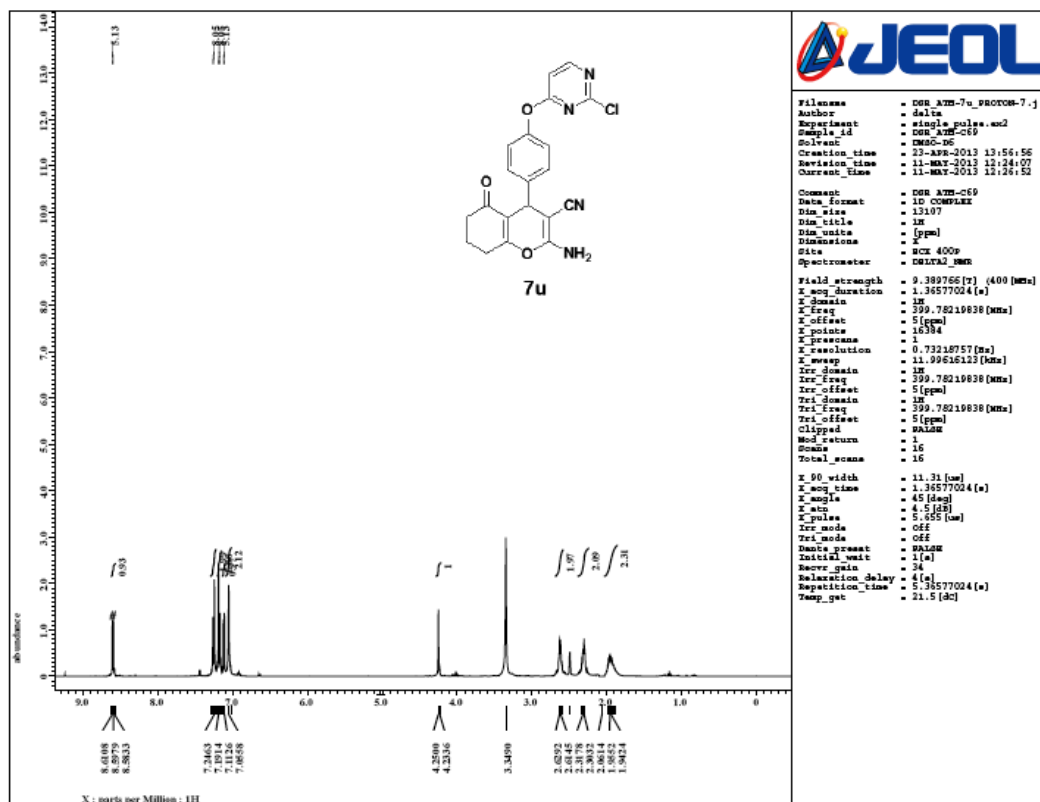


Fig 7: ¹H NMR of 4H-pyran 7u

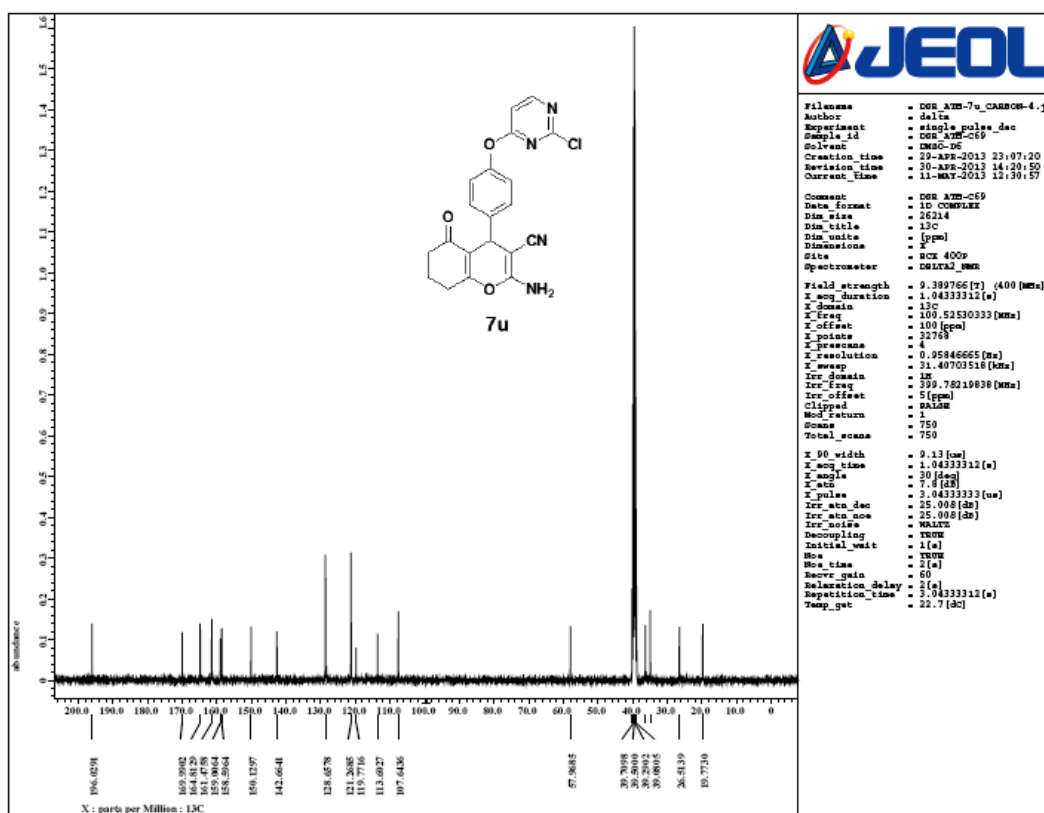


Fig 8: ¹³C NMR of 4H-pyran 7u

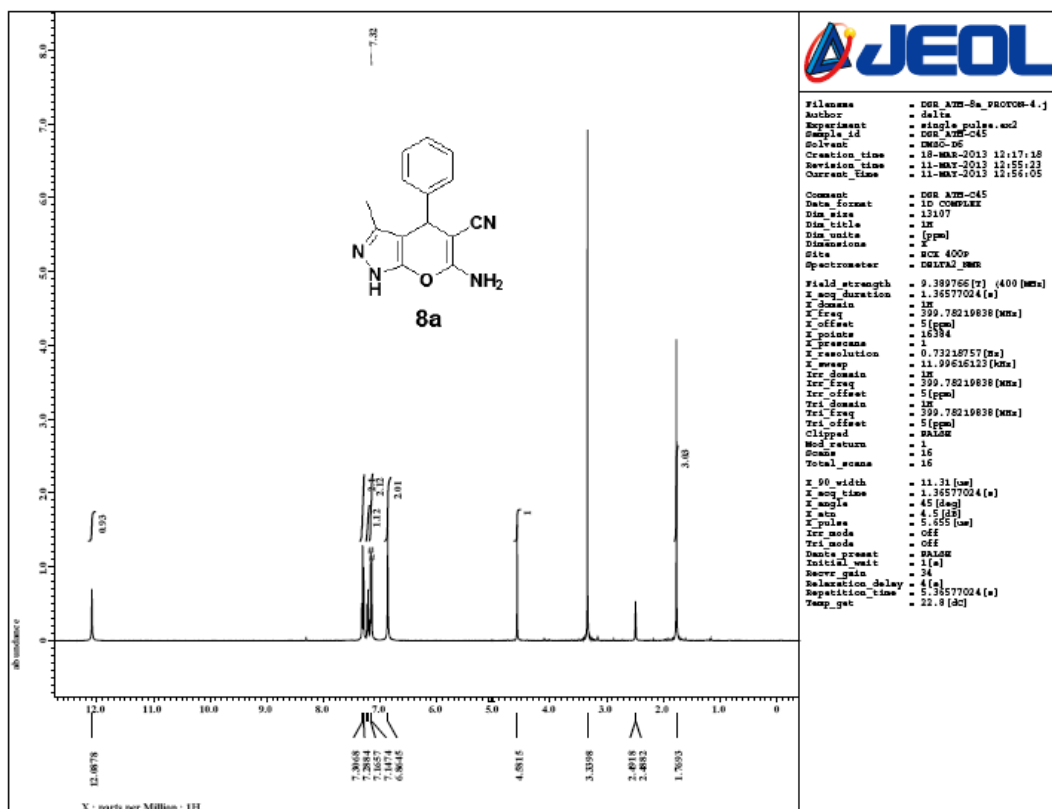


Fig 11: ¹H NMR of 4H-pyran 8a

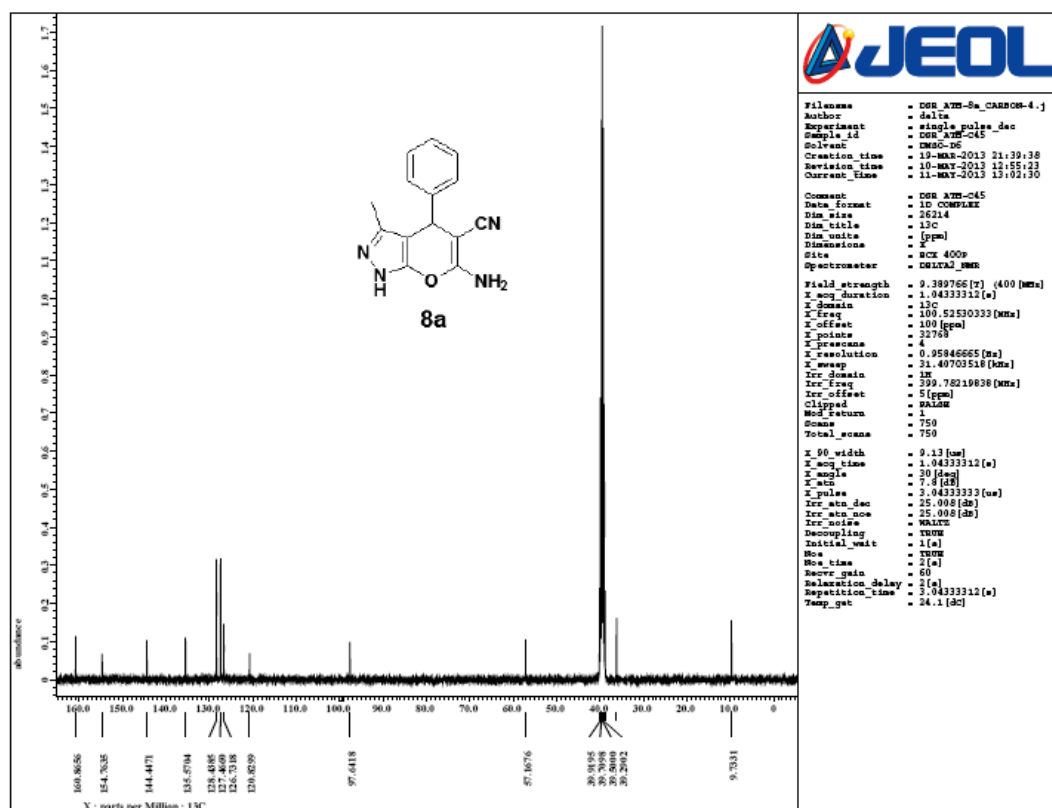


Fig 12: ¹³C NMR of 4H-pyran 8a

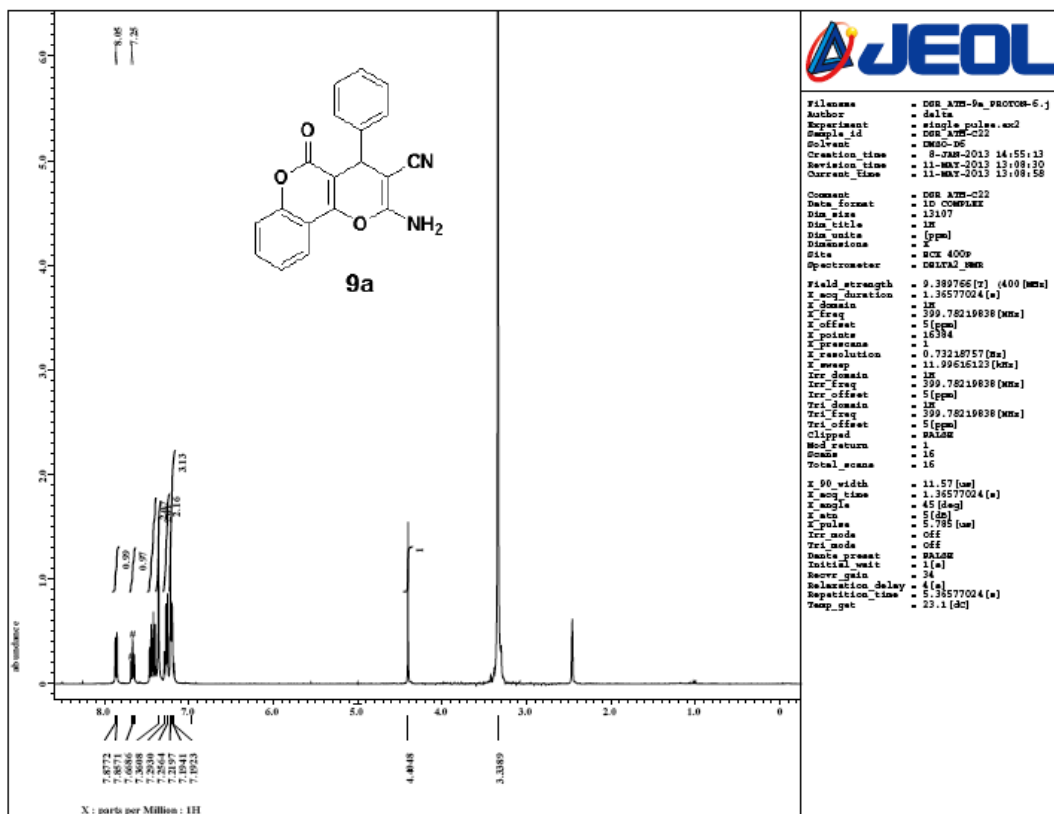


Fig 13: ¹H NMR of 4H-pyran 9a

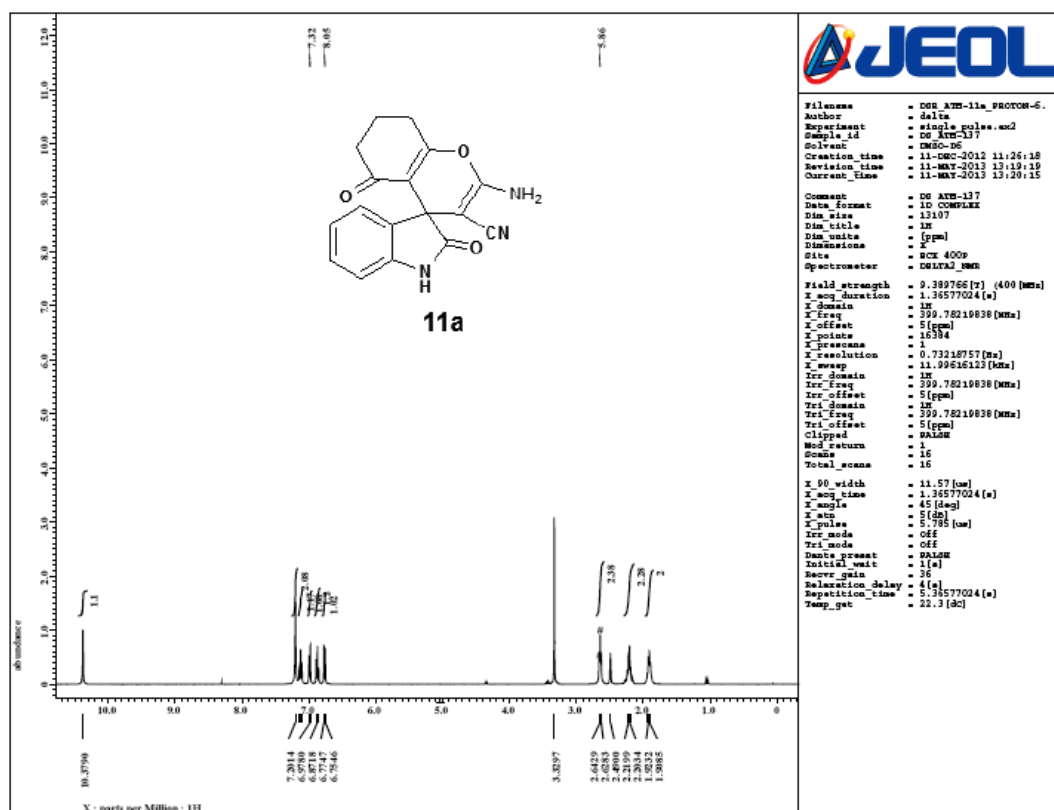


Fig 14: ¹H NMR of spirooxindole 11a

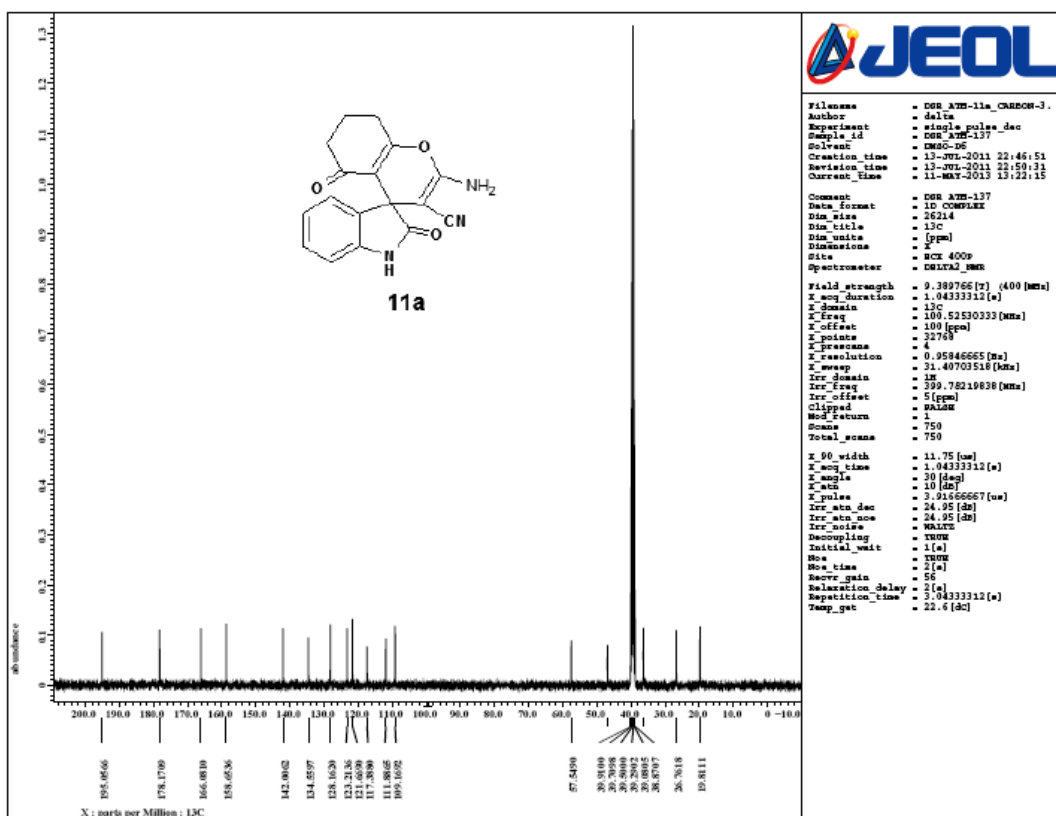


Fig 15: ^{13}C NMR of spirooxindole 11a

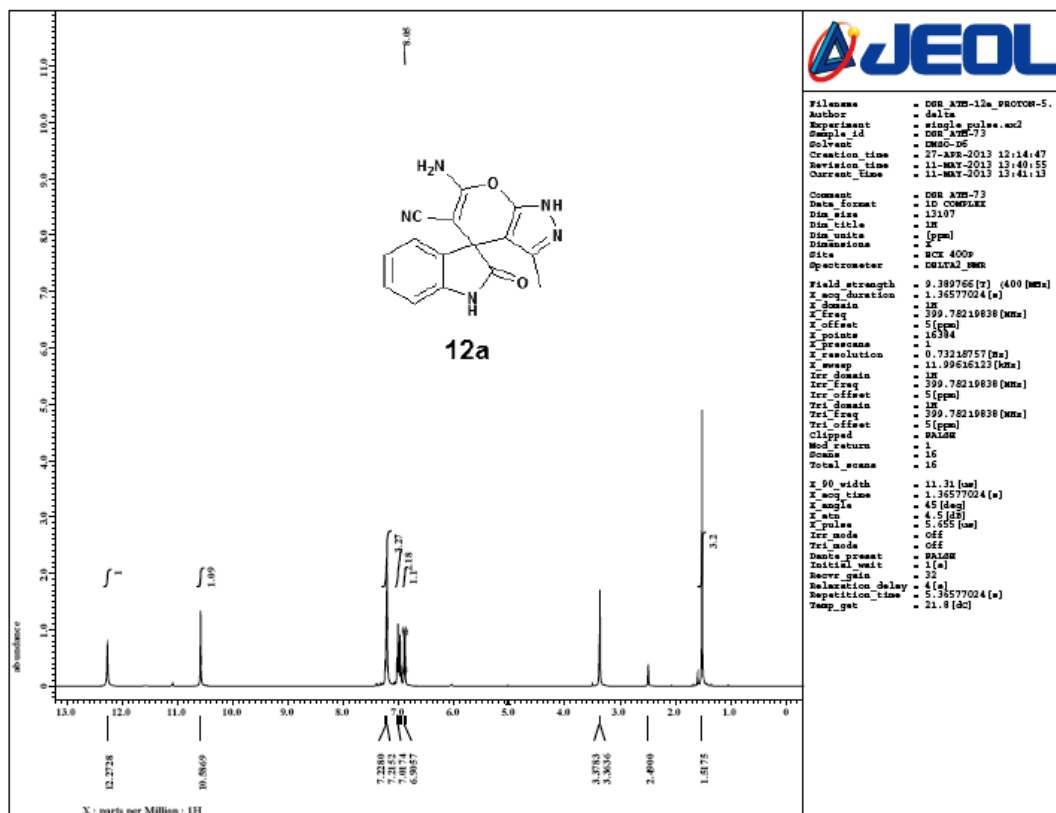


Fig 16: ^1H NMR of spirooxindole 12a

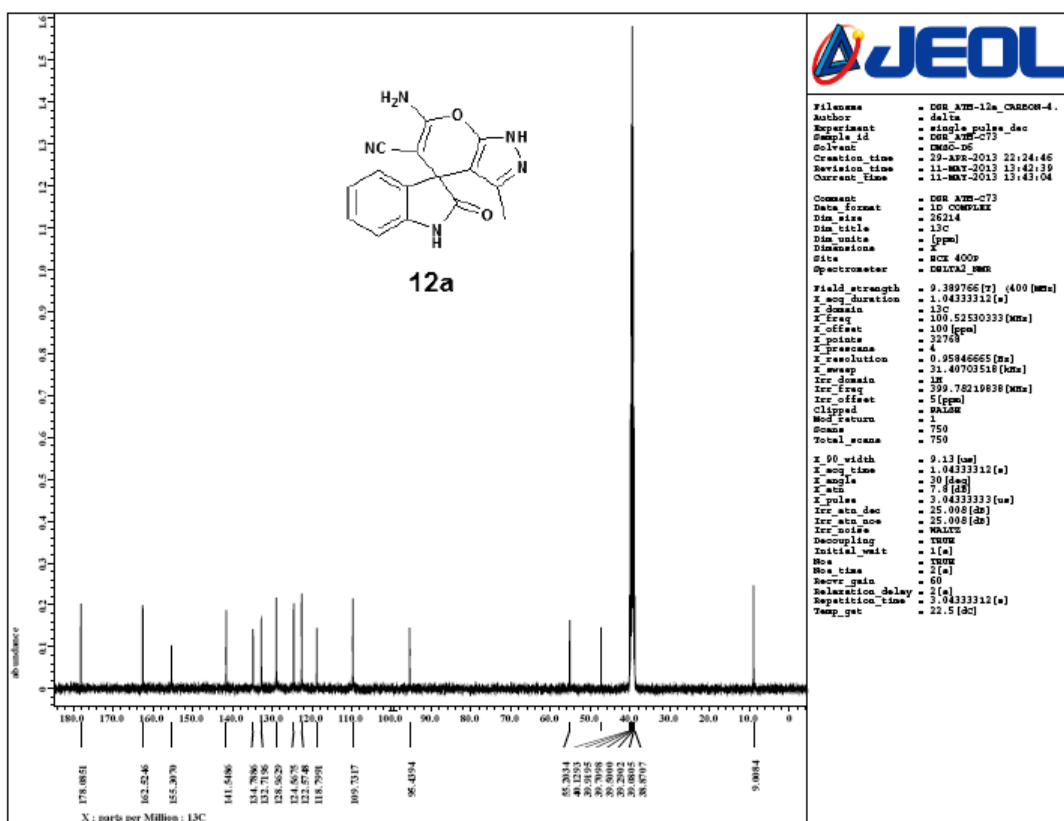


Fig 17: ¹³C NMR of spirooxindole 12a

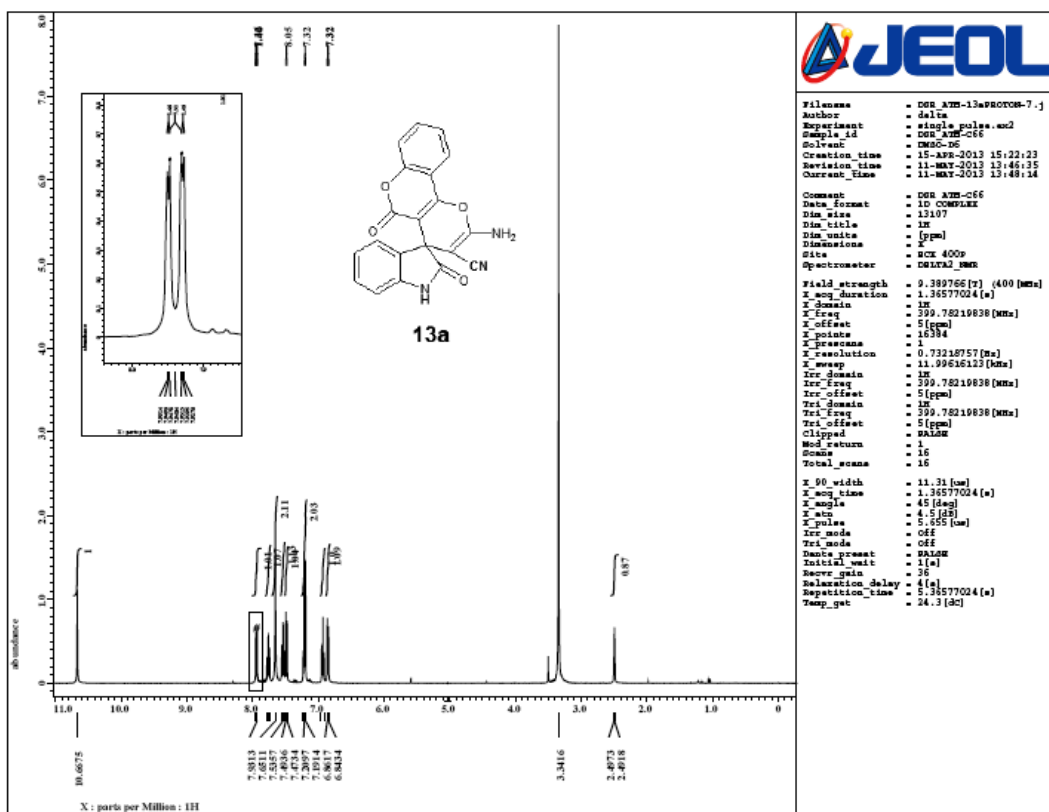


Fig 18: ¹H NMR of spirooxindole 13a

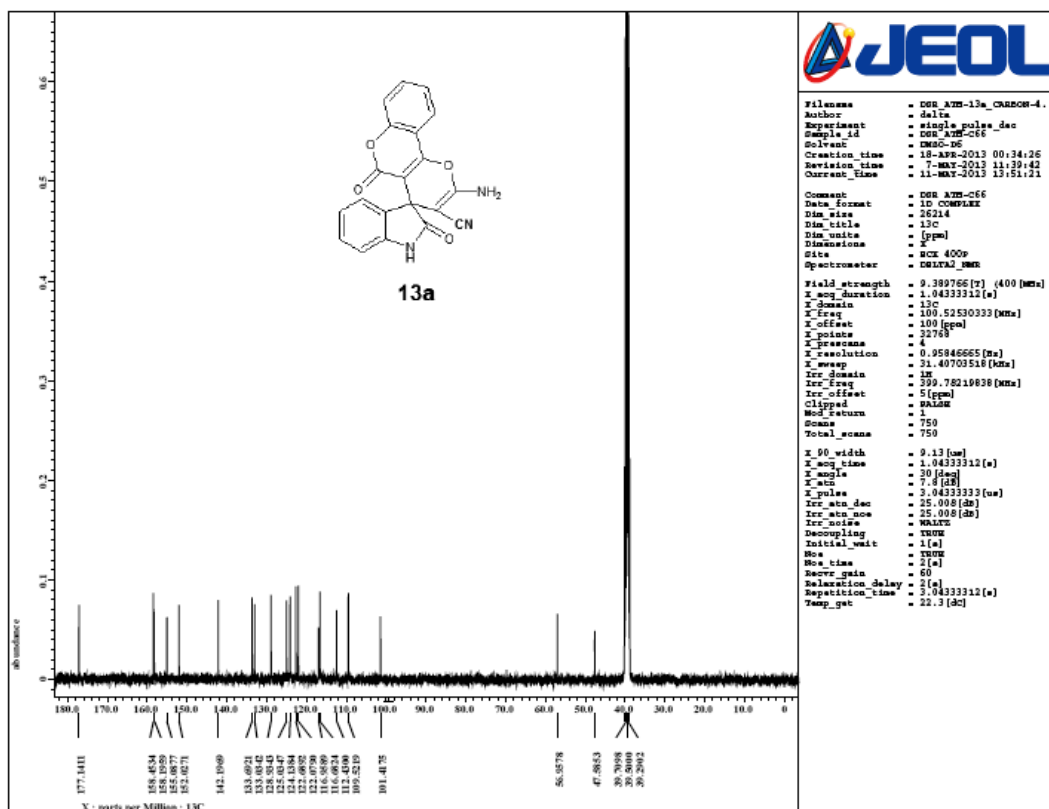


Fig 19: ^{13}C NMR of spirooxindole 13a