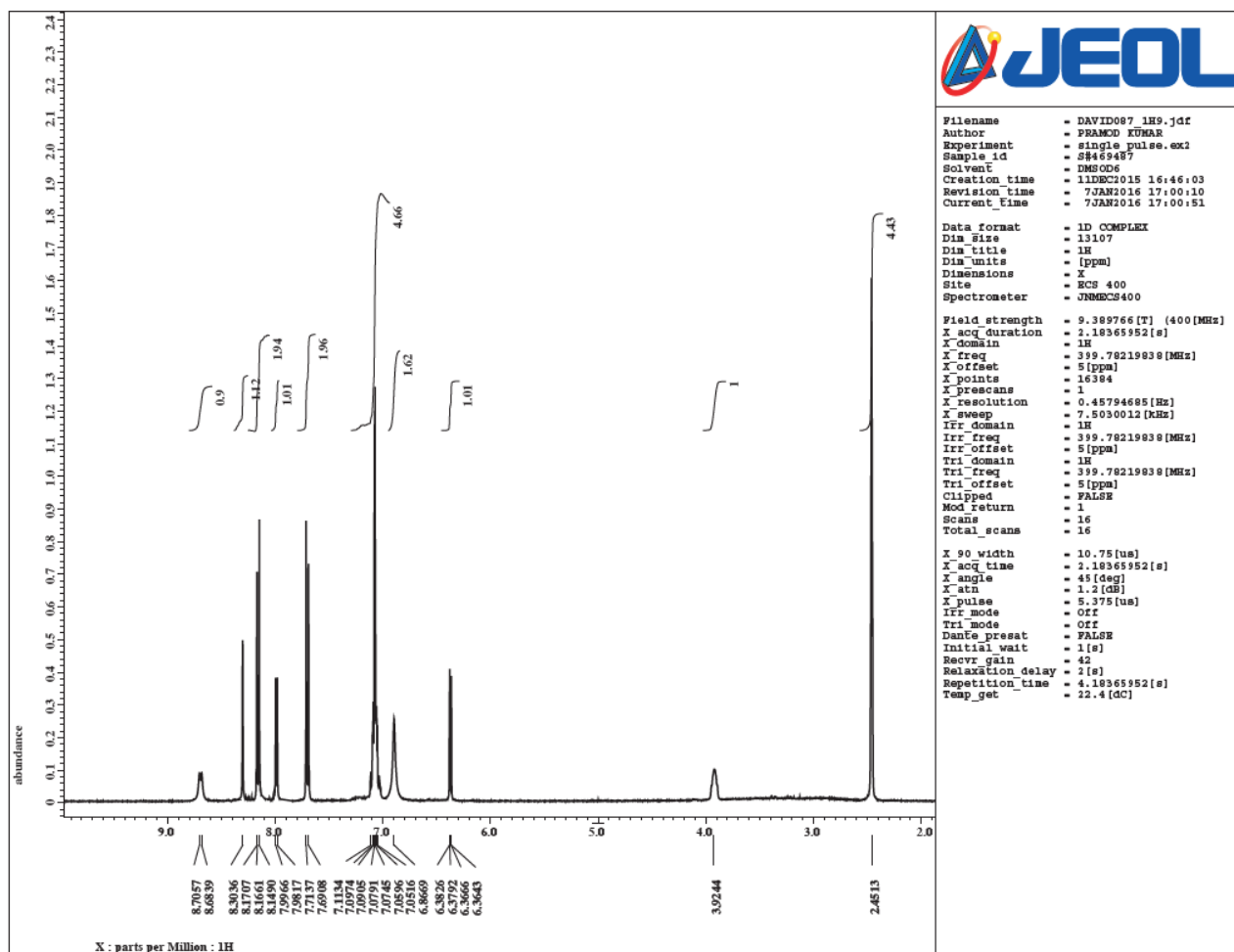


1 Supporting document



2
3 Fig. S-1 ¹H NMR spectrum of compound 27a

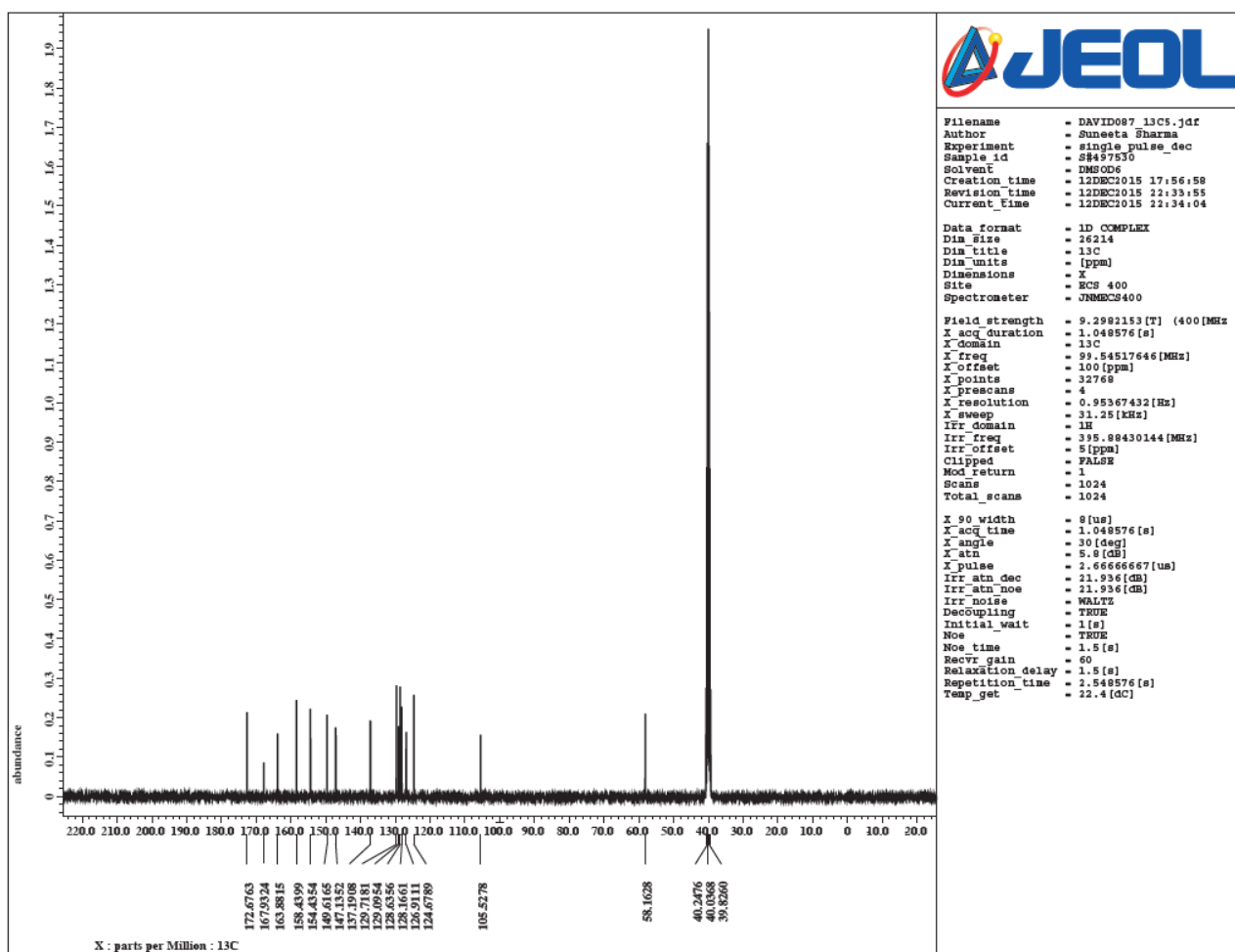


Fig. S-2 ¹³C NMR spectrum of compound 27a

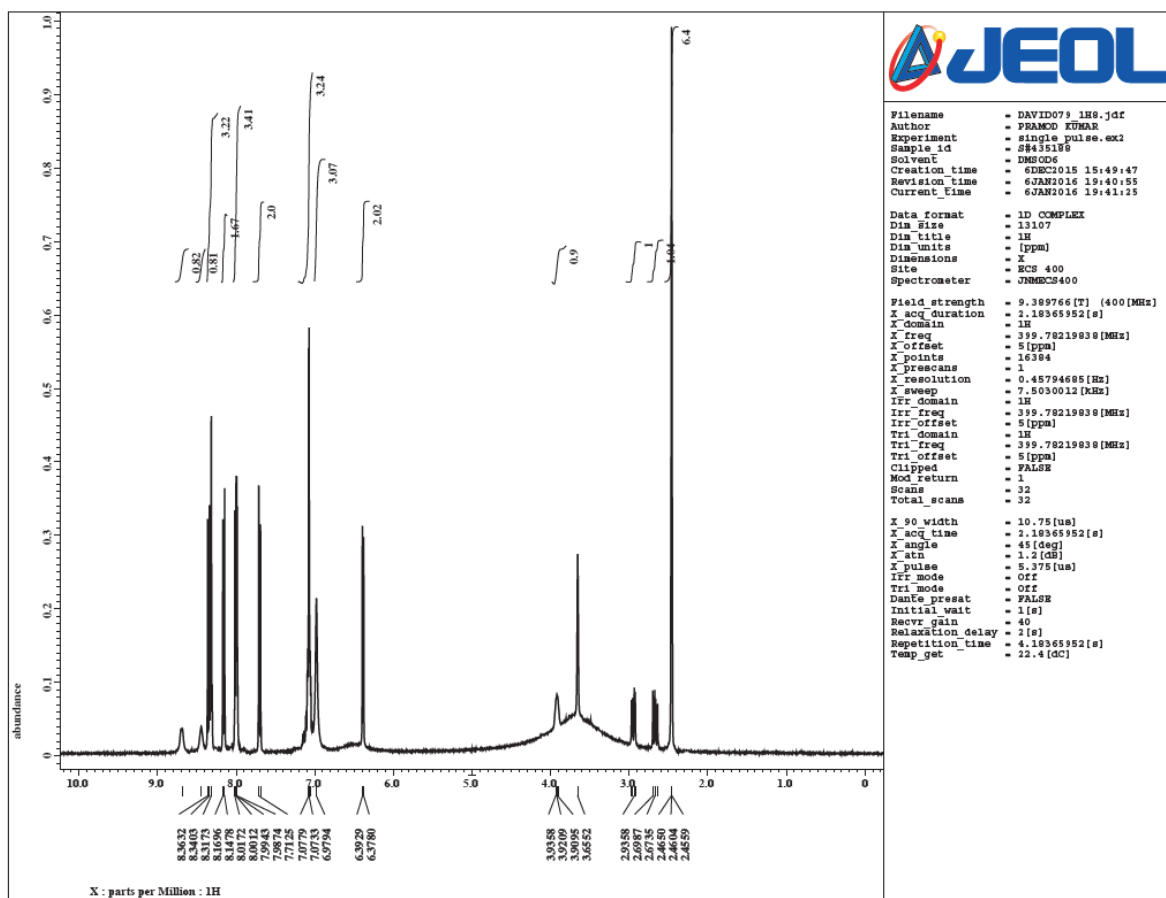


Fig. S-3 ^1H NMR spectrum of compound **27b**

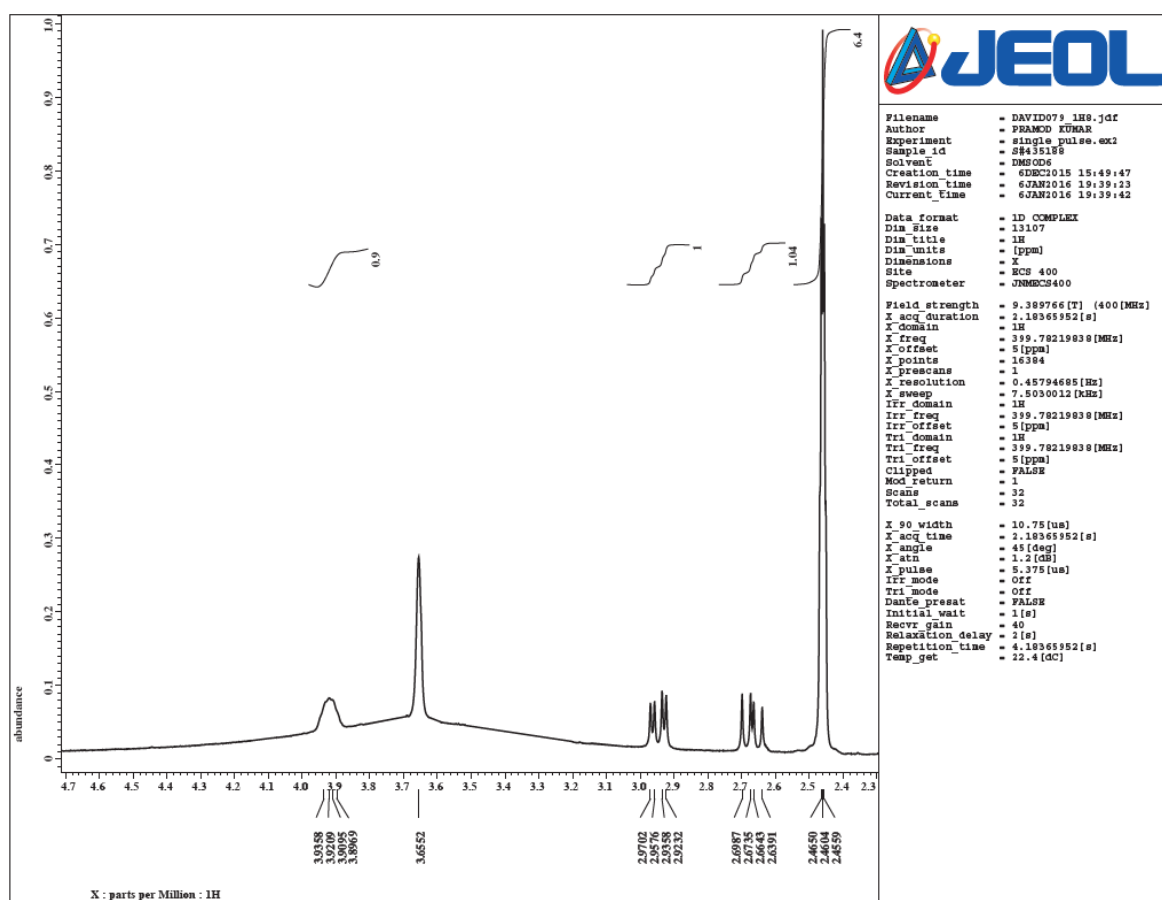


Fig. S-4 ¹H NMR spectrum of compound **27b** (expansion)

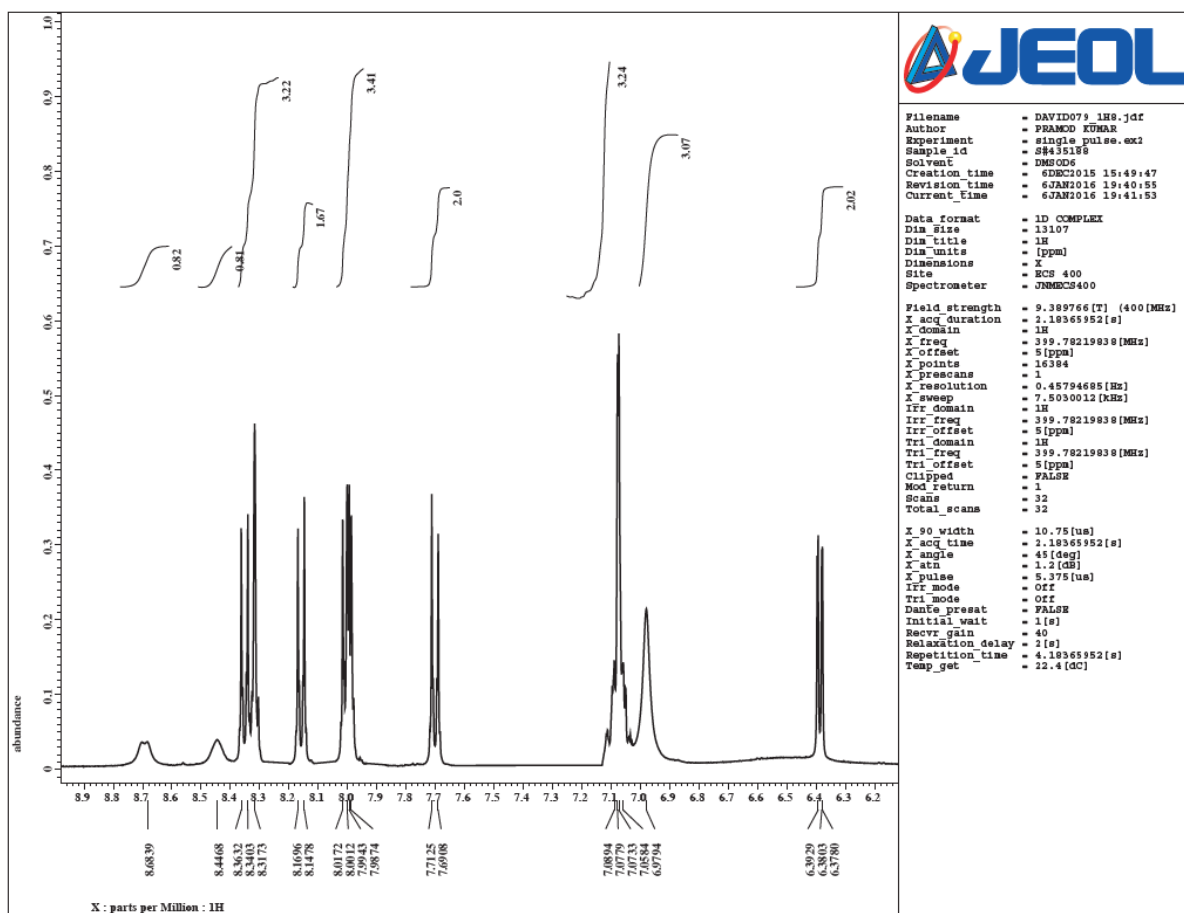


Fig. S-5 ^1H NMR spectrum of compound **27b** (expansion)

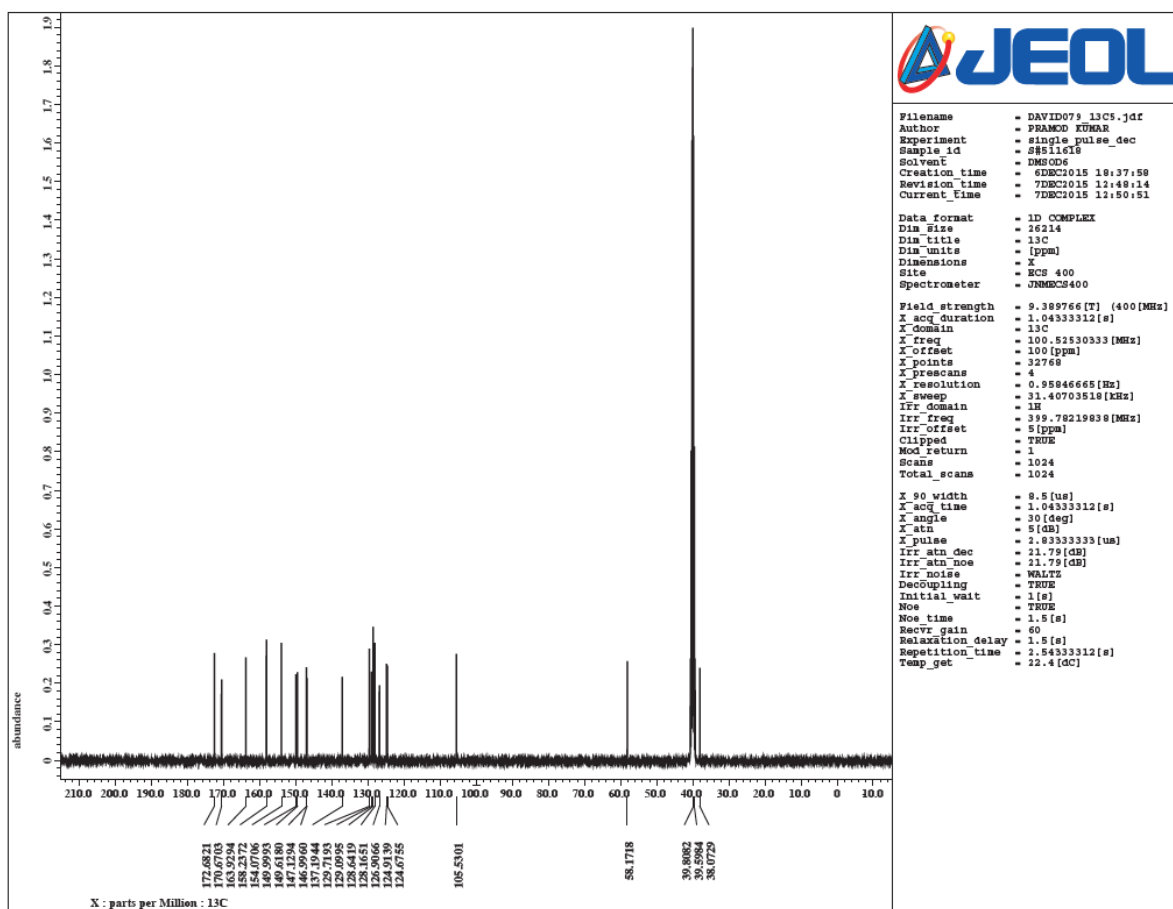


Fig. S-6 ^{13}C NMR spectrum of compound **27b**

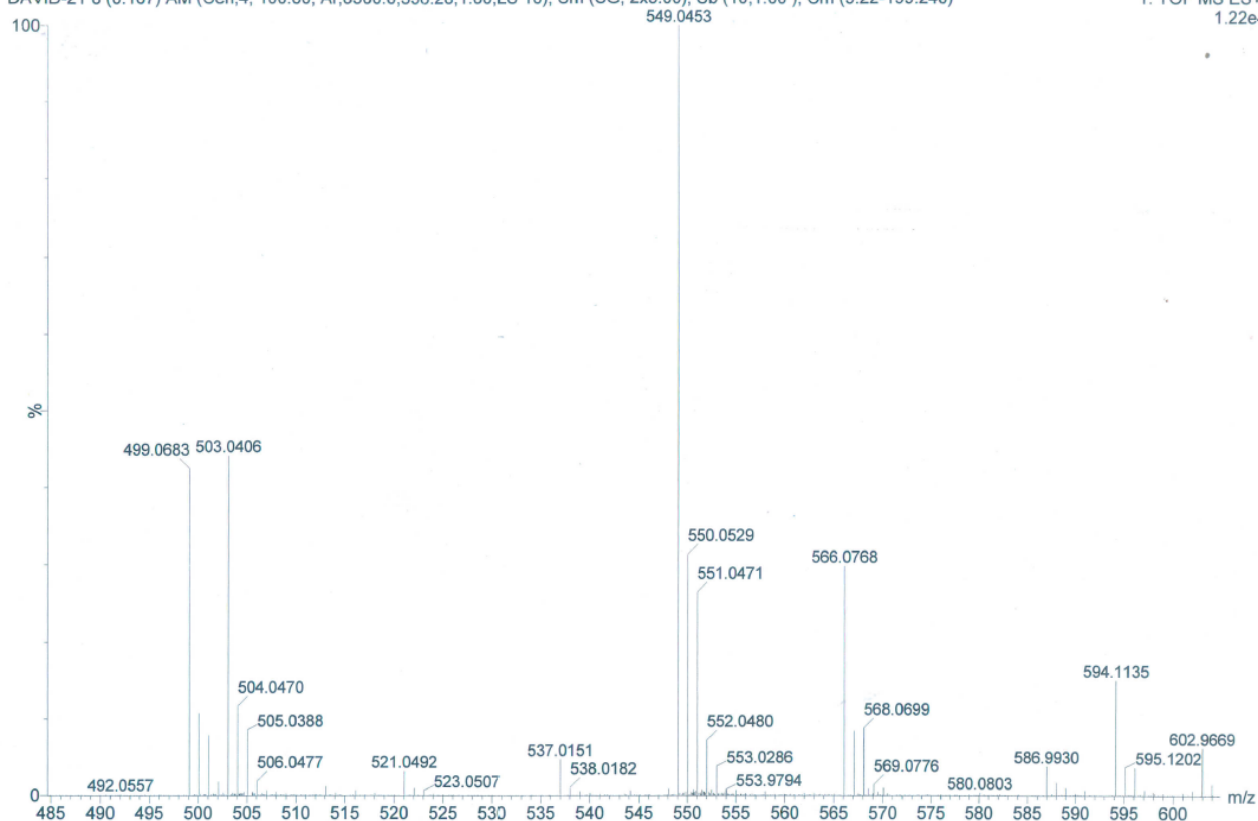


Fig. S-7 mass spectrum of compound 27b

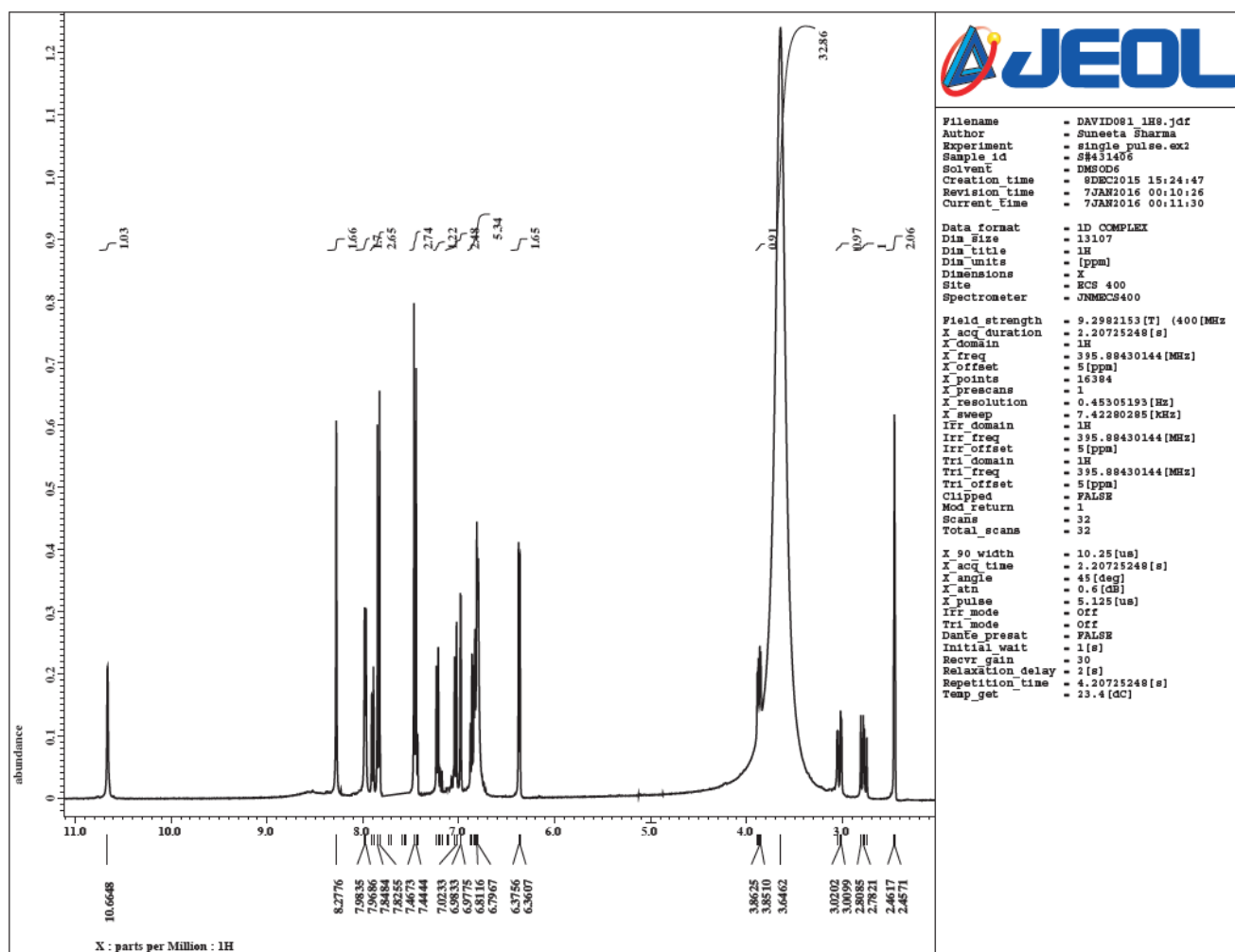


Fig. S-8 ^1H NMR spectrum of compound **27c**

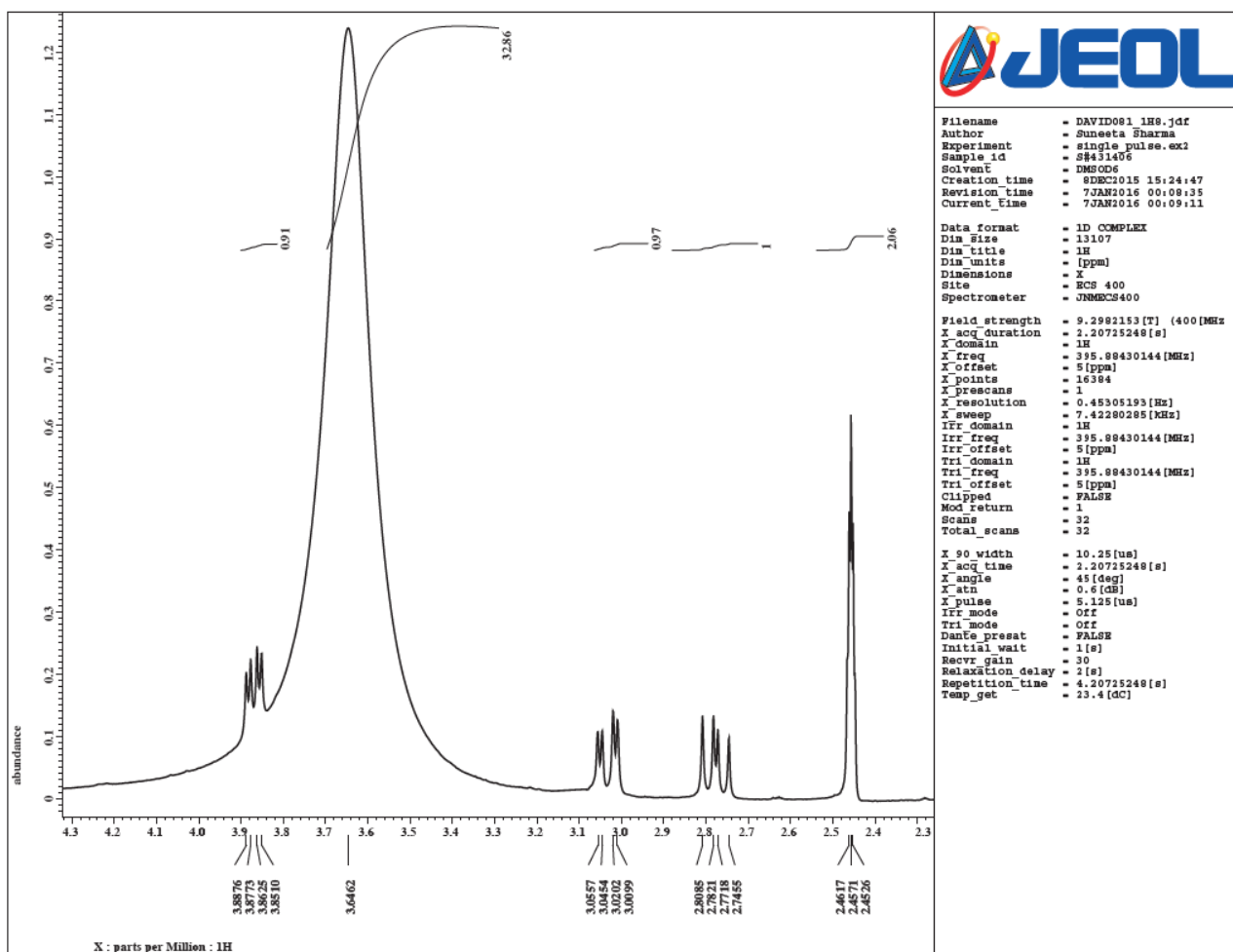


Fig. S-9 ^1H NMR spectrum of compound **27c** (expansion)

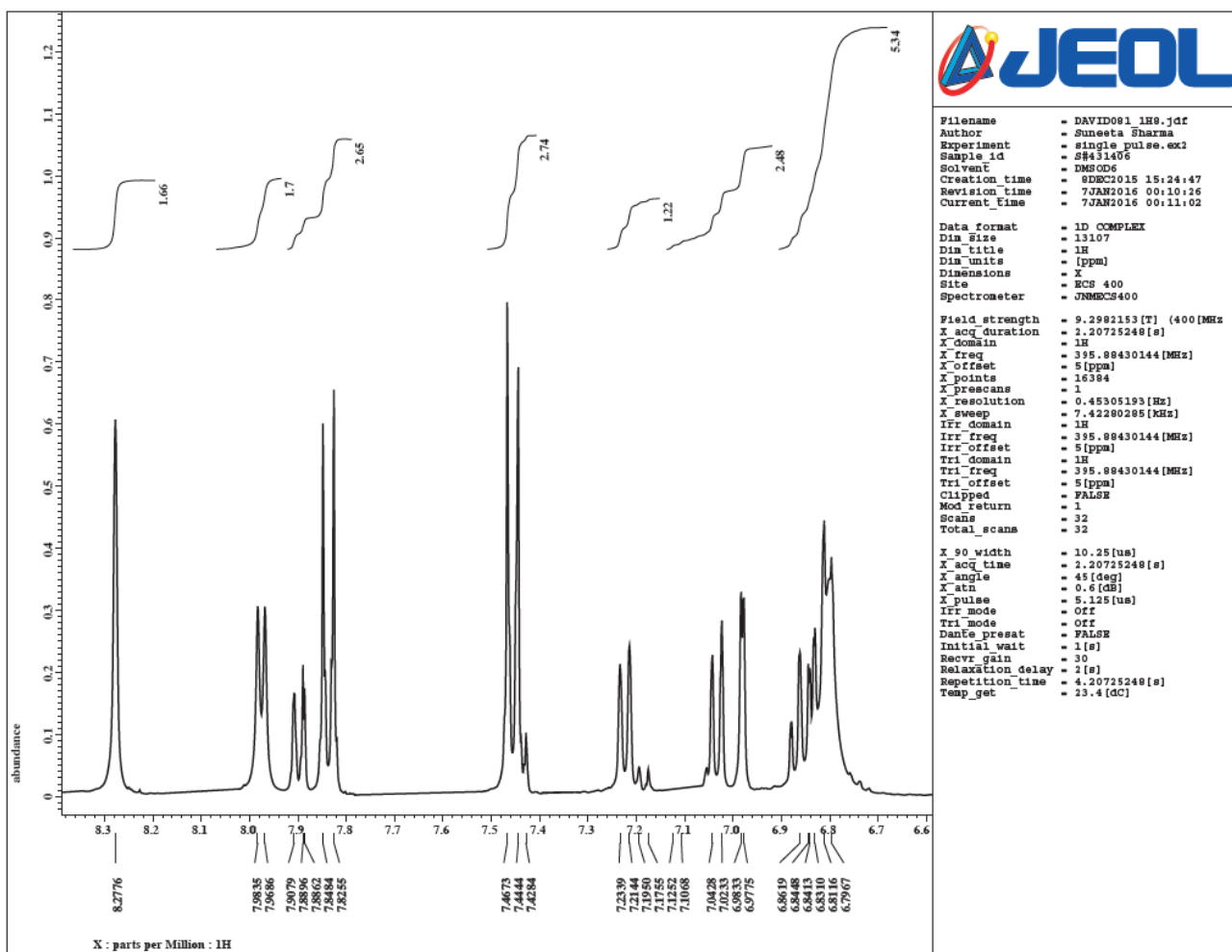


Fig. S-10 ^1H NMR spectrum of compound **27c** (expansion)

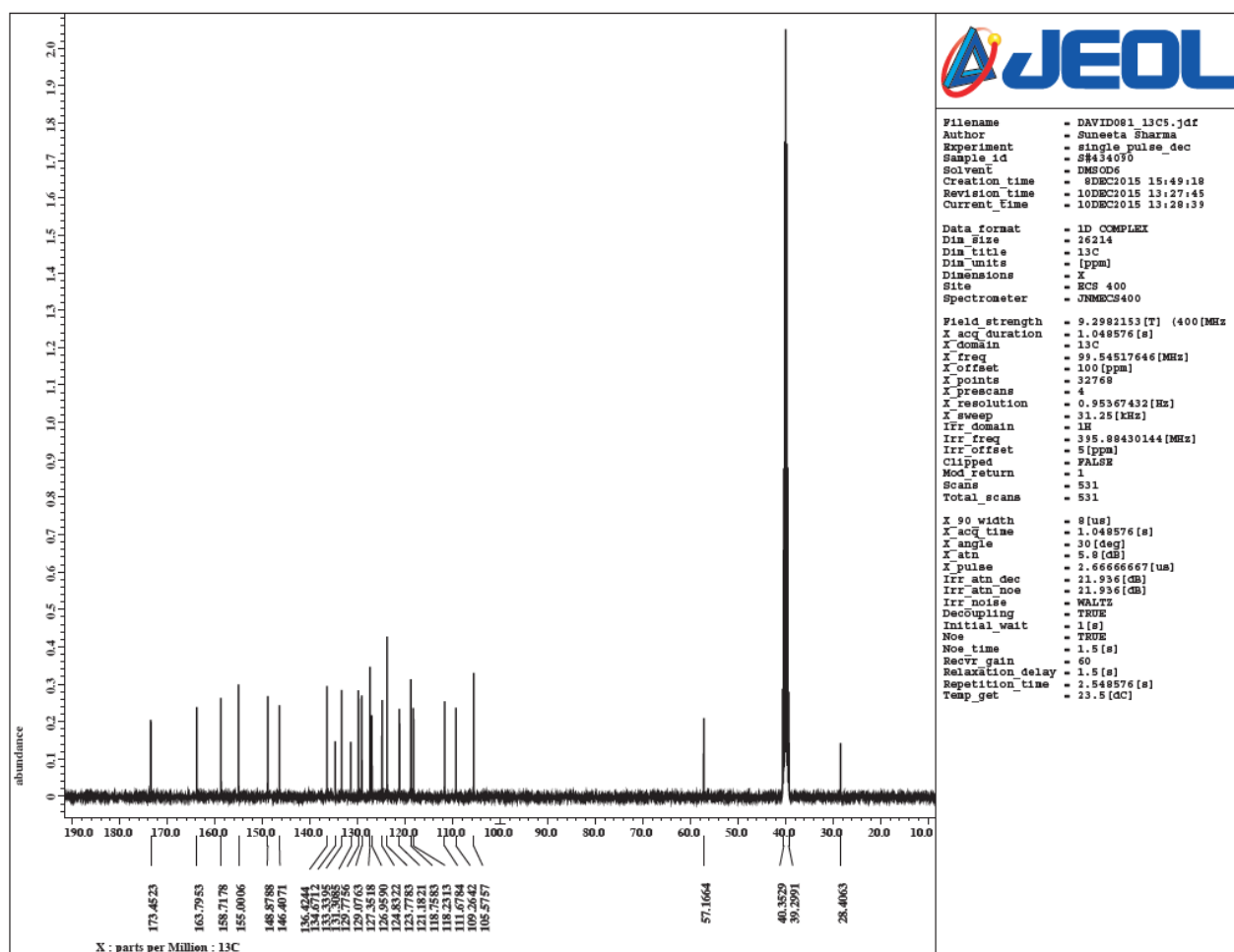


Fig. S-11 ^{13}C NMR spectrum of compound **27c**

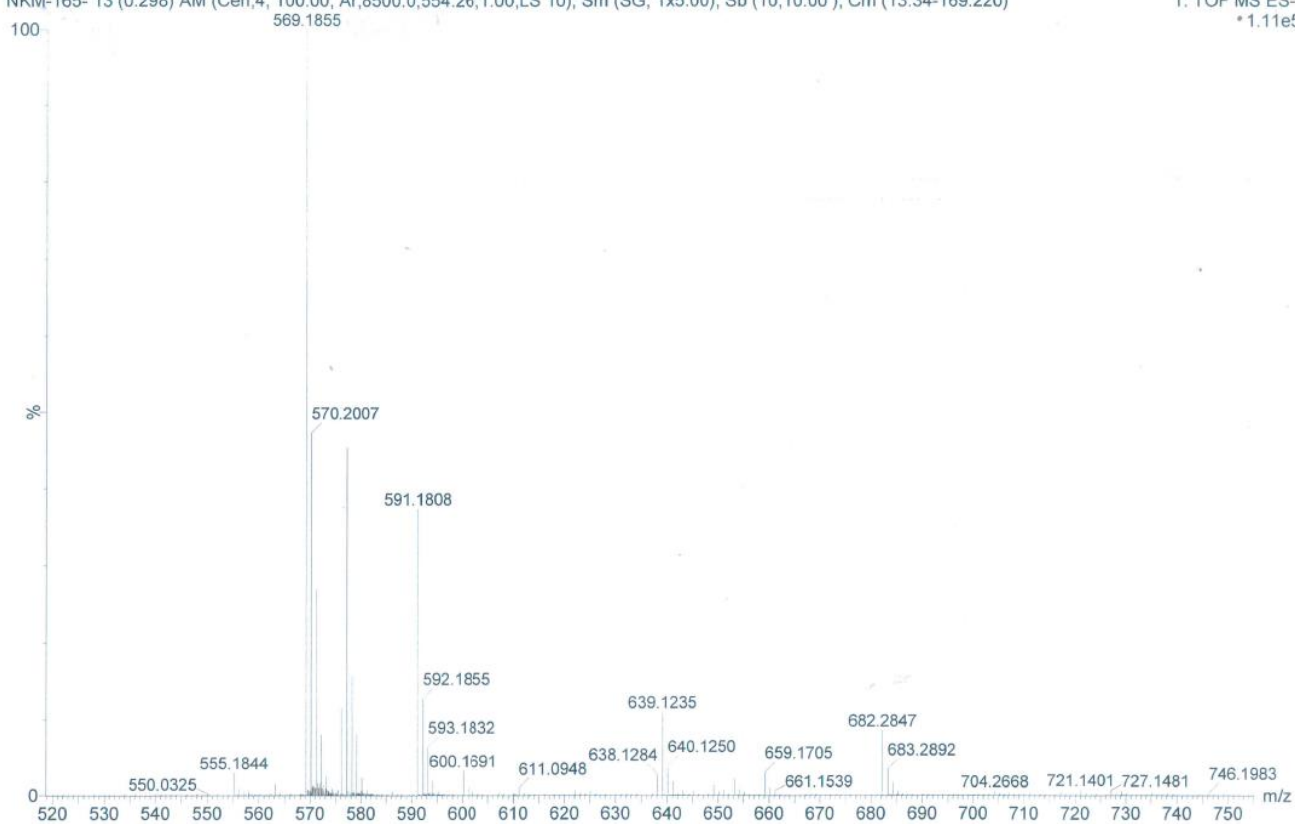


Fig. S-12 mass spectrum of compound 27c

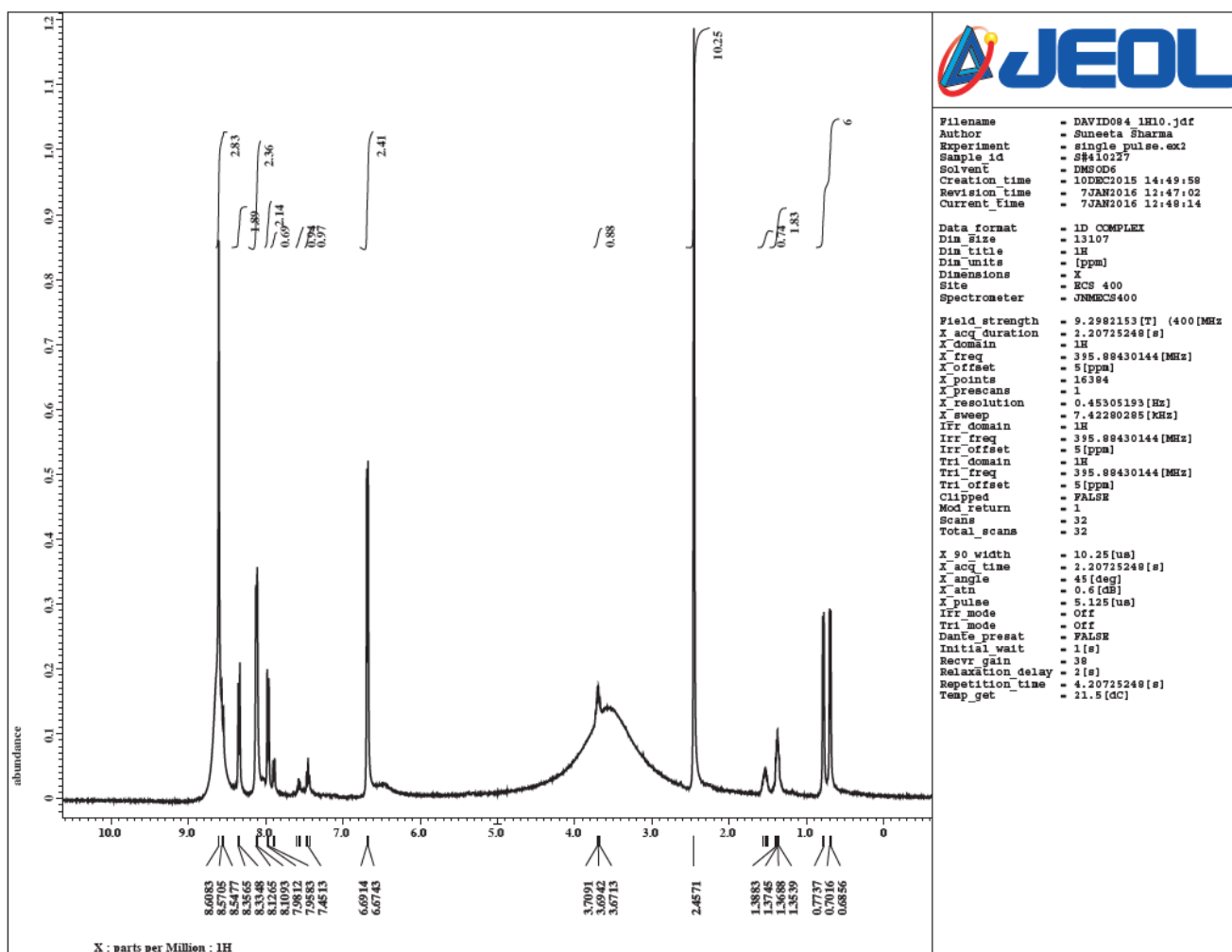
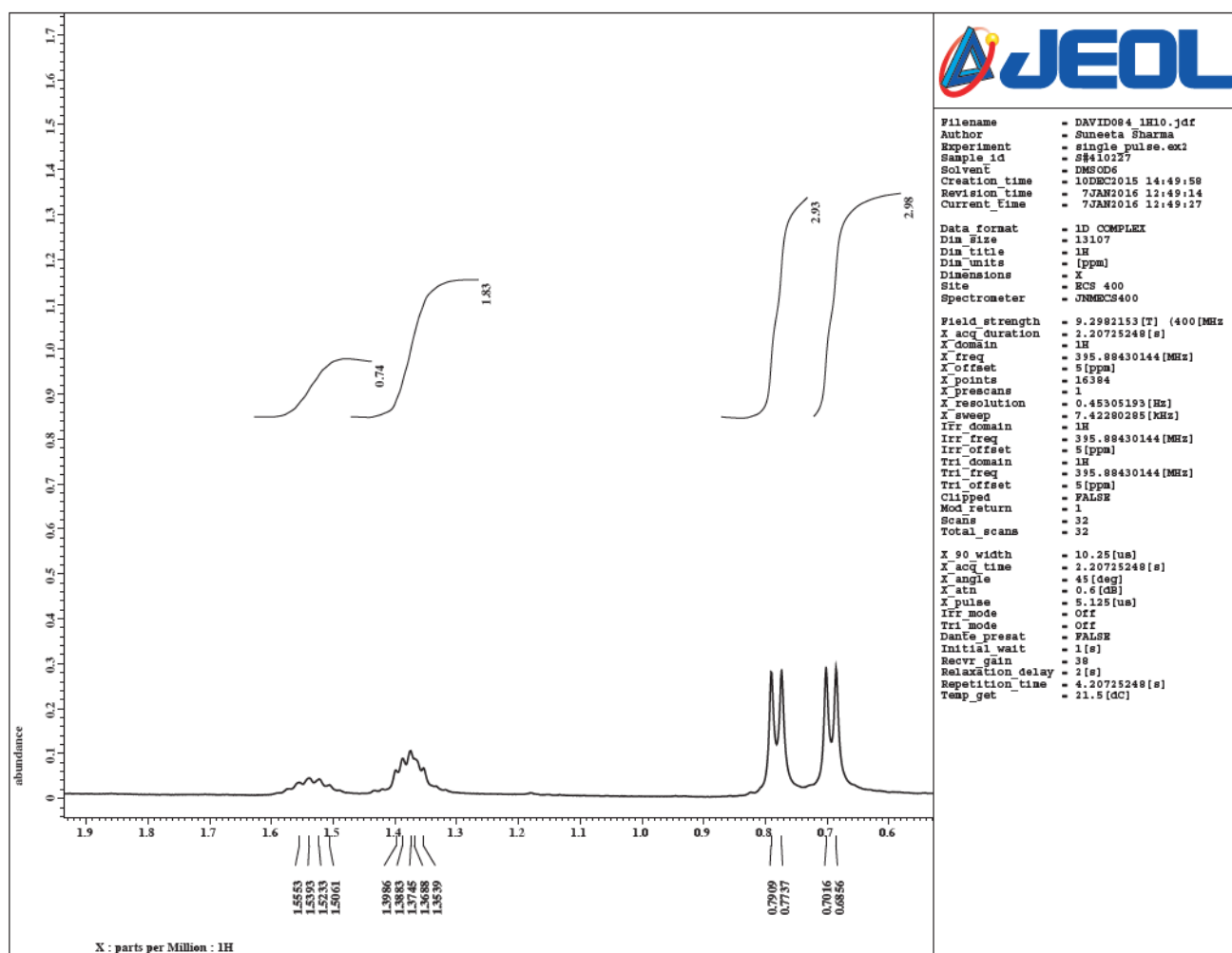


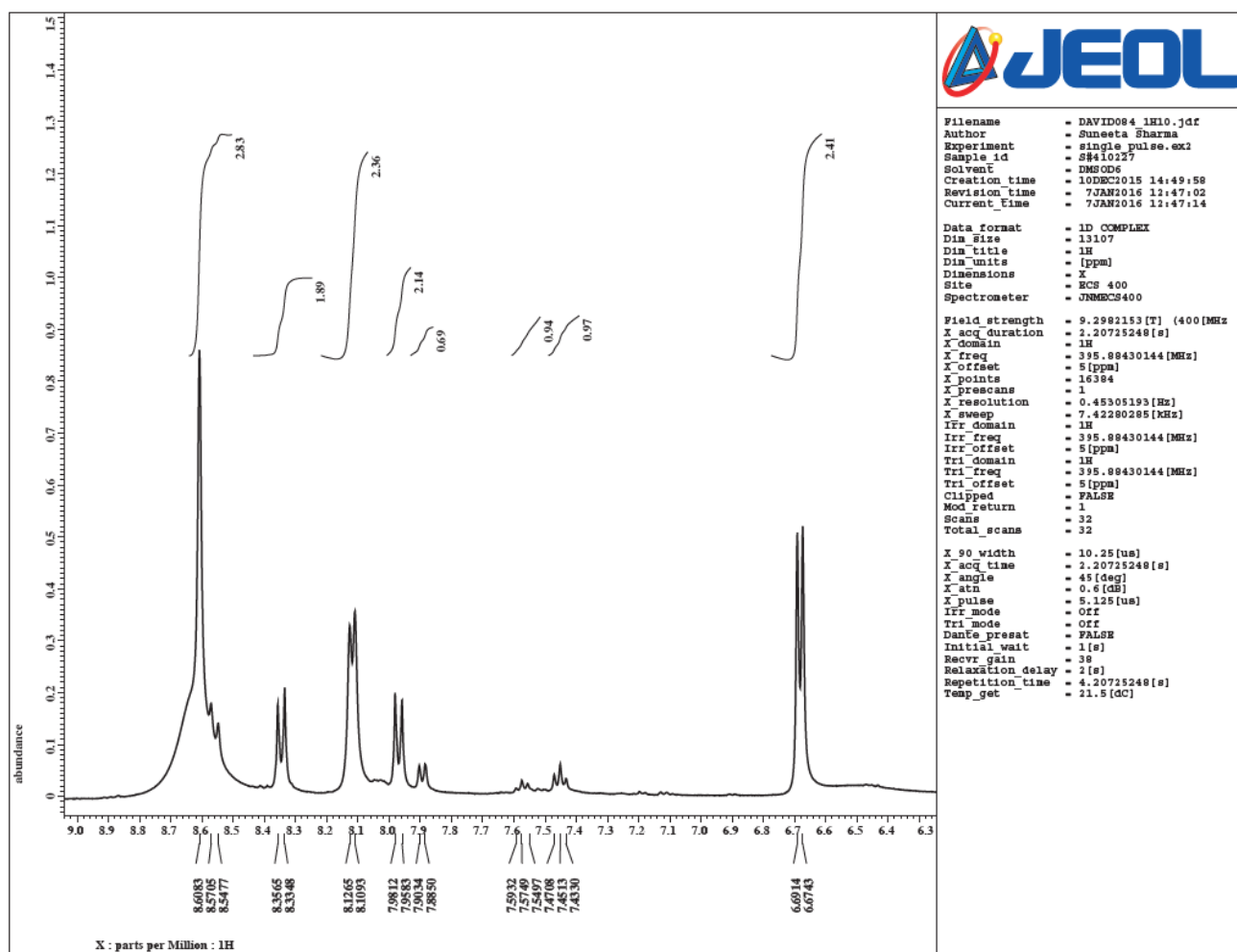
Fig. S-13 ^1H NMR spectrum of compound **27d**



29

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Fig. S-14 ^1H NMR spectrum of compound **27d** (expansion)



31
32

Fig. S-15 ^1H NMR spectrum of compound **27d** (expansion)

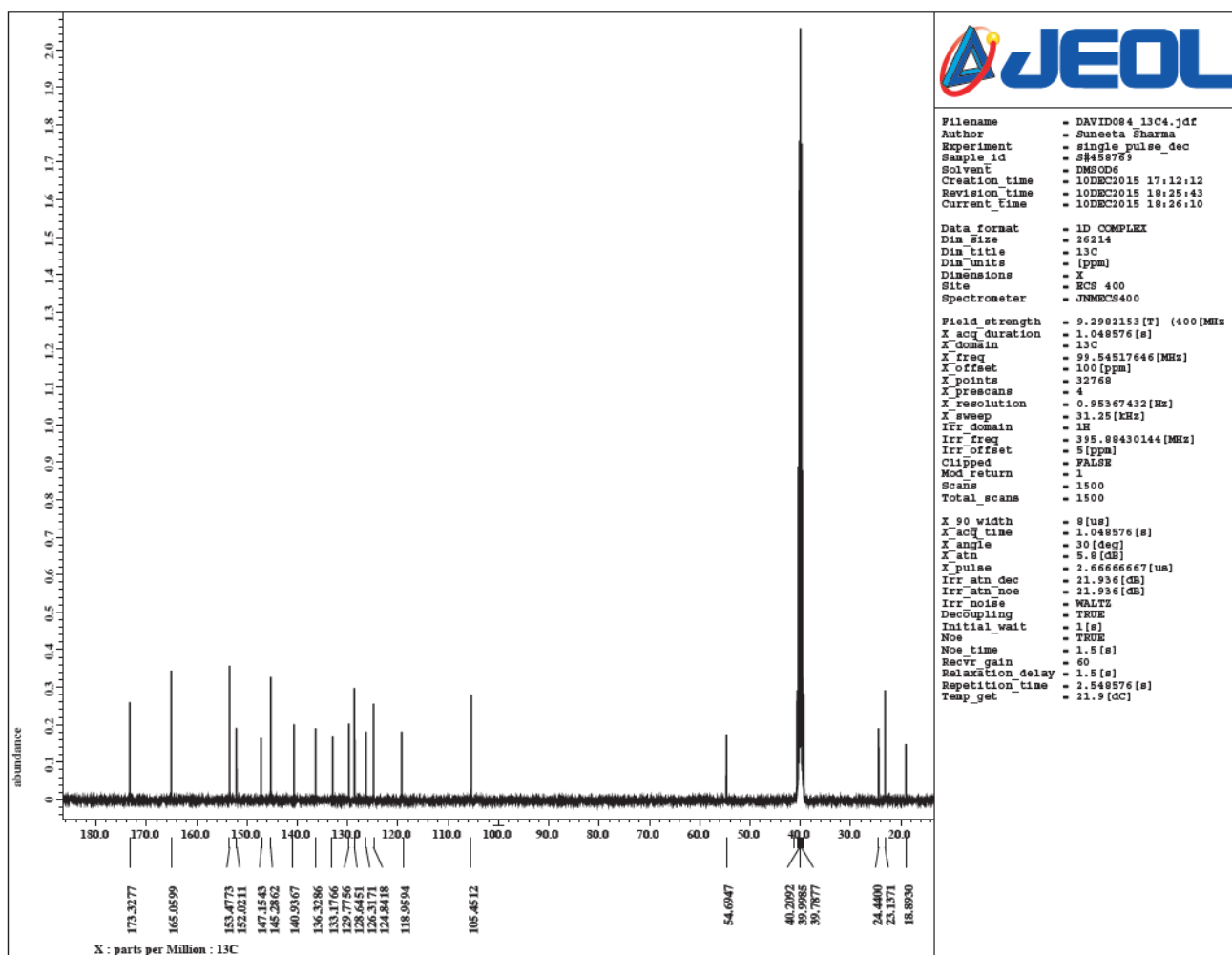


Fig. S-16 ^{13}C NMR spectrum of compound 27d

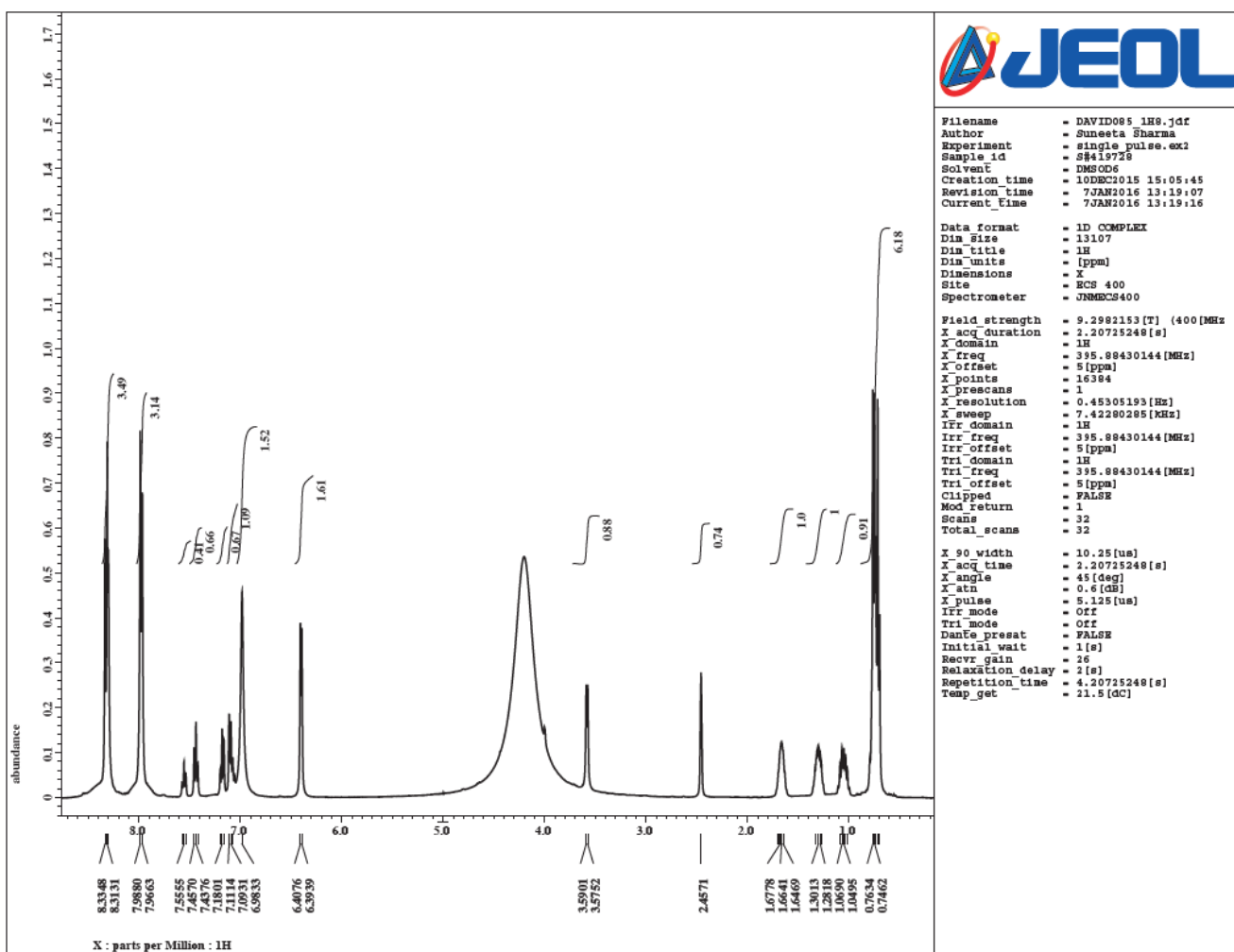


Fig. S-17 ¹H NMR spectrum of compound 27e

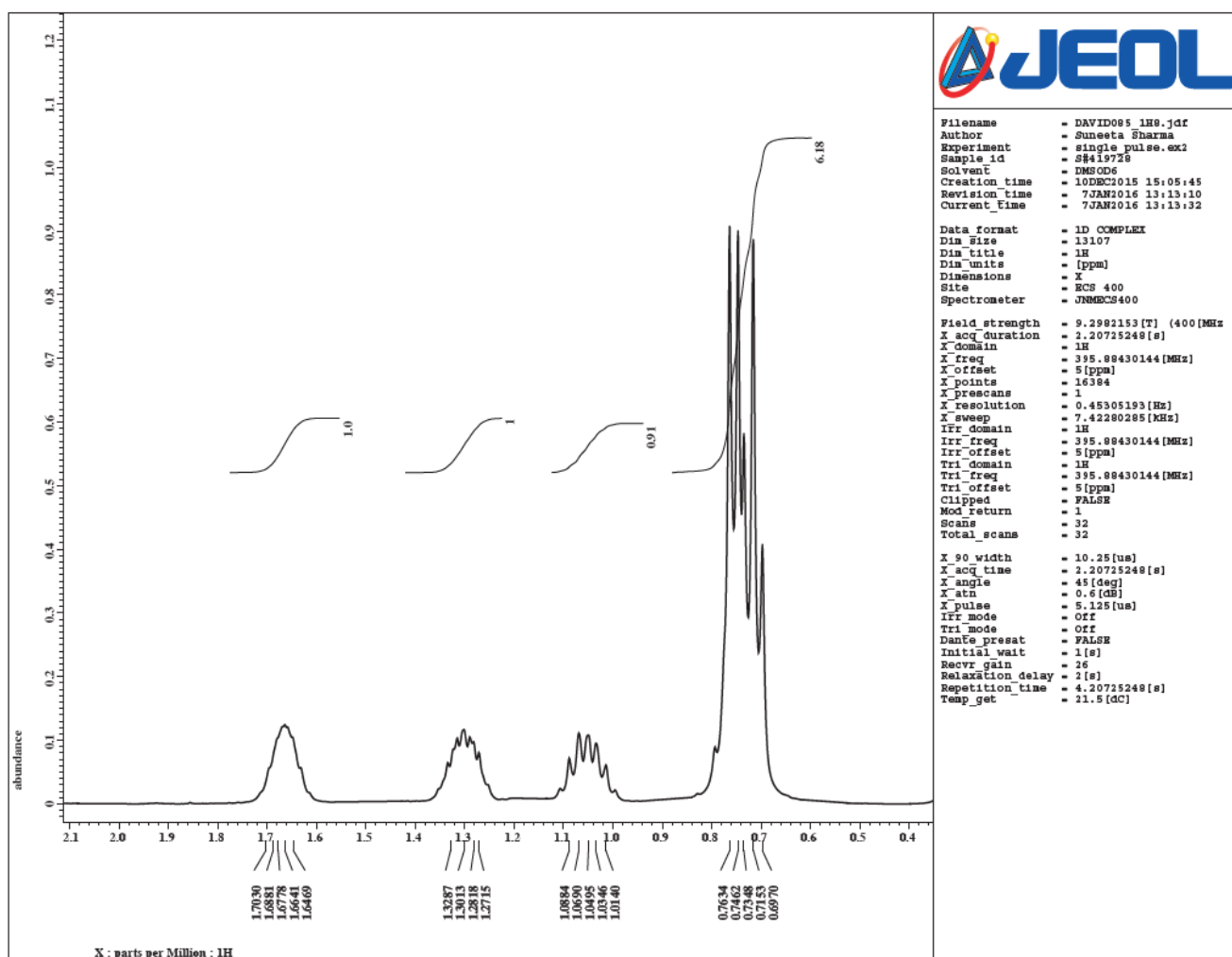


Fig. S-18 ^1H NMR spectrum of compound **27e** (expansion)

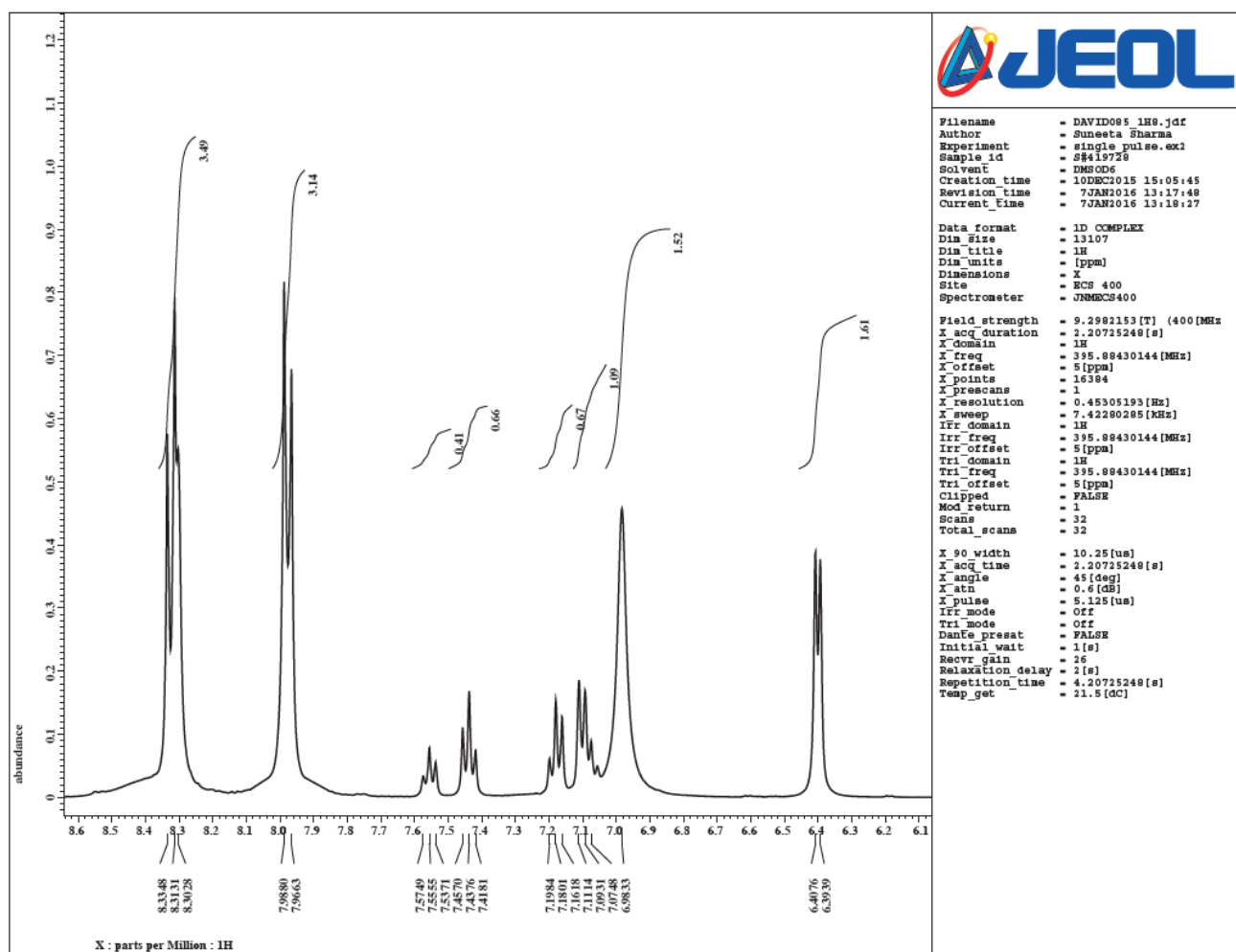


Fig. S-19 ^1H NMR spectrum of compound **27e** (expansion)

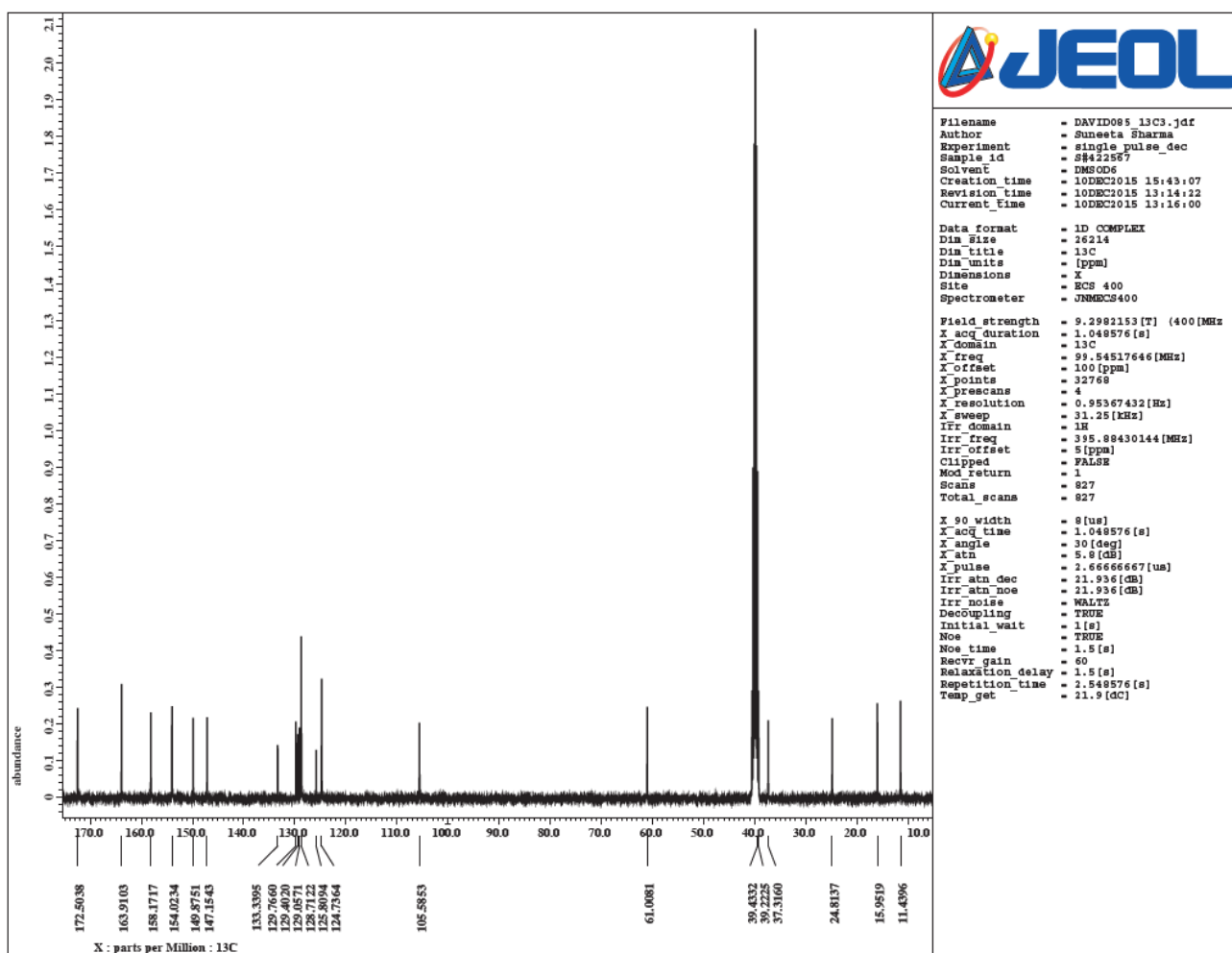


Fig. S-20 ^{13}C NMR spectrum of compound **27e**



Fig. S-21 ^1H NMR spectrum of compound **27f**

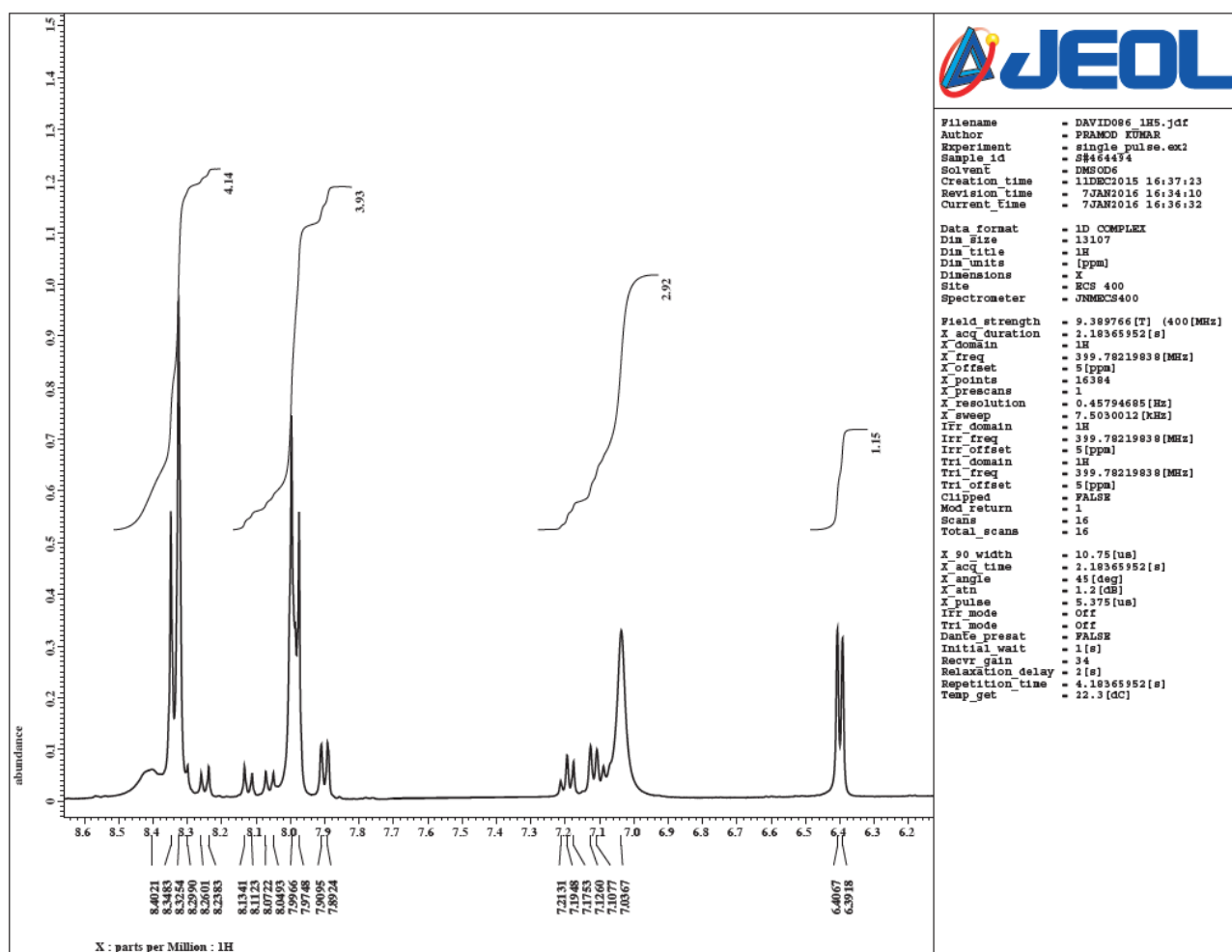


Fig. S-22 ¹H NMR spectrum of compound **27f** (expansion)

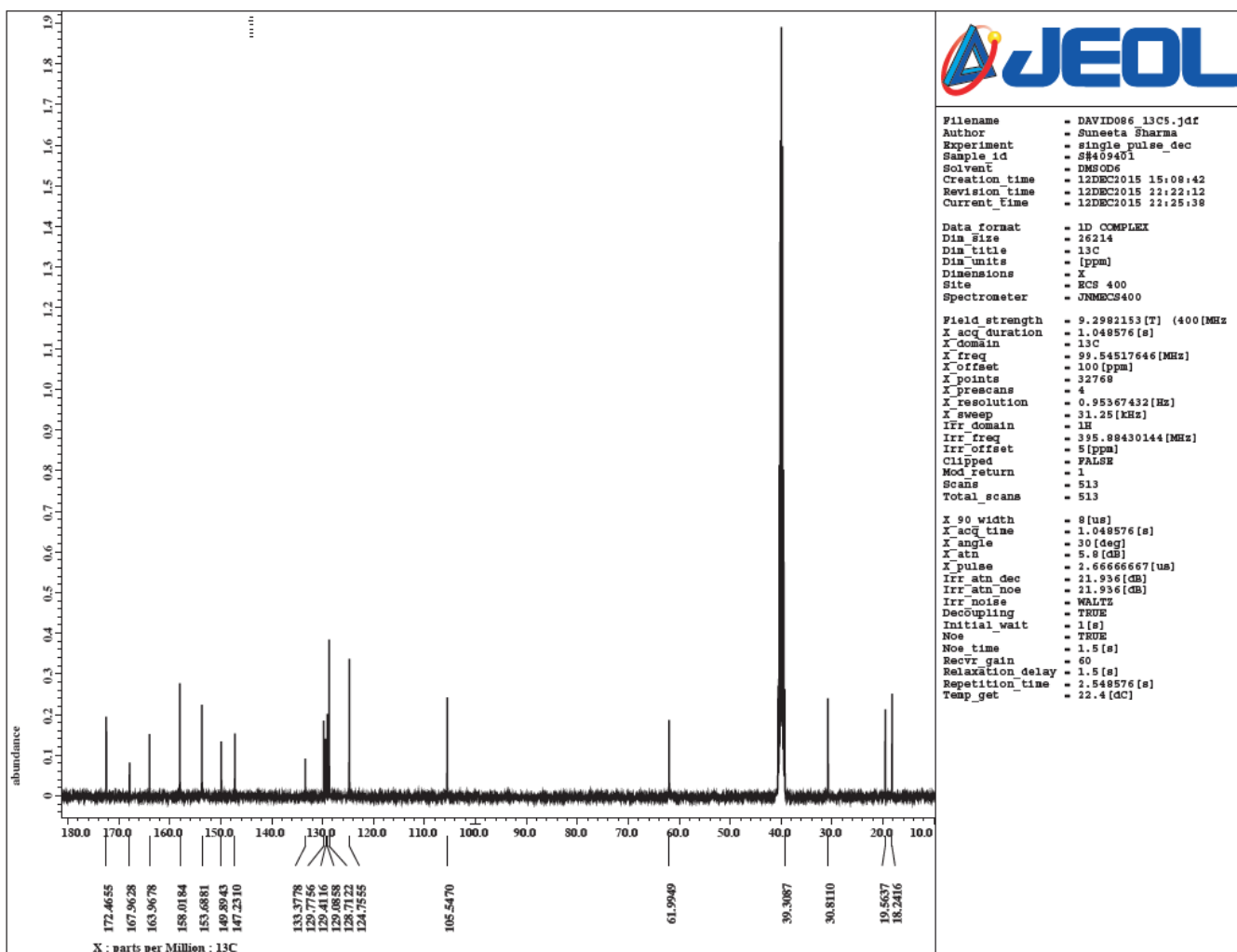


Fig. S-23 ^{13}C NMR spectrum of compound **27f**

David-034 16 (0.333) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.00,LS 10); Sm (SG, 1x5.00); Sb (10,1.00); Cm (12.23-250.268)

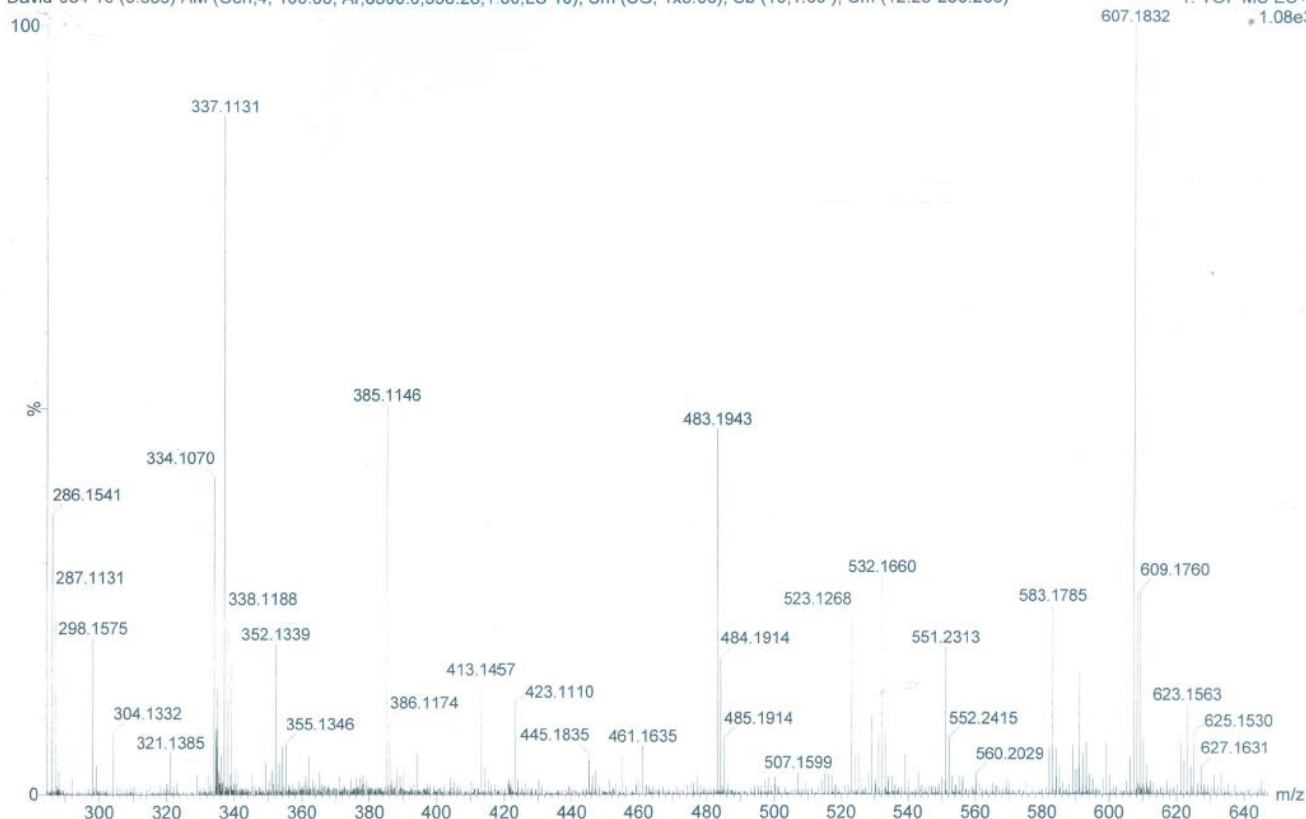
1: TOF MS ES+
1.08e3

Fig. S-24 mass spectrum of compound 27f

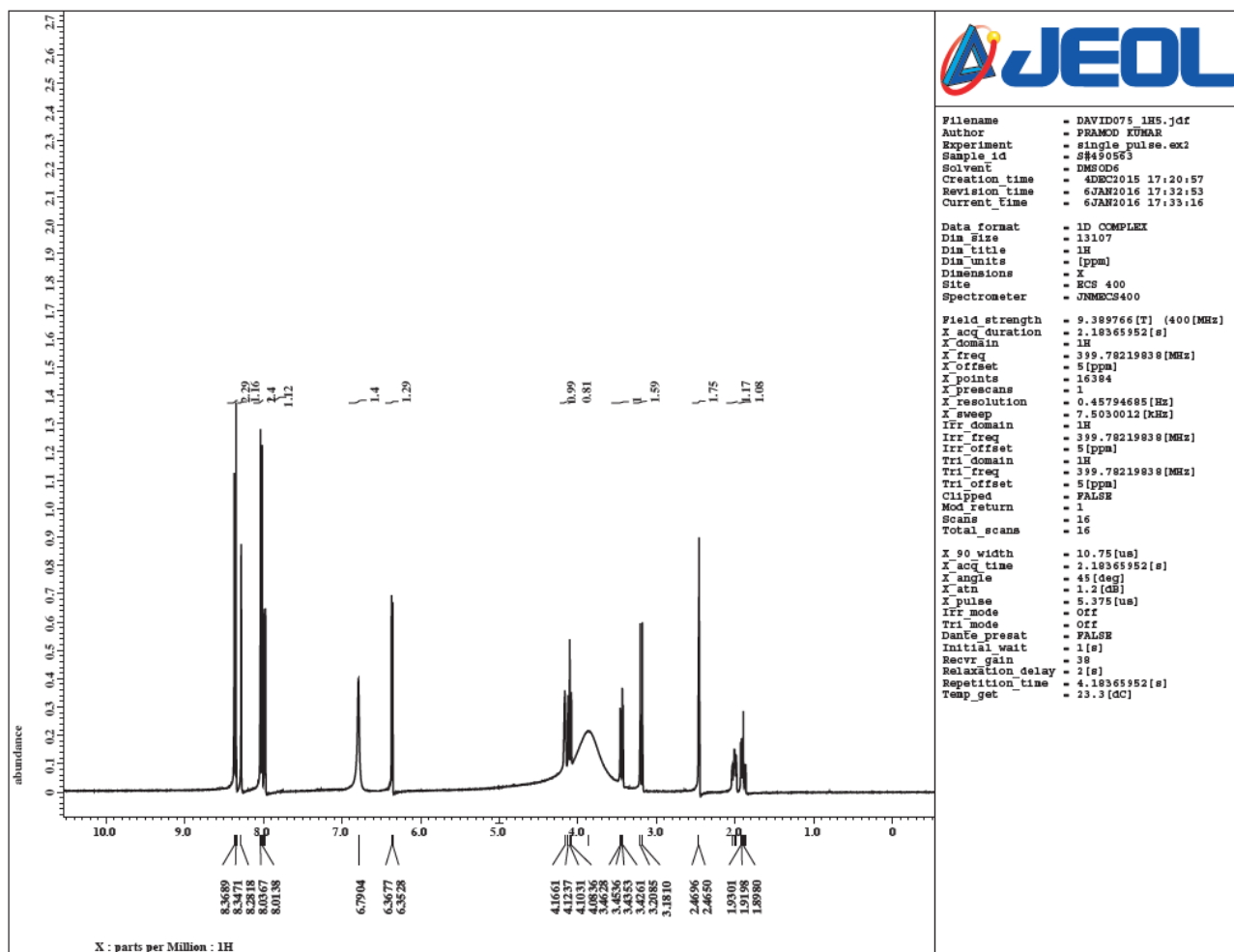


Fig. S-25 ^1H NMR spectrum of compound **27g**

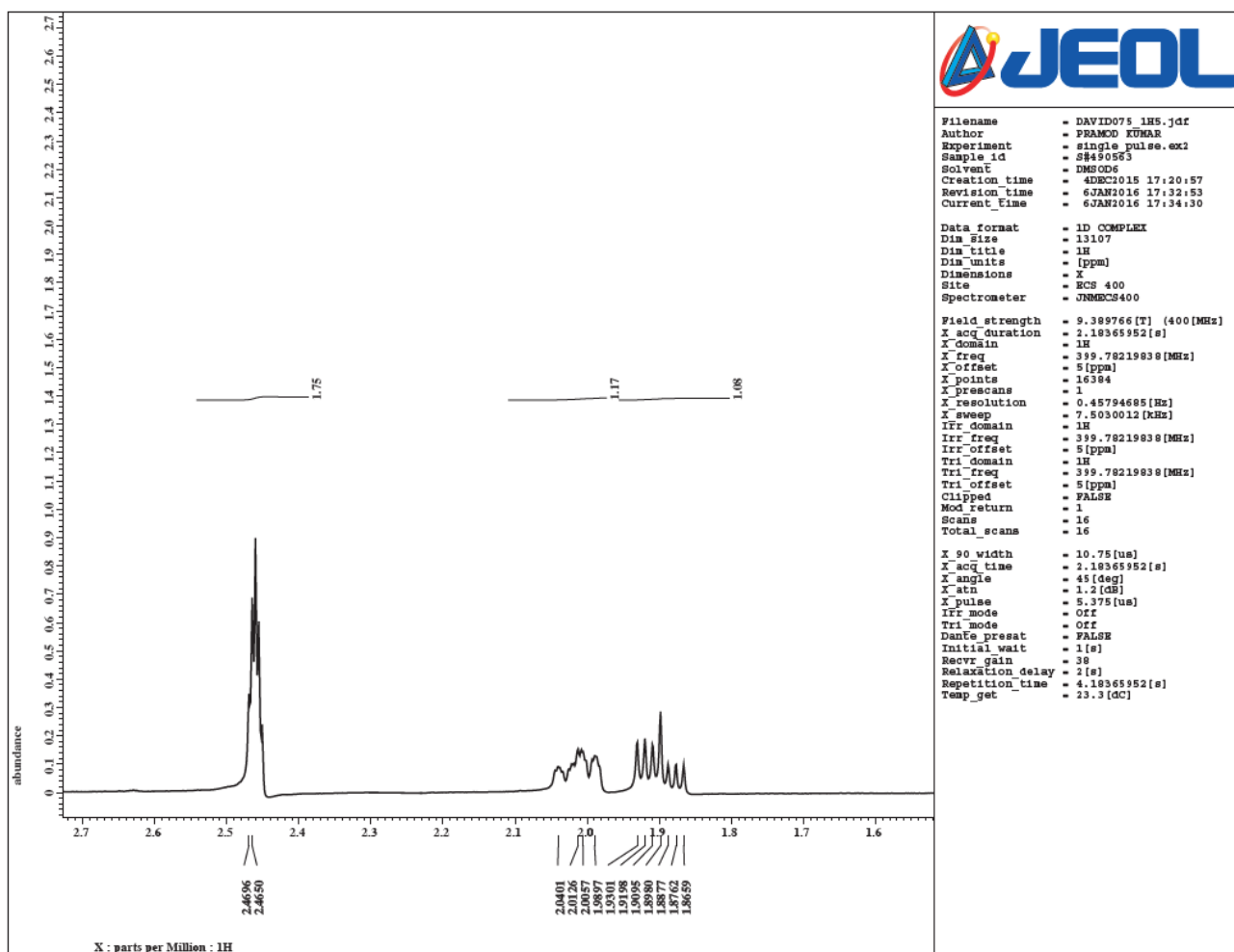


Fig. S-26 ^1H NMR spectrum of compound **27g** (expansion)

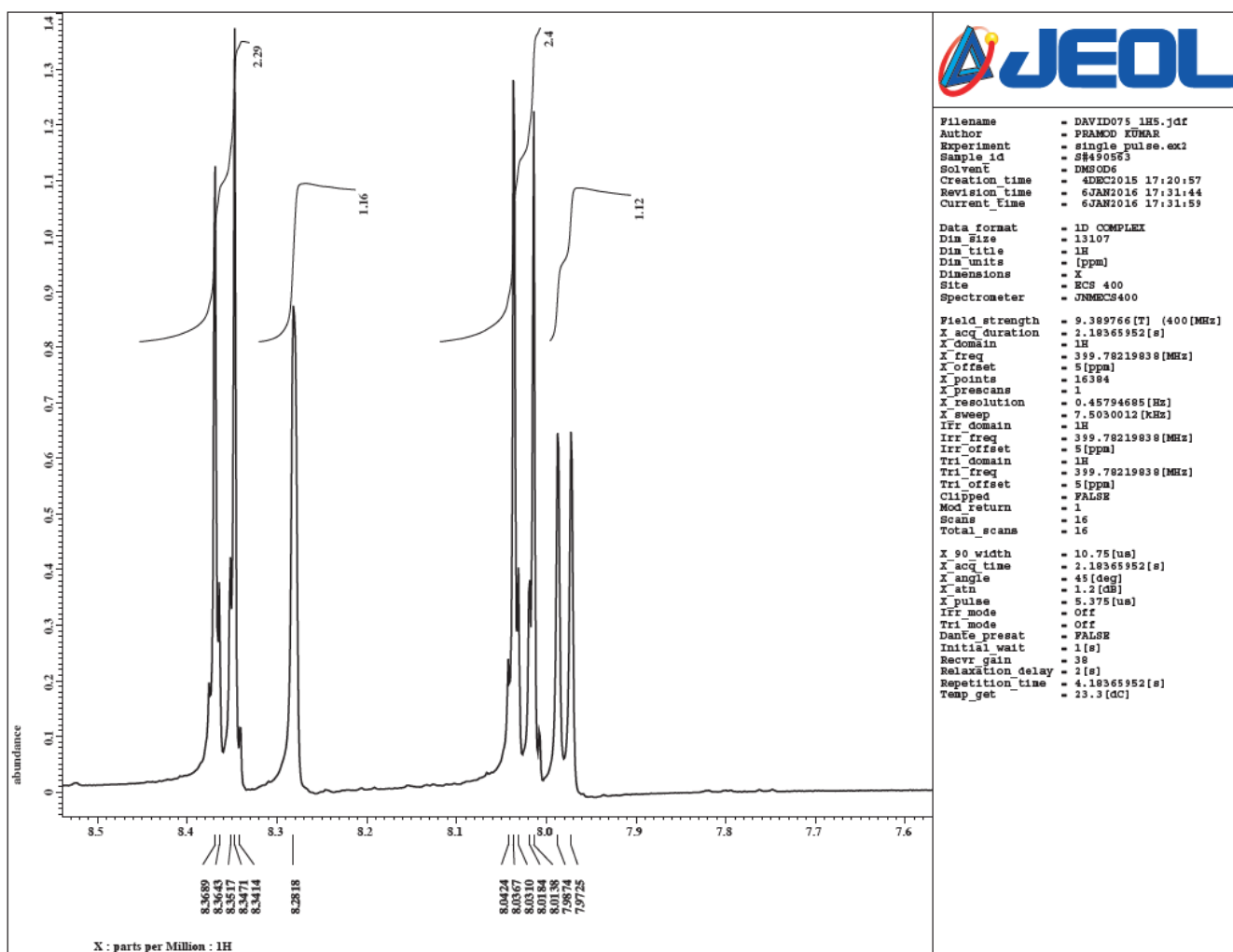


Fig. S-27 ^1H NMR spectrum of compound **27g** (expansion)

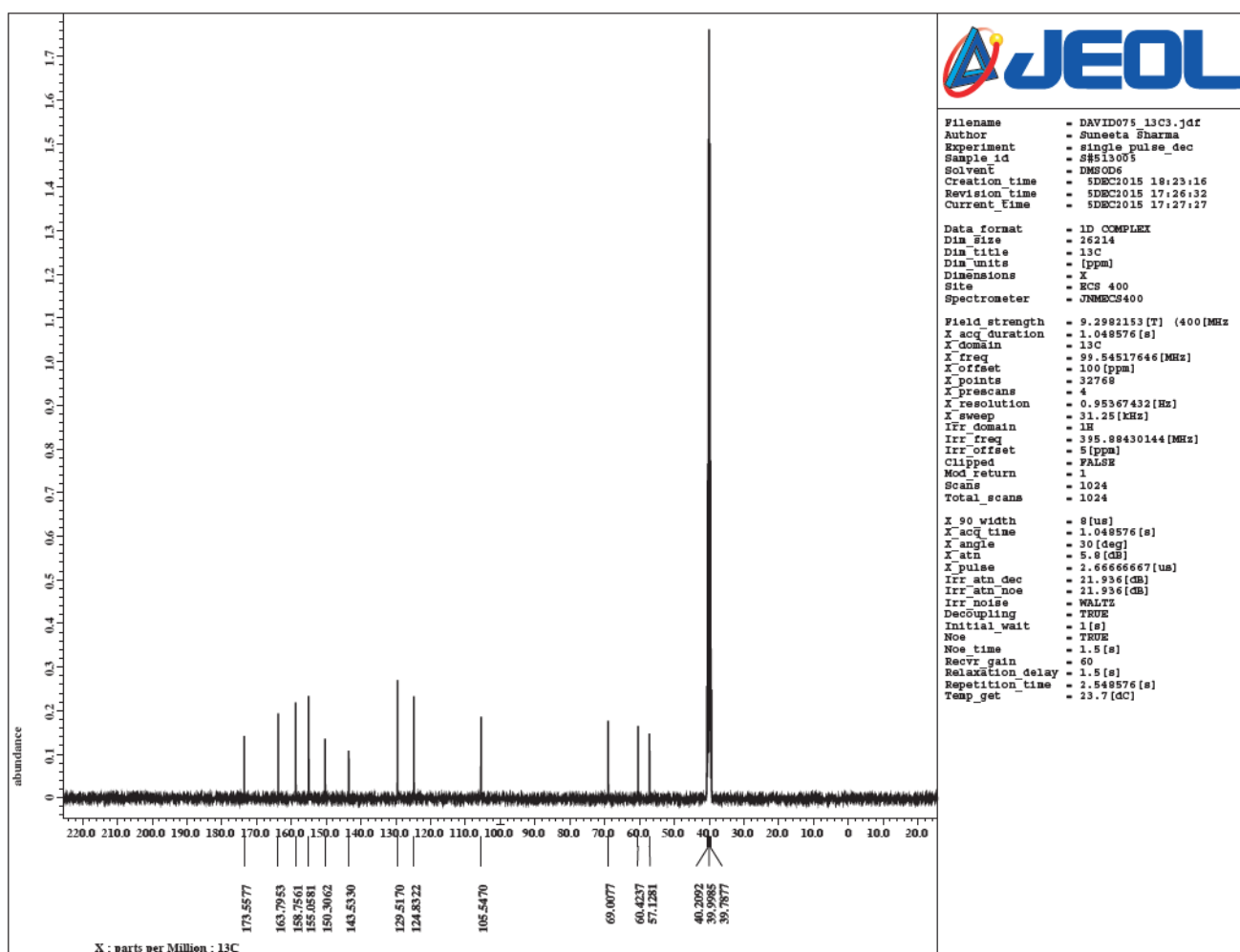


Fig. S-28 ^{13}C NMR spectrum of compound **27g**

David 057 12 (0.259) AM (Cen,4, 100.00, Ar,8500.0,556.28,0.70,LS 10); Sm (SG, 1x5.00); Sb (10,1.00)

1: TOF MS ES+
1.26e4

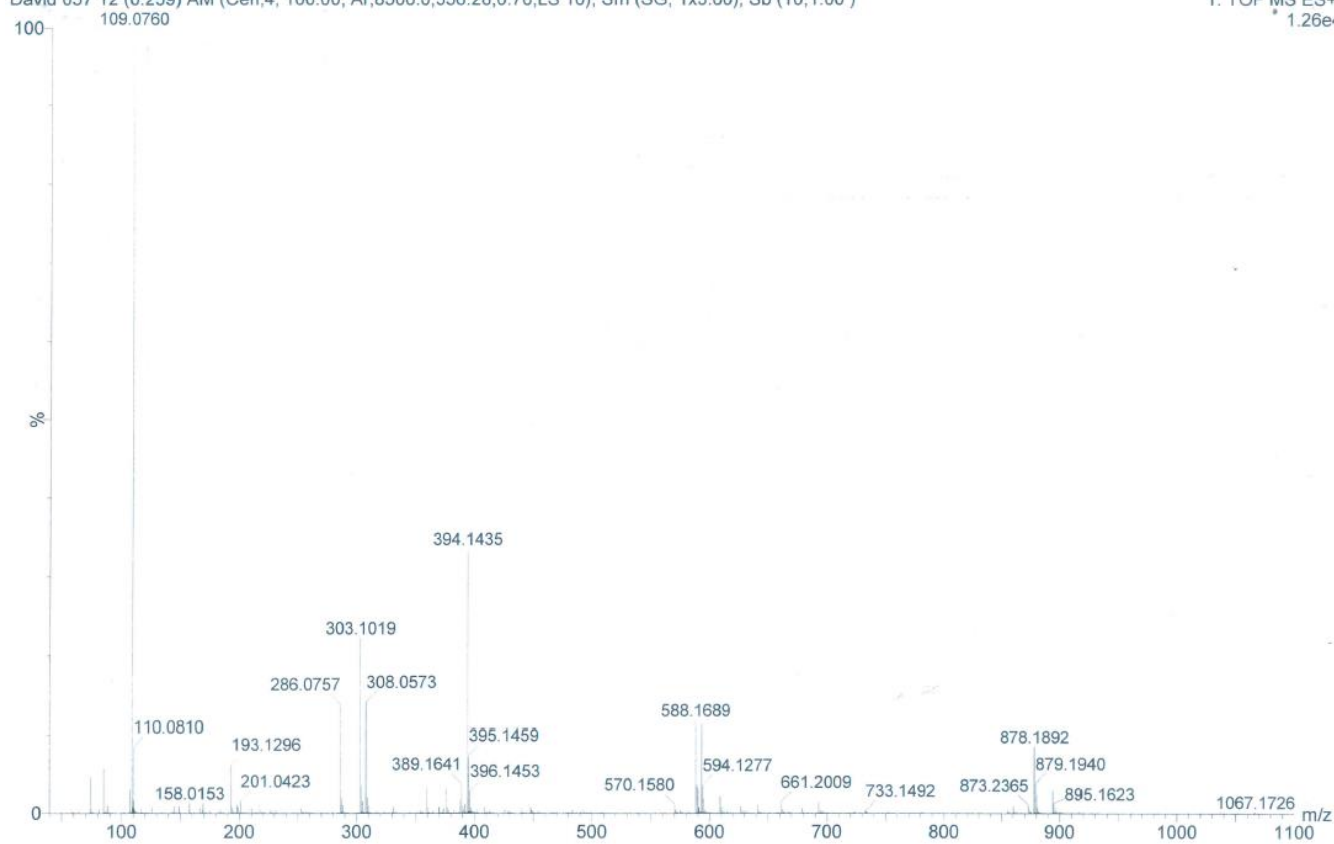


Fig. S-29 mass spectrum of compound 27g

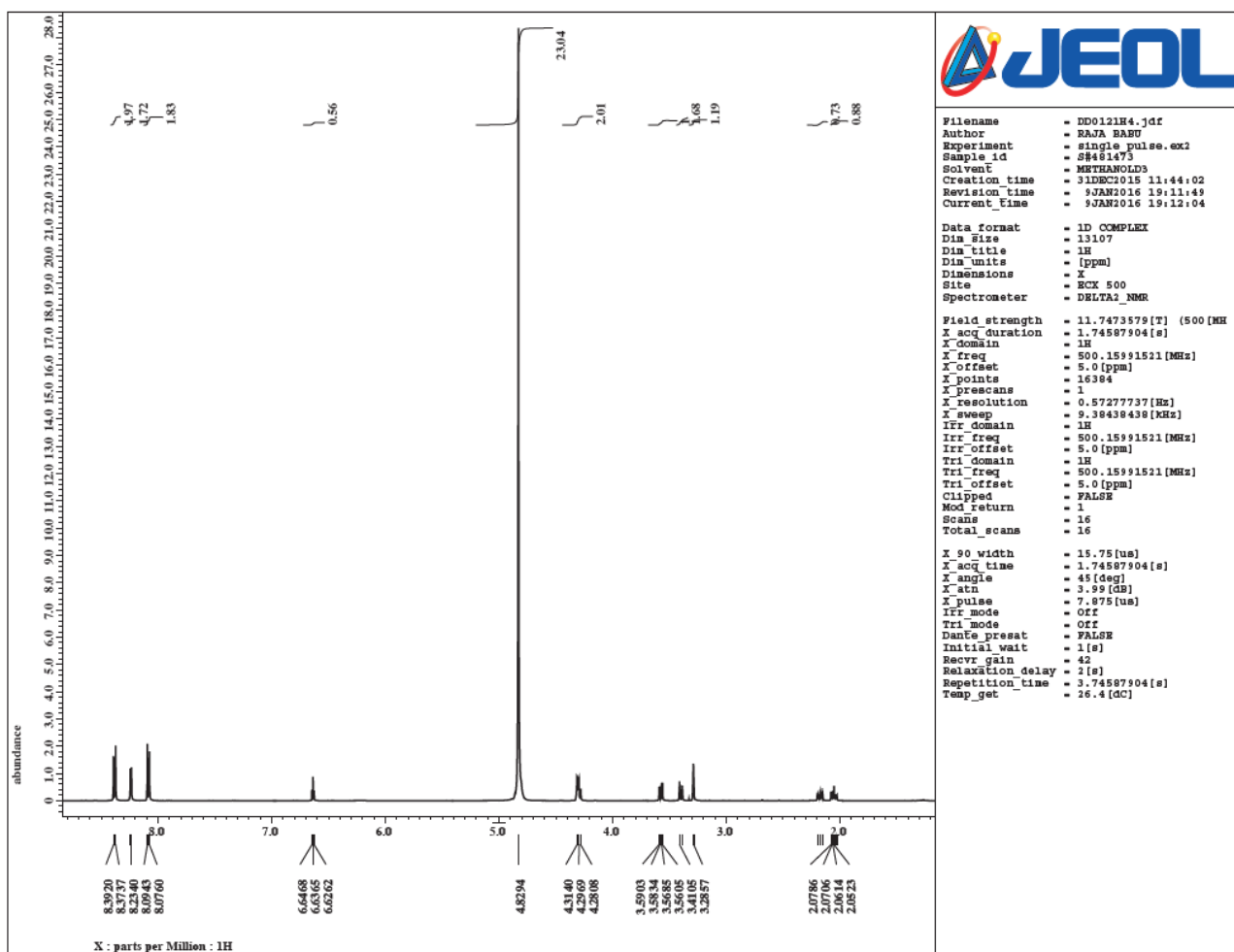


Fig. S-30 ^1H NMR spectrum of compound **27h**

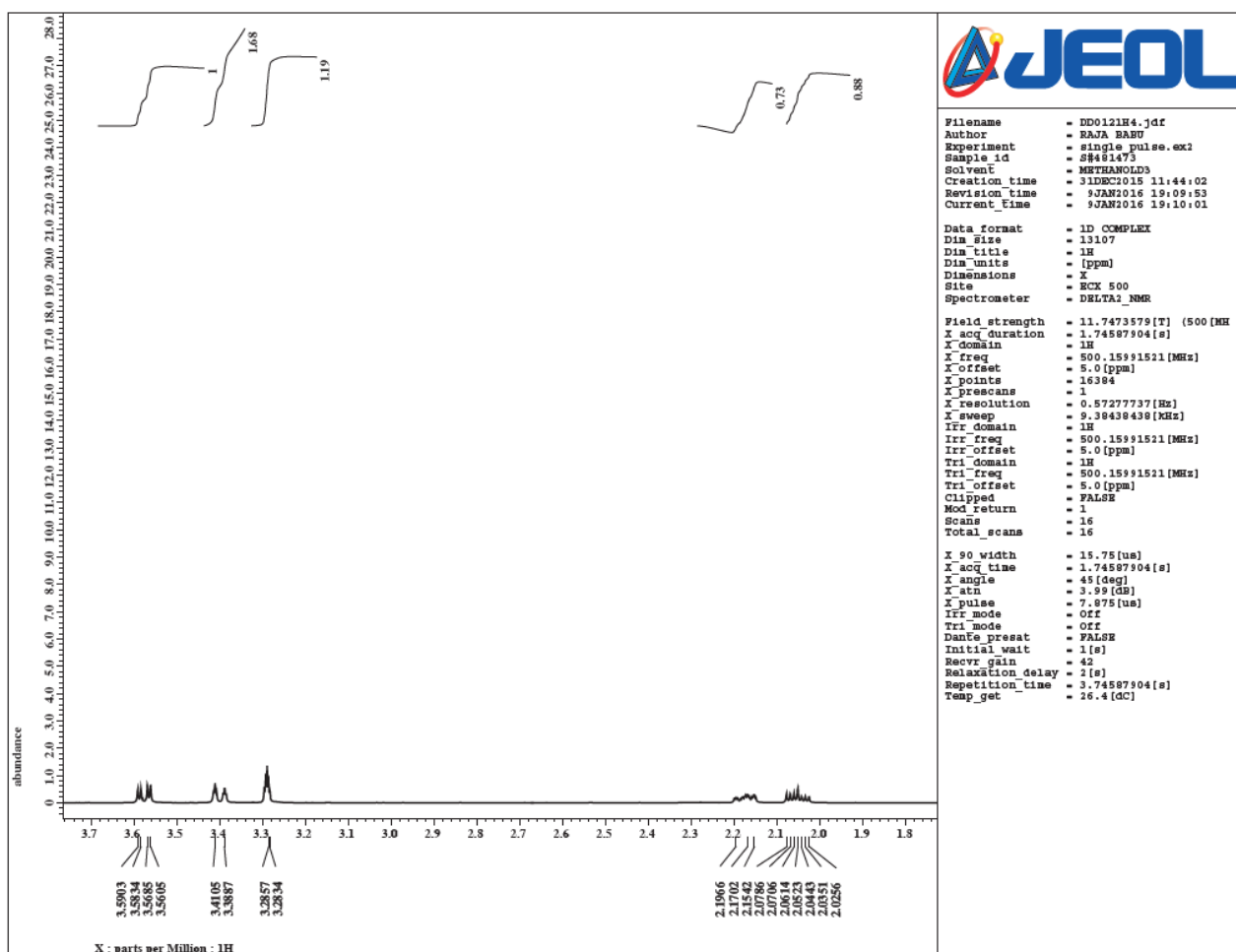


Fig. S-31 ^1H NMR spectrum of compound **27h** (expansion)

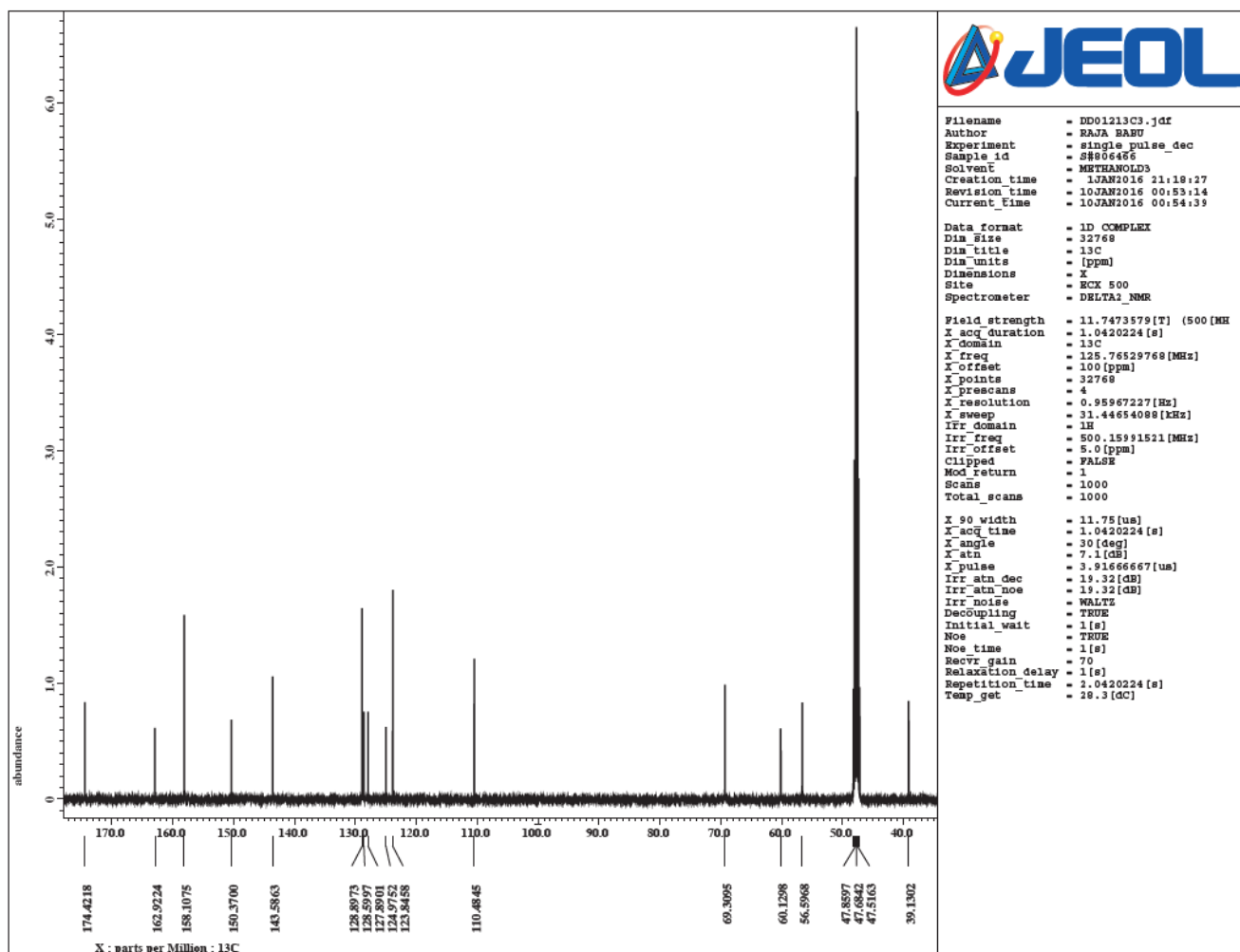


Fig. S-32 ^{13}C NMR spectrum of compound **27h**

DD 012+ 12 (0.258) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.00,LS 10); Sm (SG, 2x5.00); Sb (10,1.00)

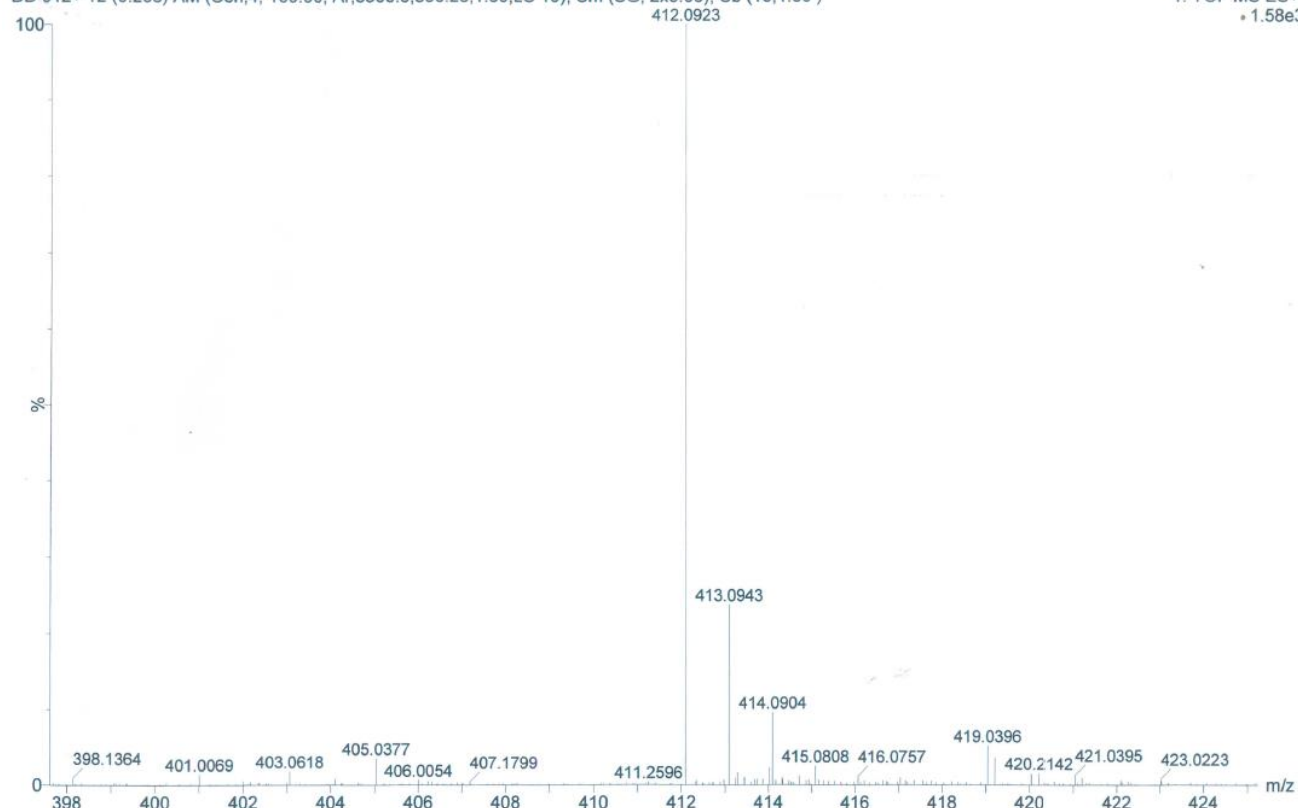
1: TOF MS ES+
•1.58e3

Fig. S-33 mass spectrum of compound 27h

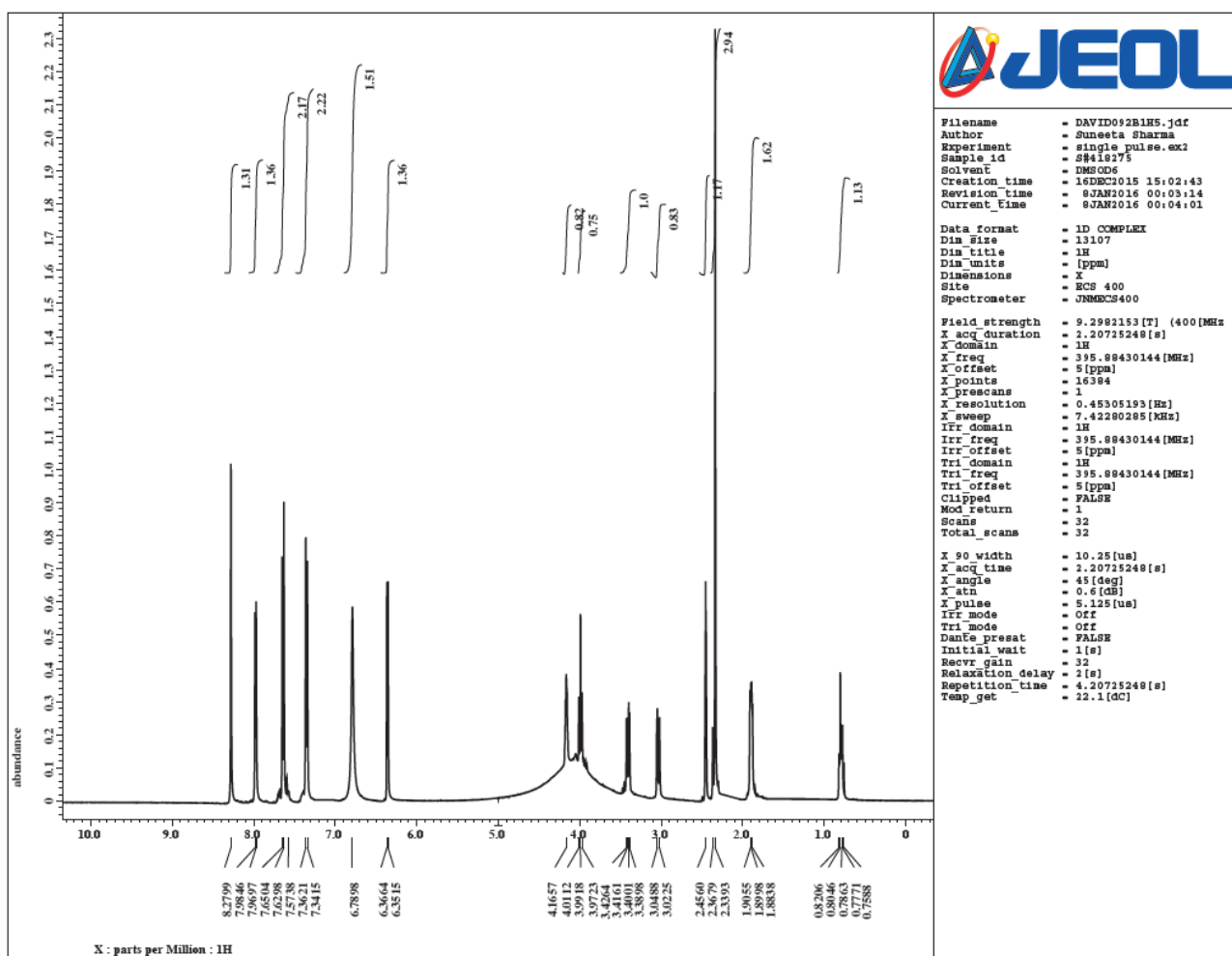


Fig. S-34 ^1H NMR spectrum of compound 27i

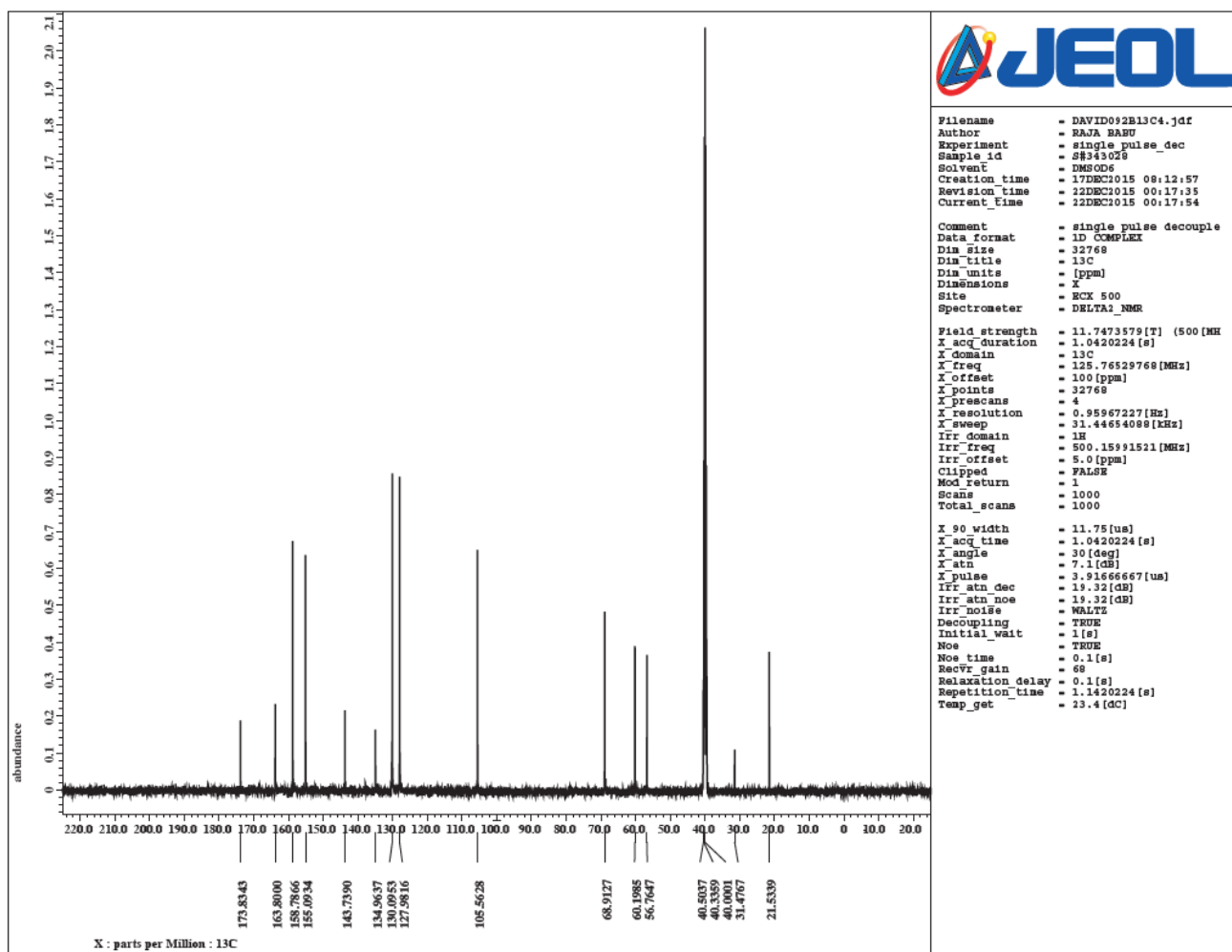
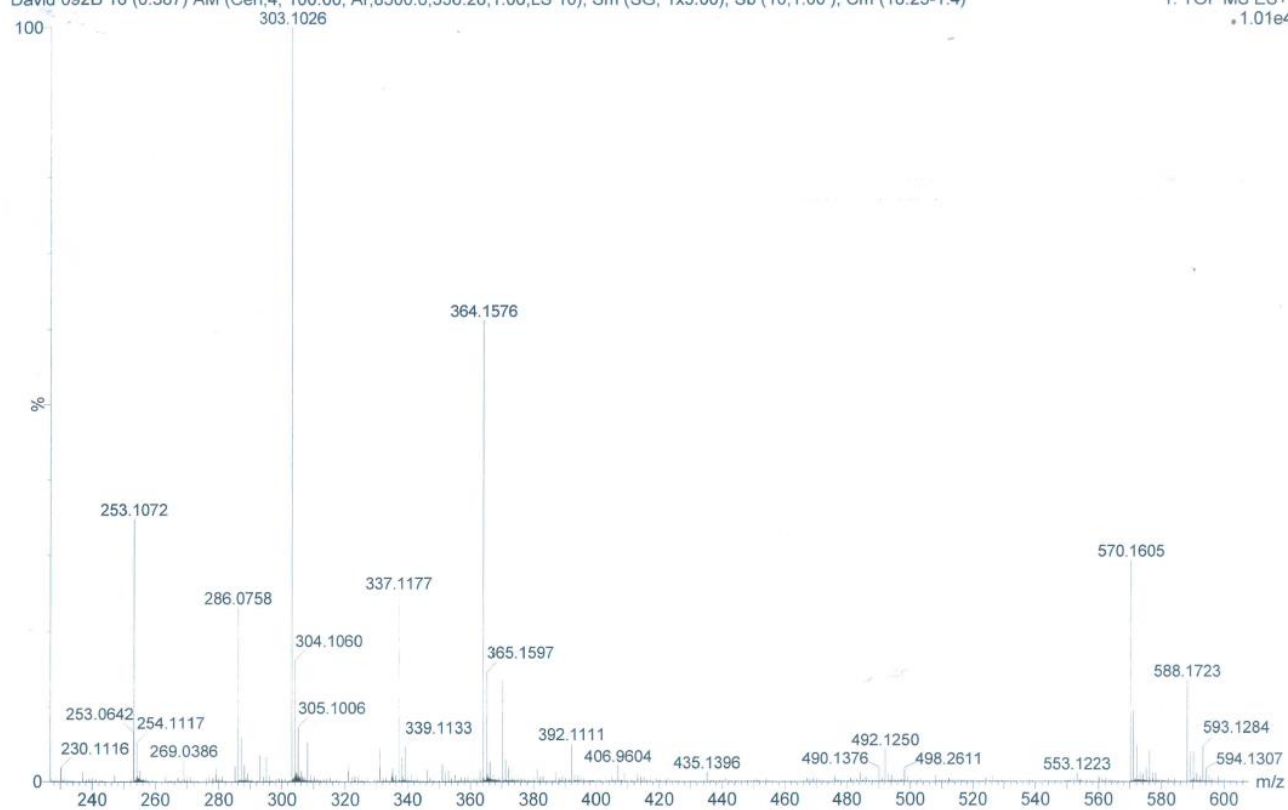


Fig. S-35 ^{13}C NMR spectrum of compound **27i**

David 092B 18 (0.387) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.00,LS 10); Sm (SG, 1x5.00); Sb (10,1.00); Cm (18:25-1:4)

1: TOF MS ES+
•1.01e4

78

79

Fig. S-36 mass spectrum of compound 27i

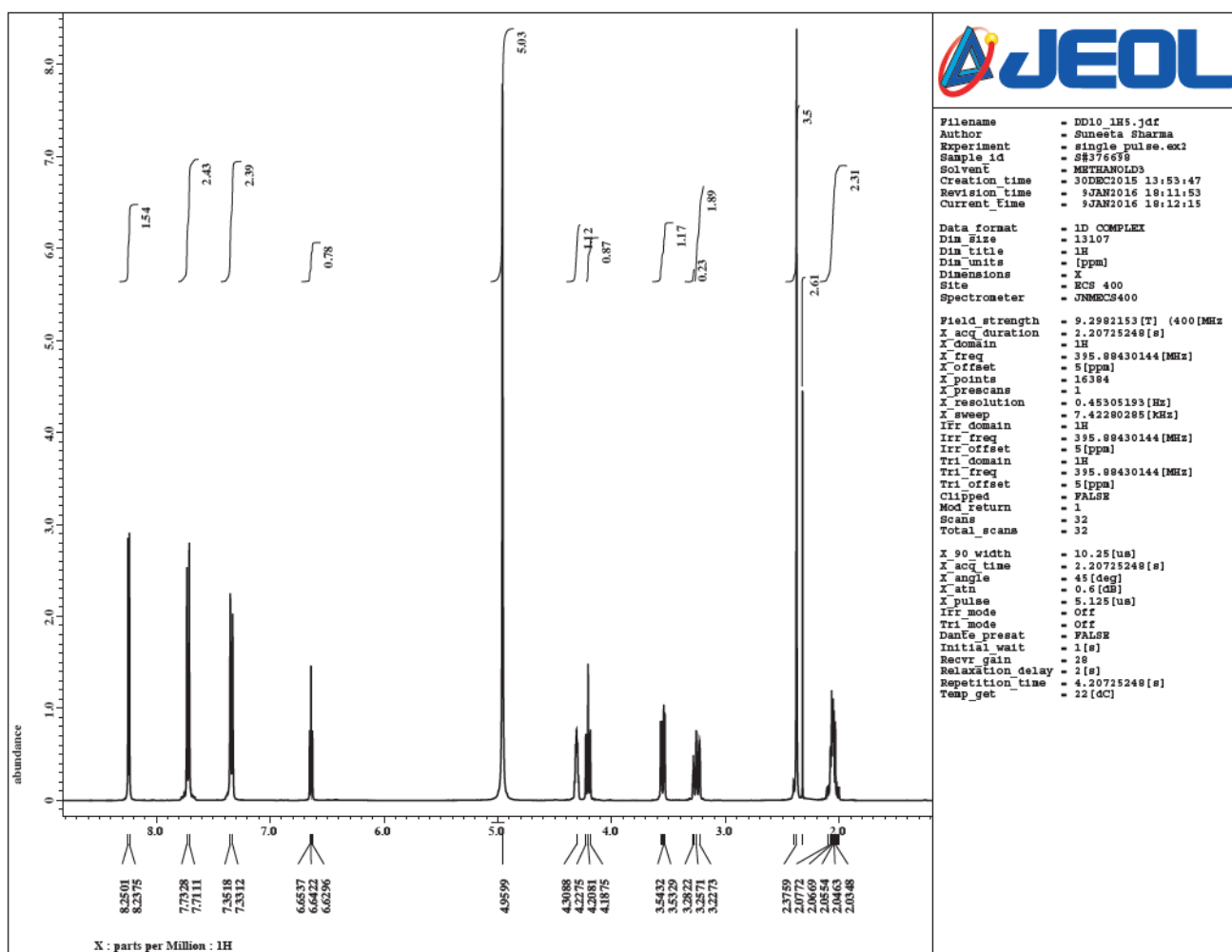


Fig. S-37 ^1H NMR spectrum of compound **27j**

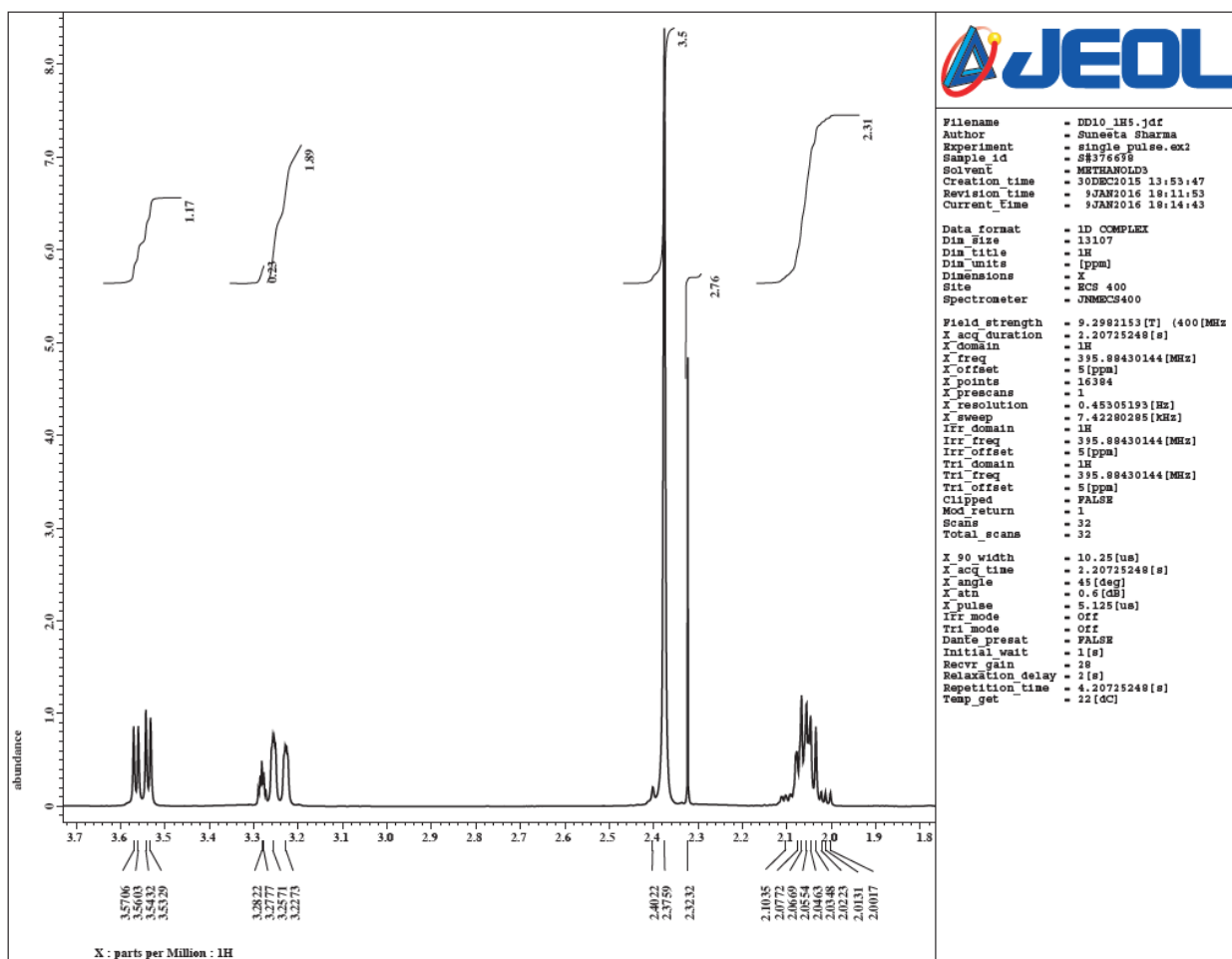


Fig. S-38 ^1H NMR spectrum of compound **27j** (expansion)

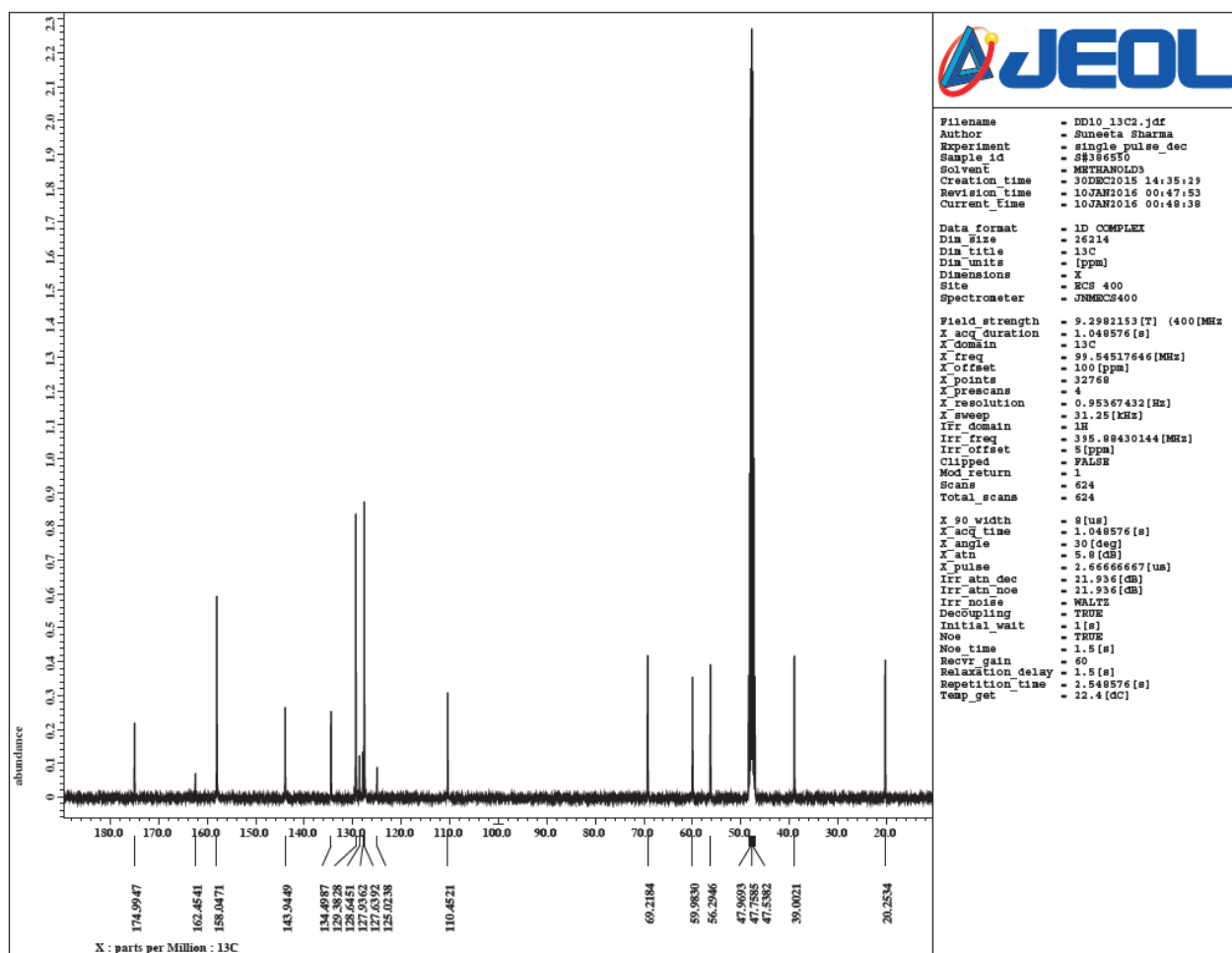
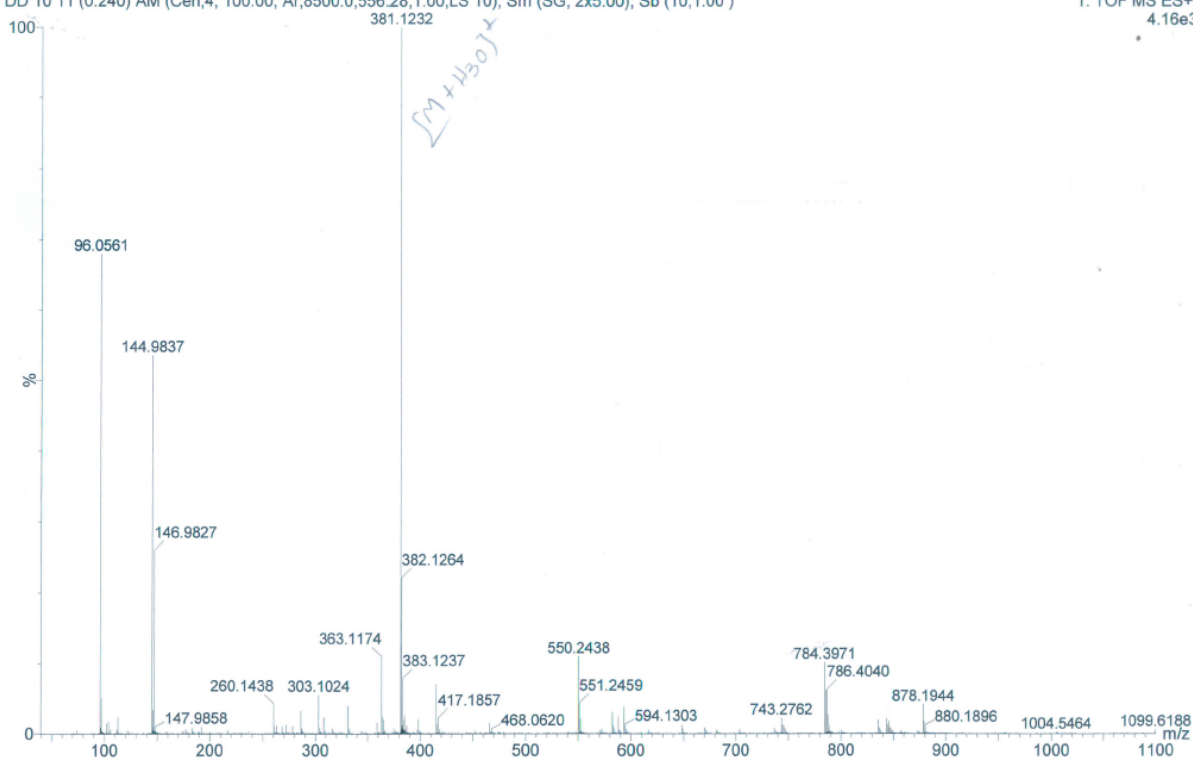


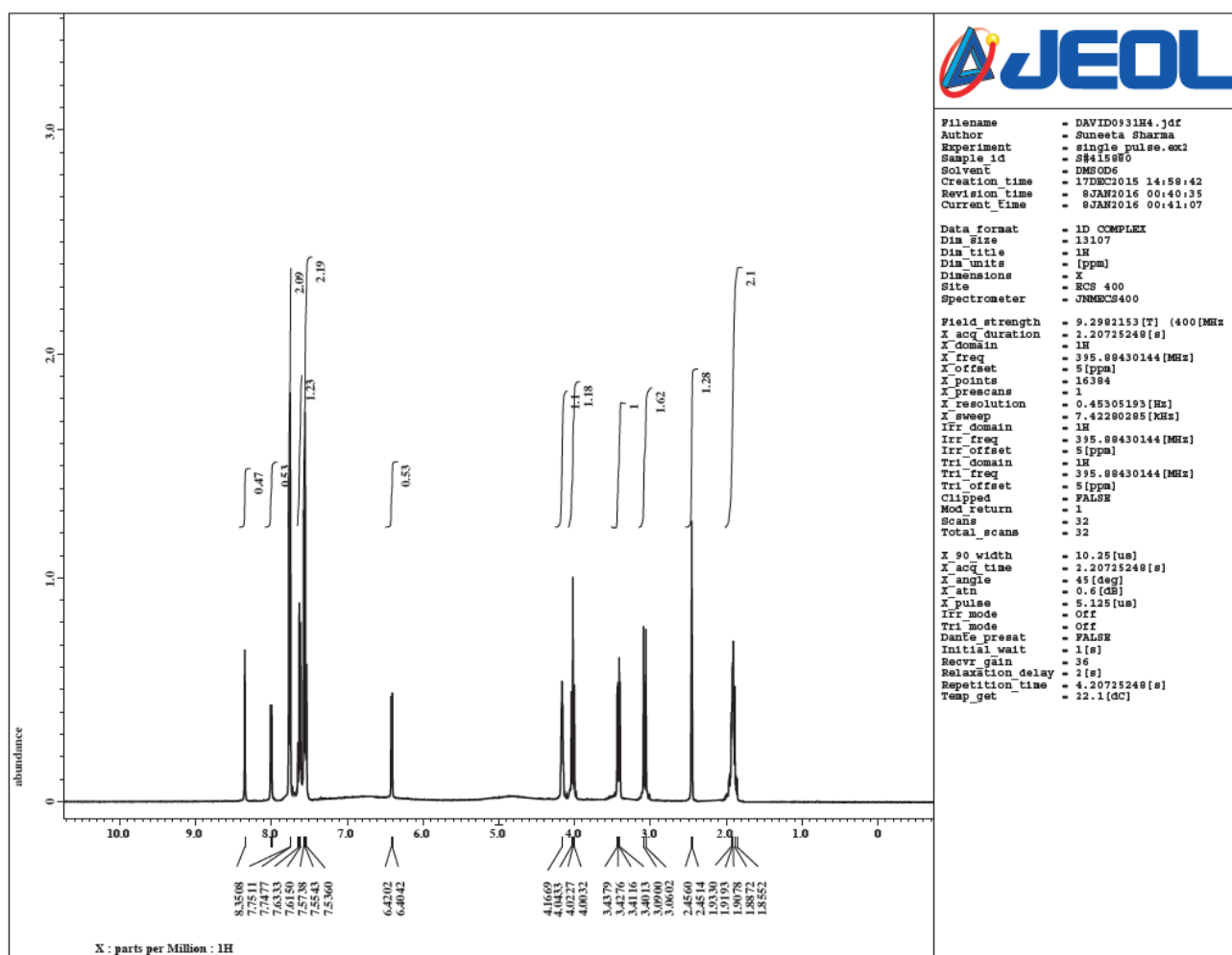
Fig. S-39 ^{13}C NMR spectrum of compound 27j



86

87

Fig. S-40 mass spectrum of compound 27j



88

89 Fig. S-41 ^1H NMR spectrum of compound **27k**

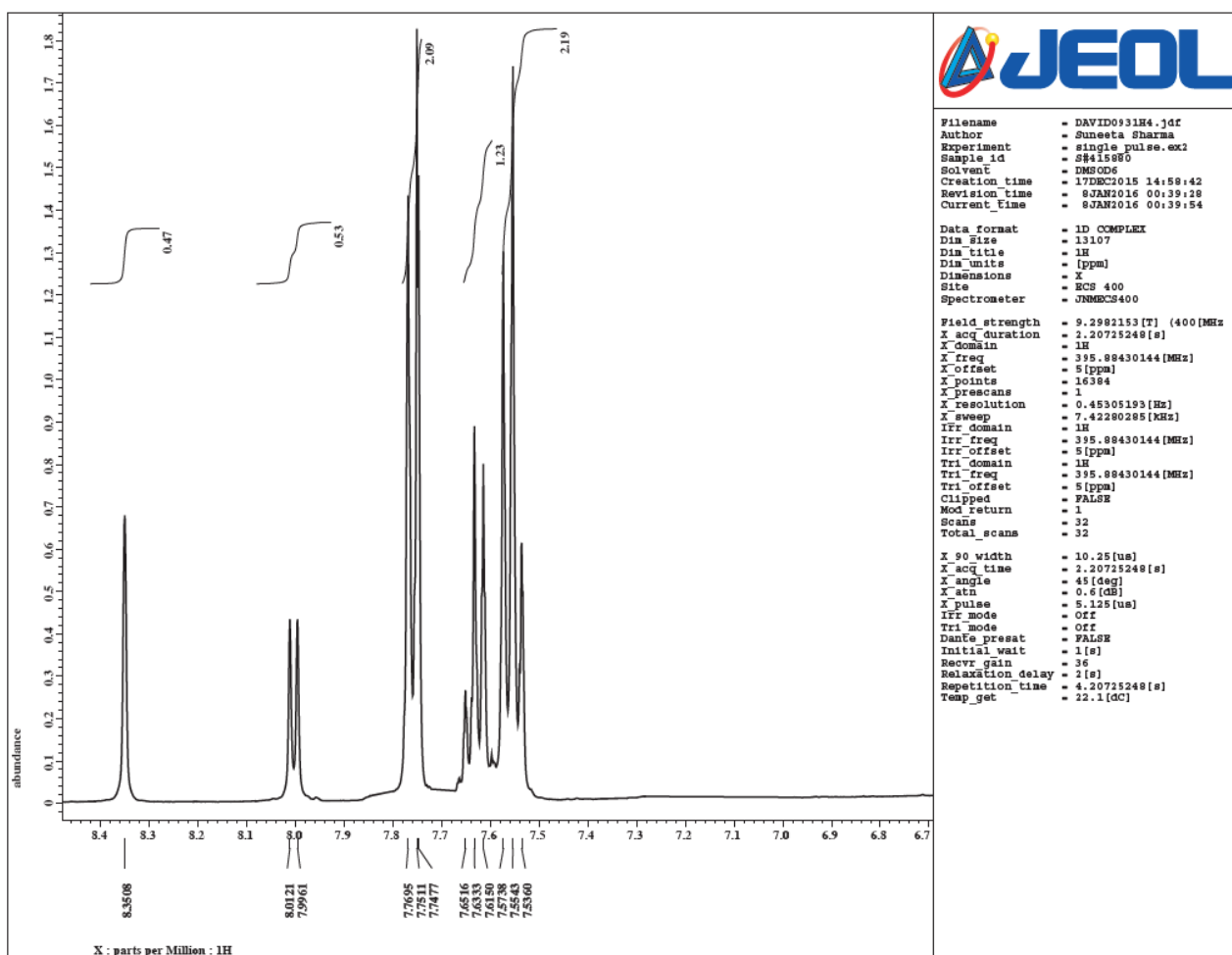


Fig. S-42 ¹H NMR spectrum of compound **27k** (expansion)

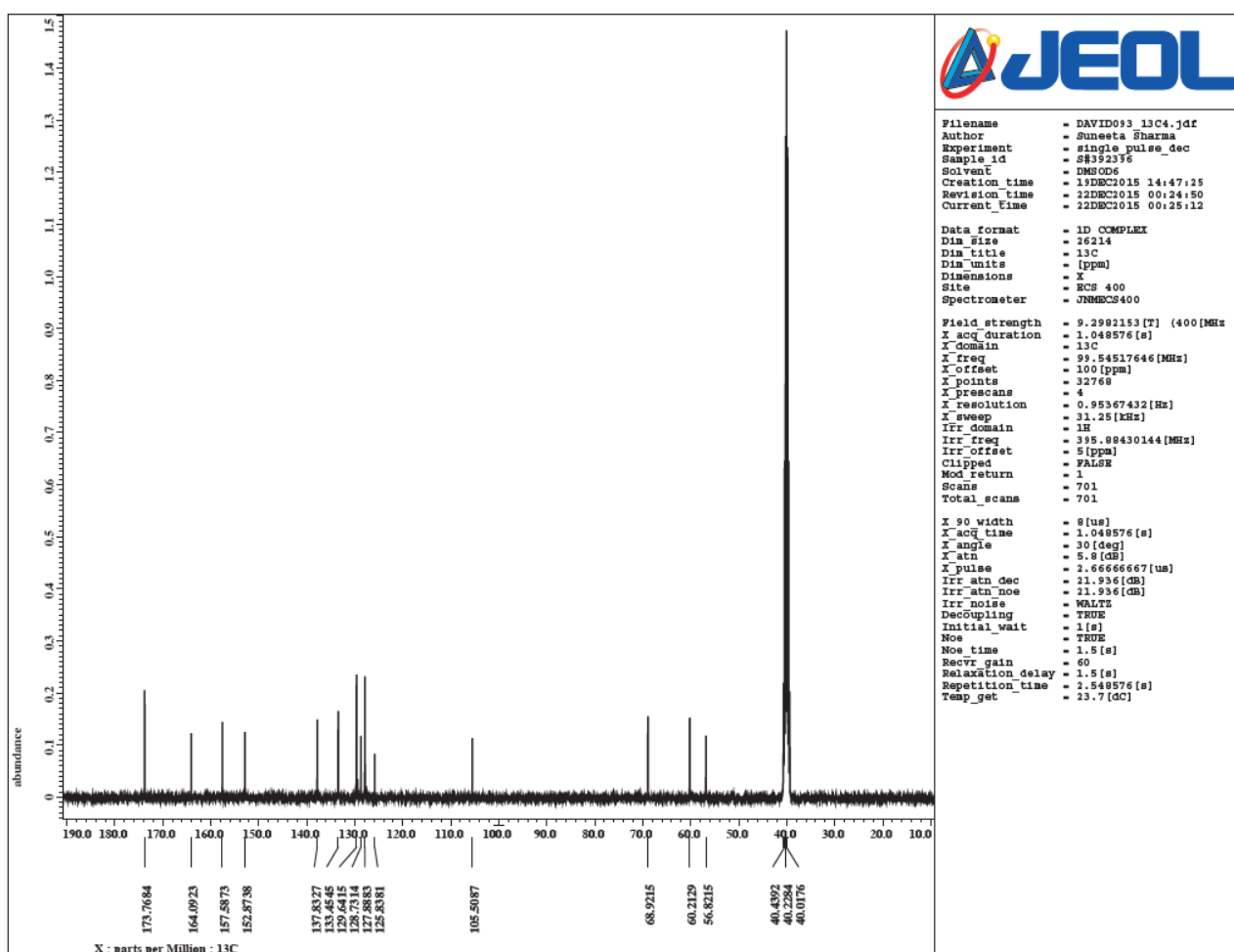
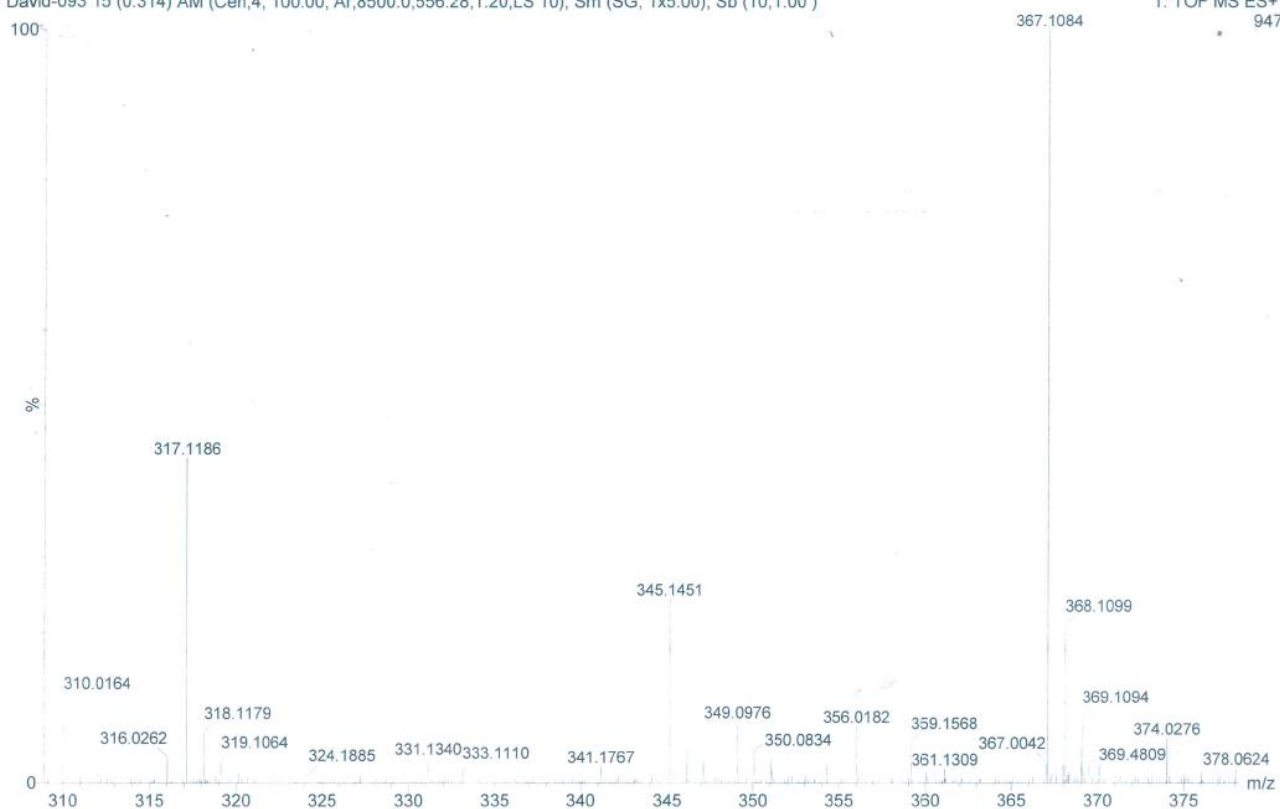


Fig. S-43 ^{13}C NMR spectrum of compound **27k**

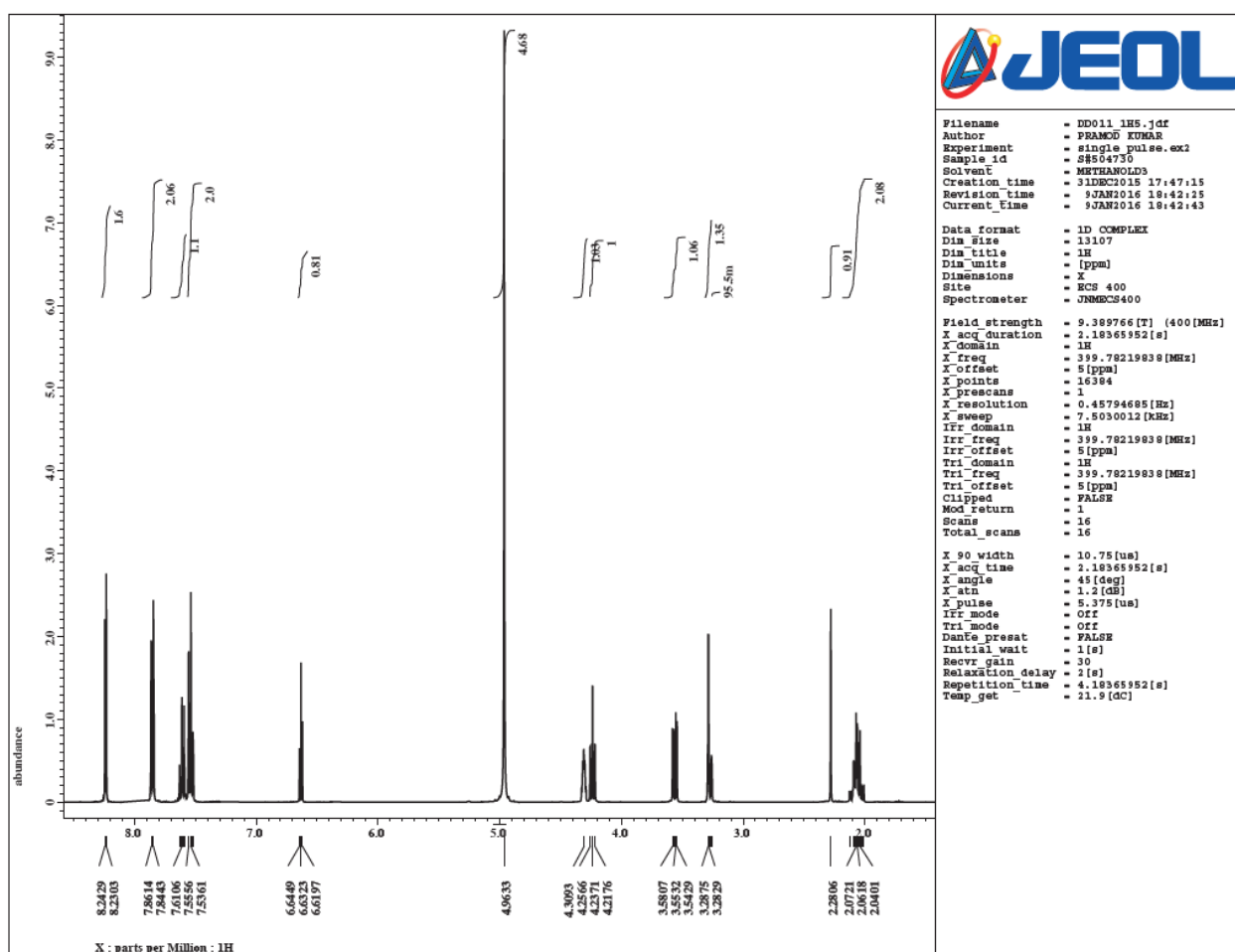
David-093 15 (0.314) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.20,LS 10); Sm (SG, 1x5.00); Sb (10,1.00)

1: TOF MS ES+
947

95

96

Fig. S-44 mass spectrum of compound 27k



97

98

Fig. S-45 ^1H NMR spectrum of compound 271

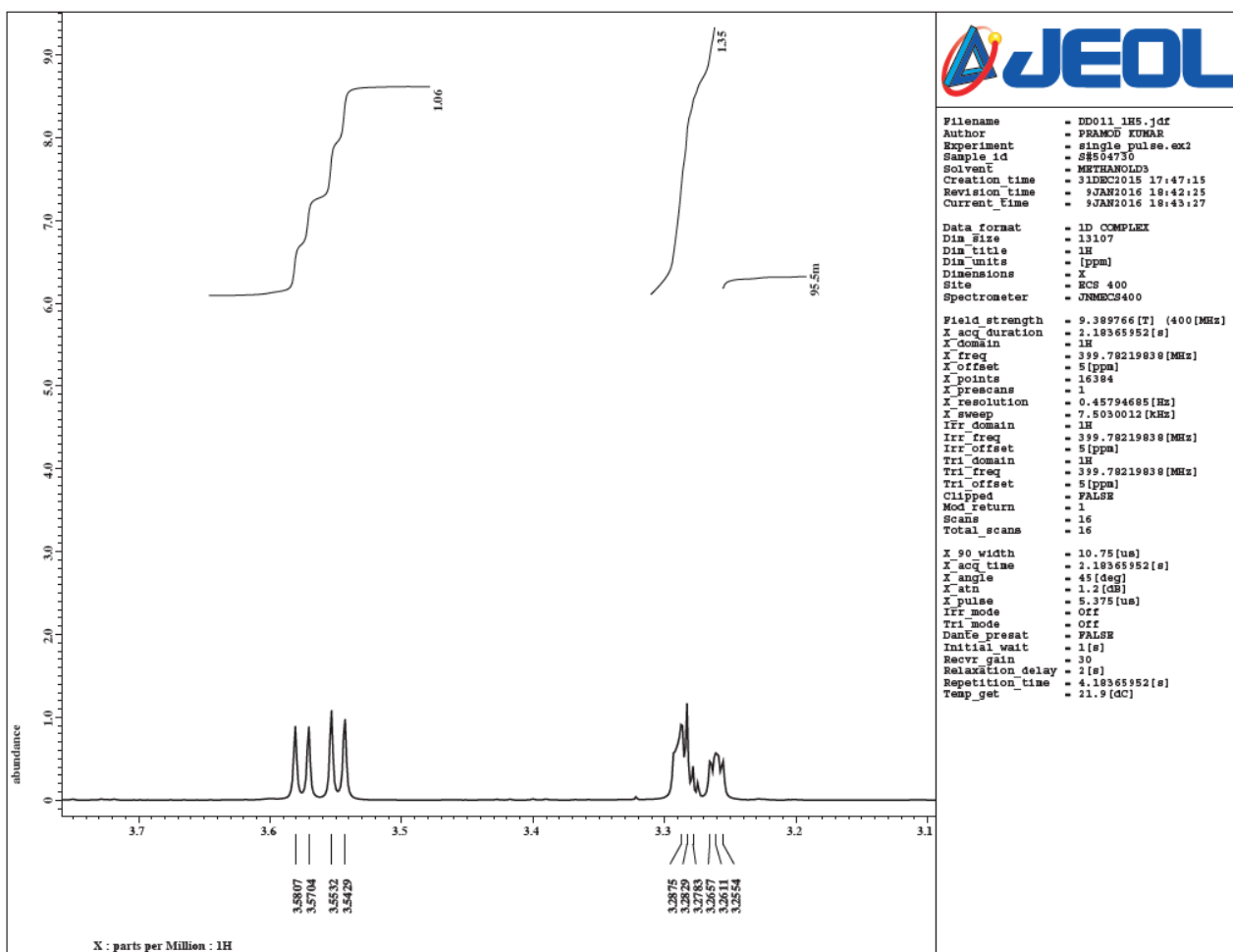
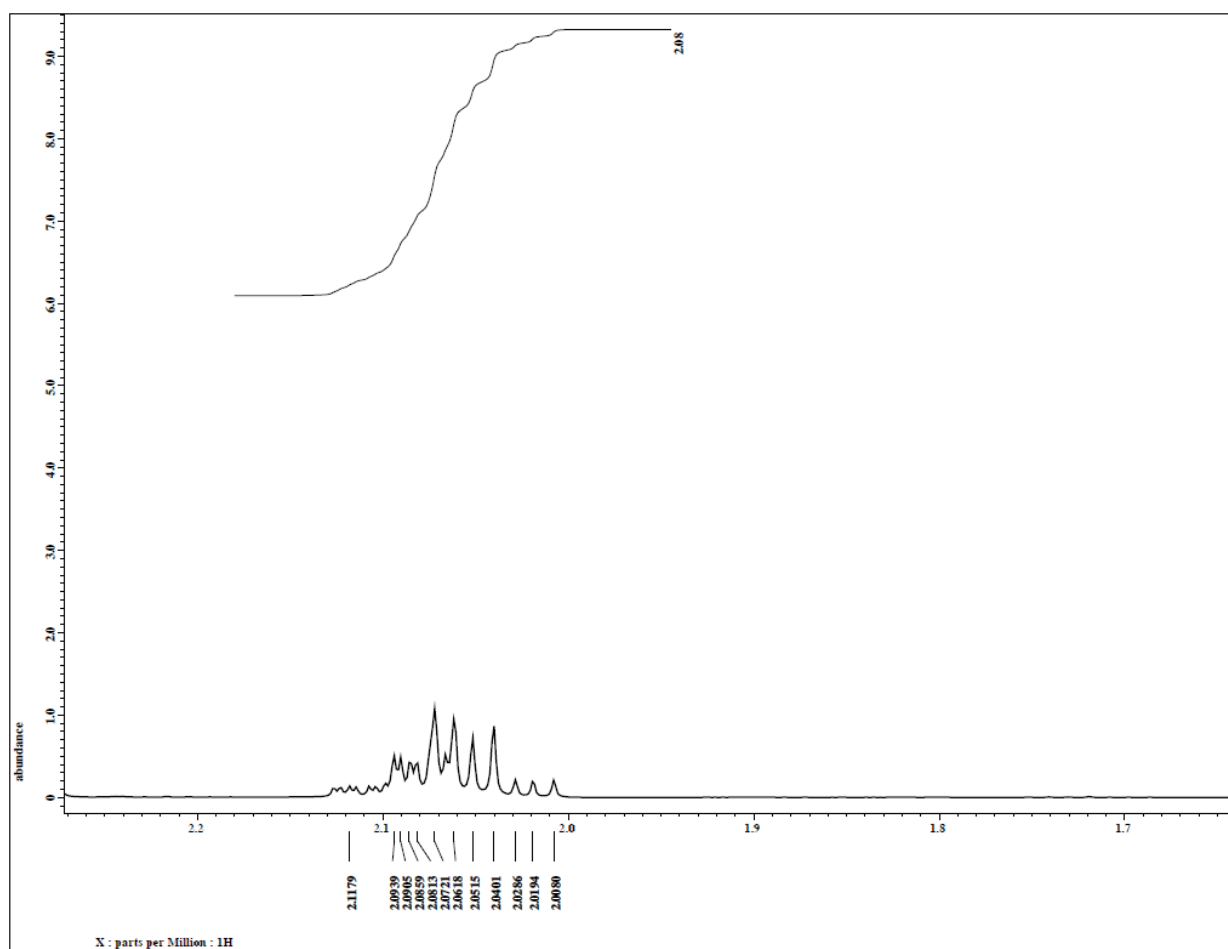


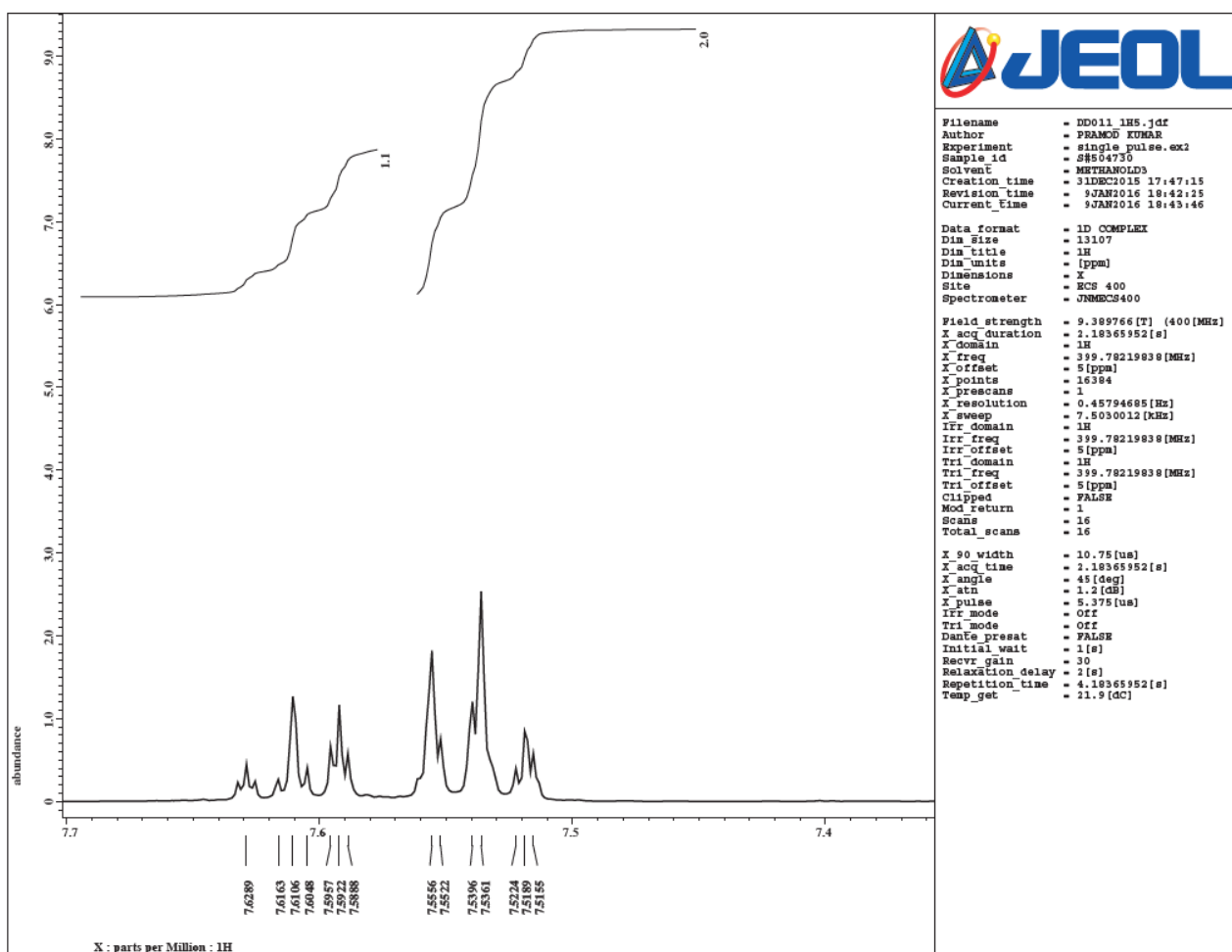
Fig. S-46 ^1H NMR spectrum of compound **27I** (expansion)



102

103

Fig. S-47 ^1H NMR spectrum of compound **271** (expansion)



104
105

Fig. S-48 ^1H NMR spectrum of compound **271** (expansion)

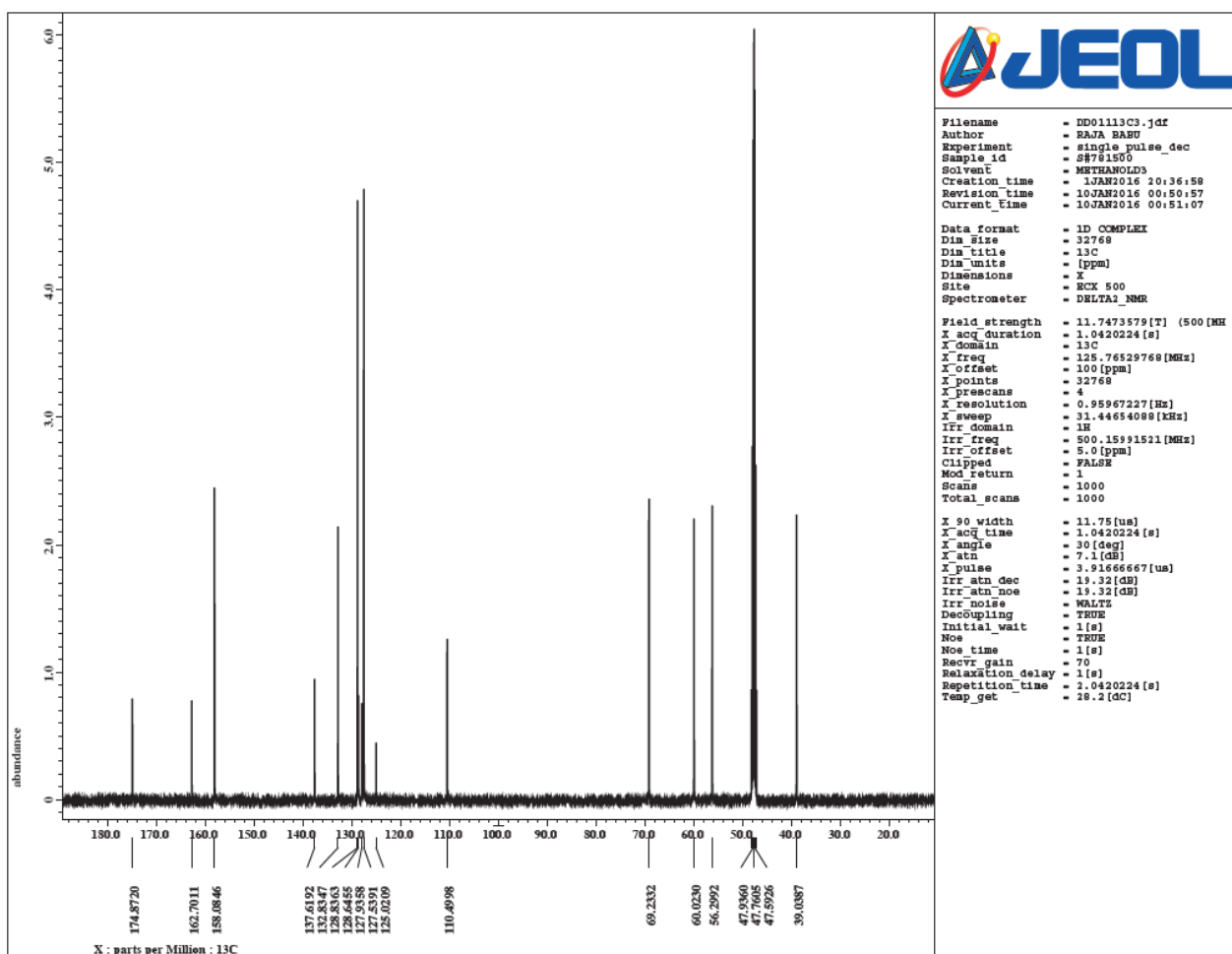


Fig. S-49 ¹³C NMR spectrum of compound 271

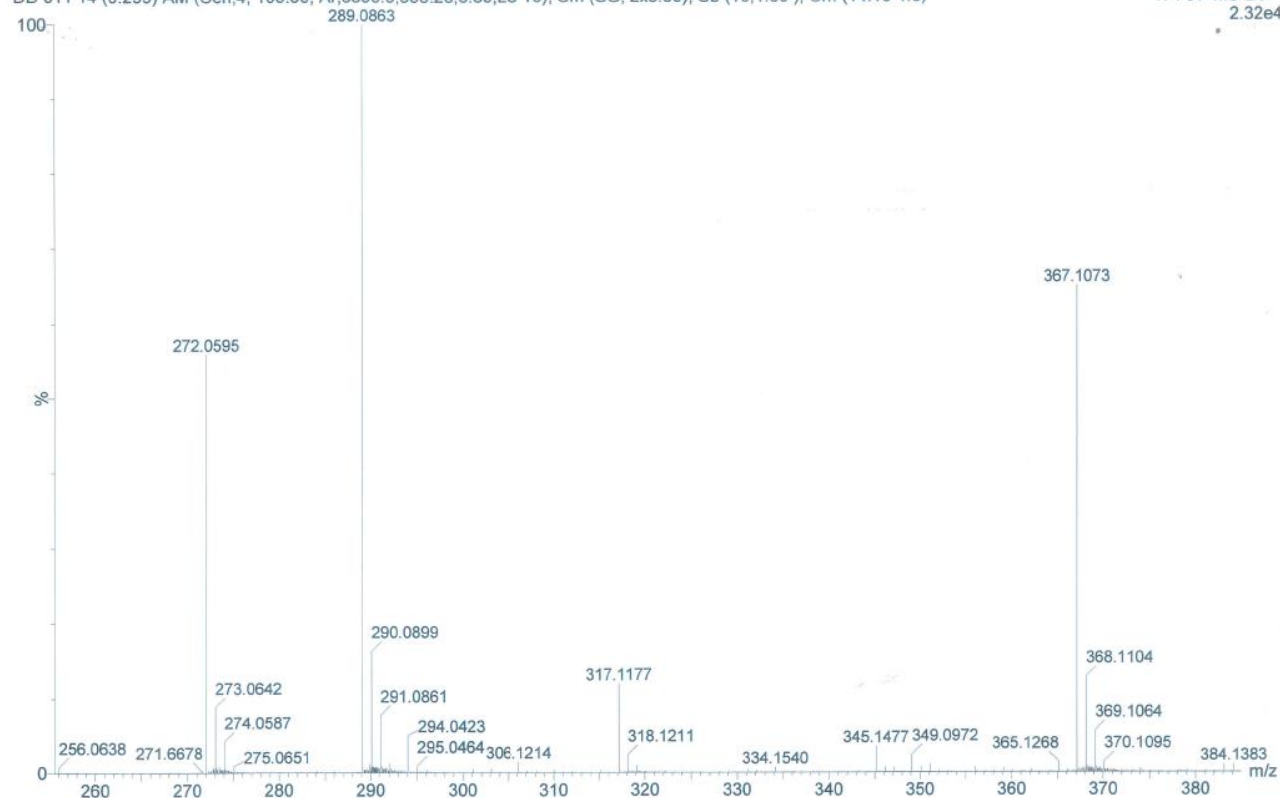
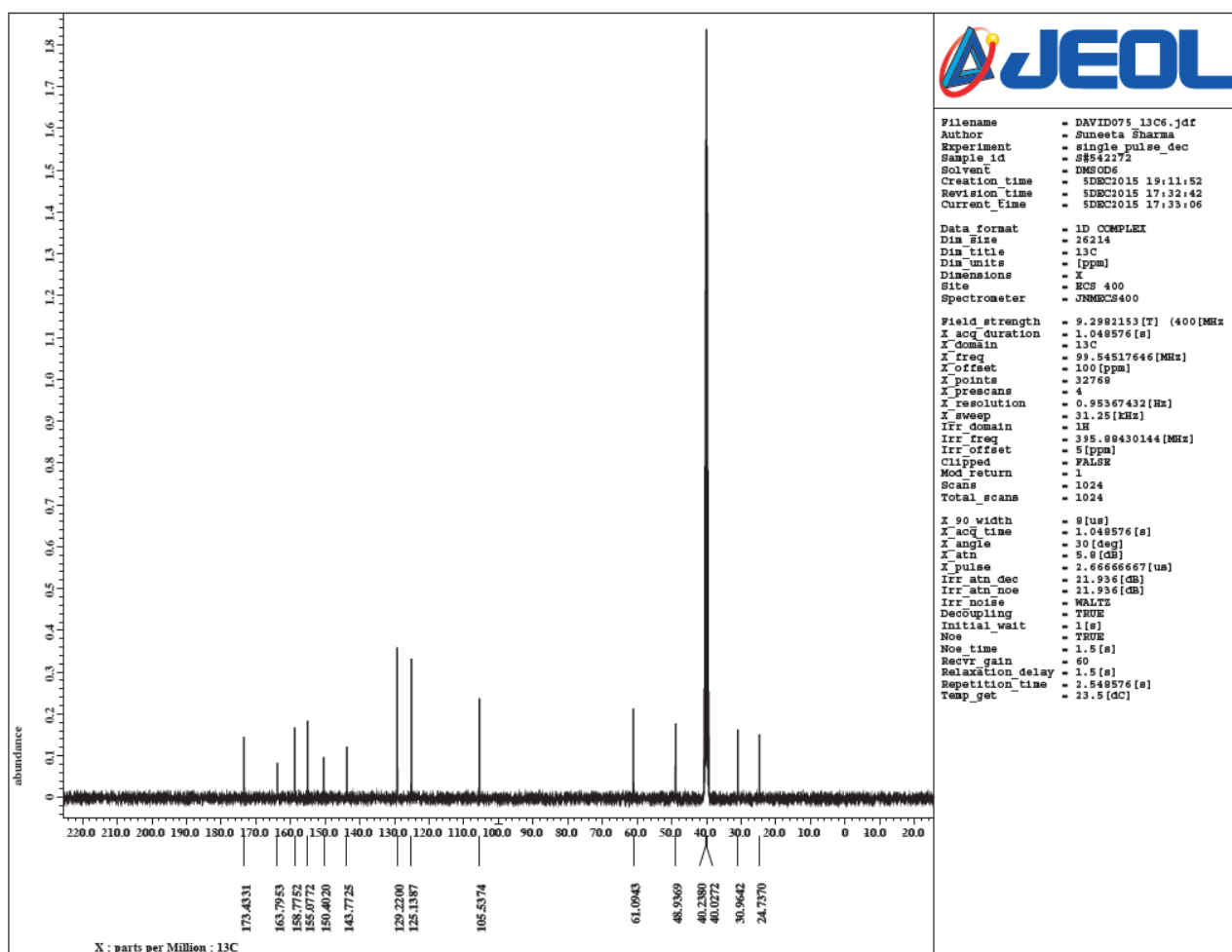


Fig. S-50 mass spectrum of compound 271



111
112 Fig. S-51 ^{13}C NMR spectrum of compound **27m**

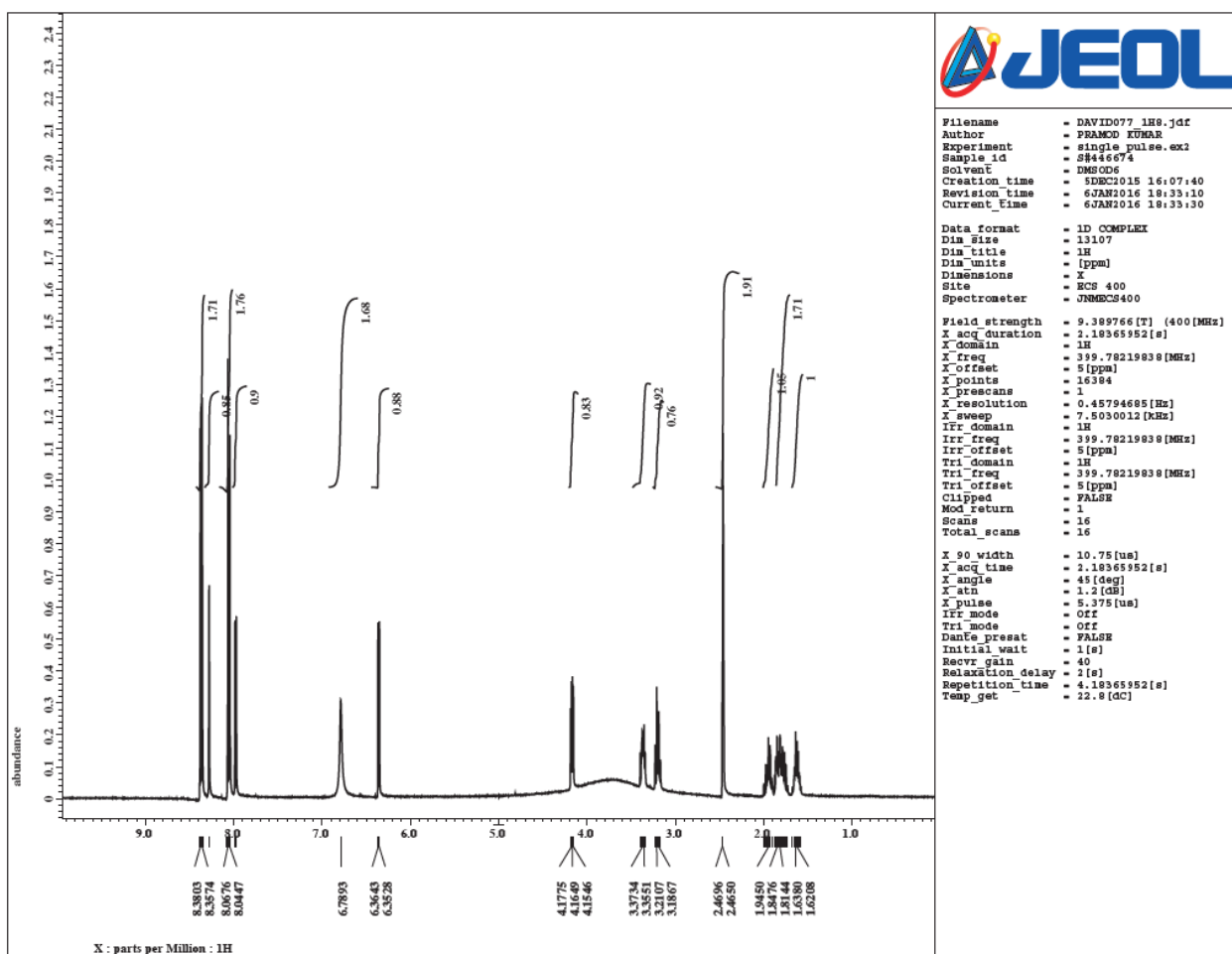
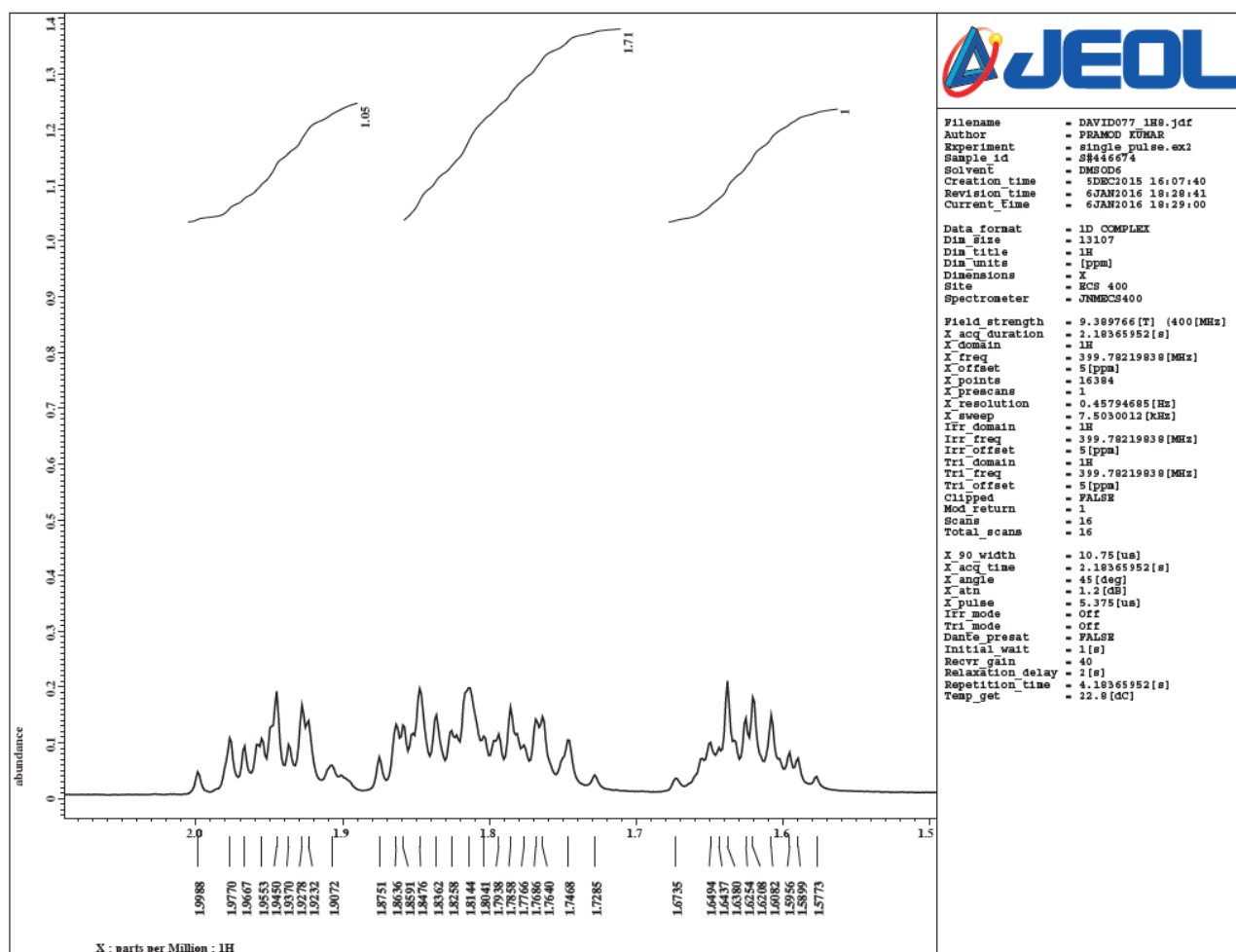
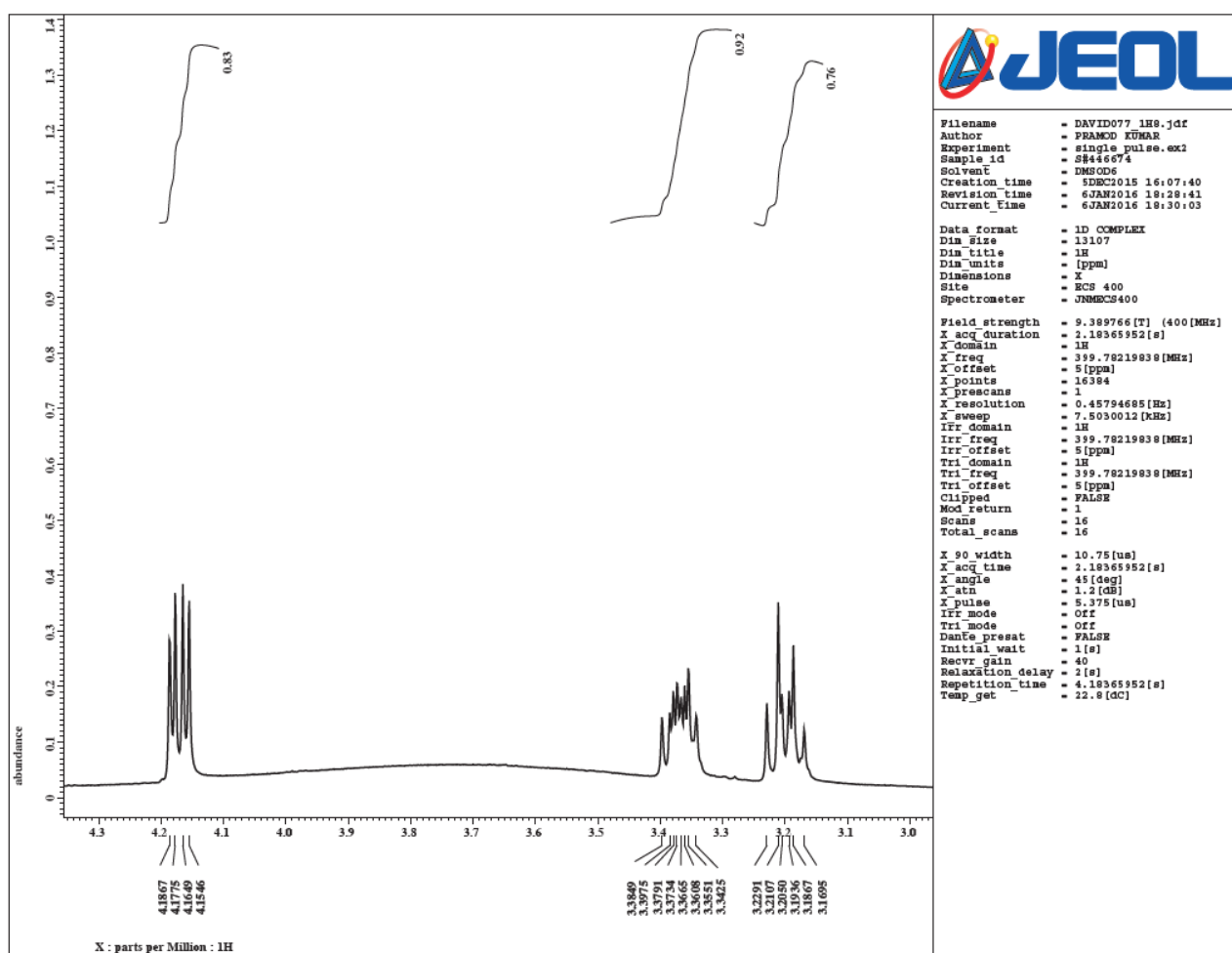


Fig. S-52 ^1H NMR spectrum of compound **27m**



115
116 Fig. S-53 ^1H NMR spectrum of compound **27m** (expansion)



117

118

Fig. S-54 ^1H NMR spectrum of compound **27m** (expansion)

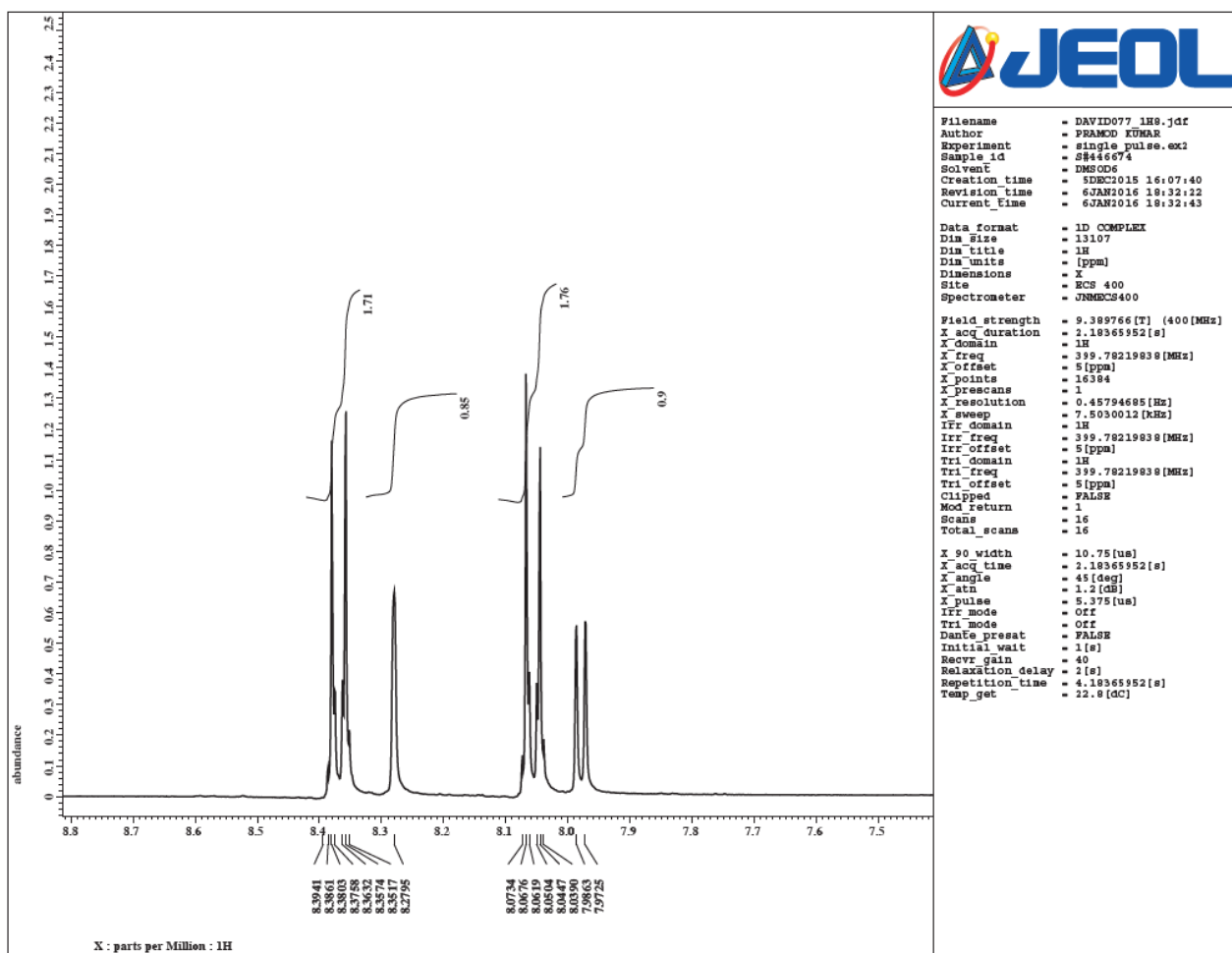


Fig. S-55 ^1H NMR spectrum of compound **27m** (expansion)

David 072 17 (0.426) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.00,LS 10); Sm (SG, 2x5.00); Sb (10,1.00); Cm (17:22-1:3)

1: TOF MS ES+
5.20e3

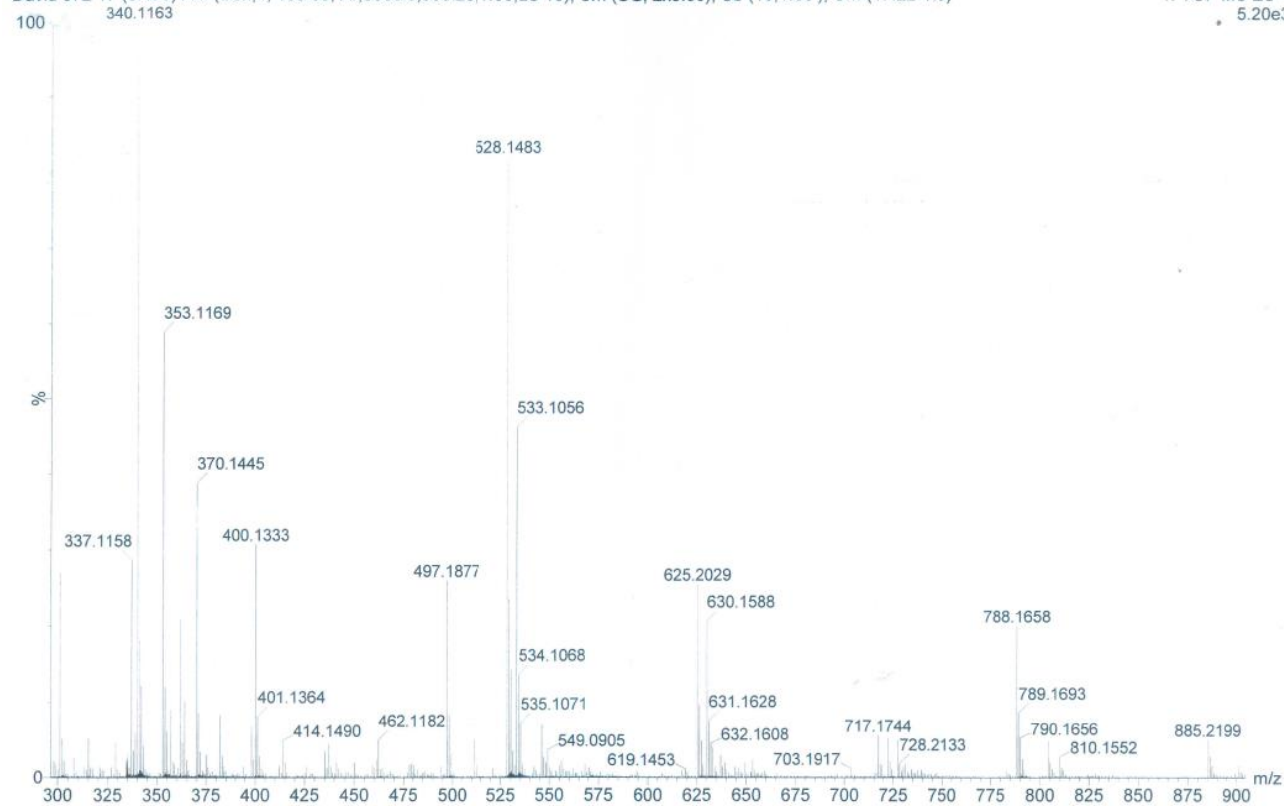
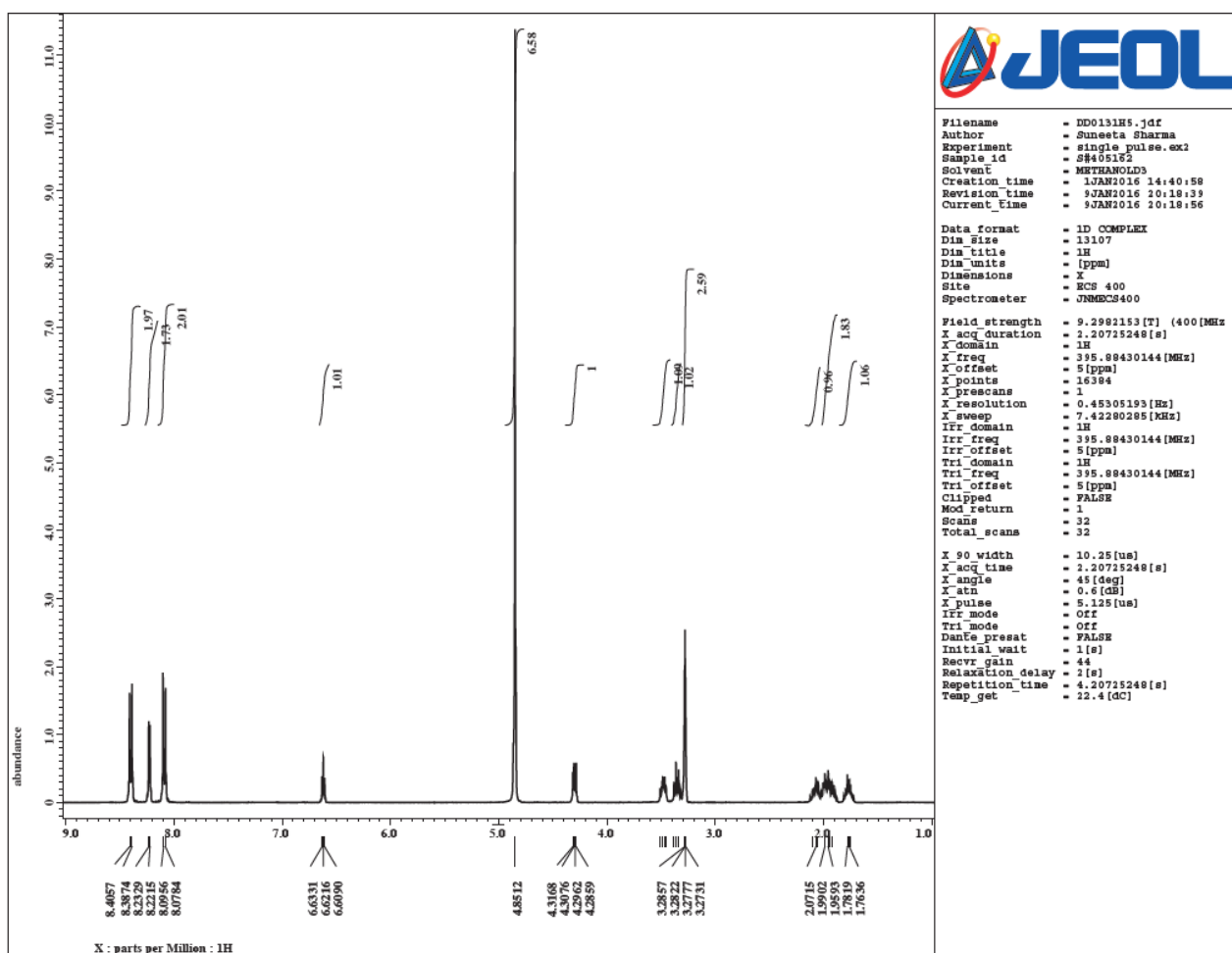


Fig. S-56 mass spectrum of compound 27m



124
125 Fig. S-57 ¹H NMR spectrum of compound **27n**

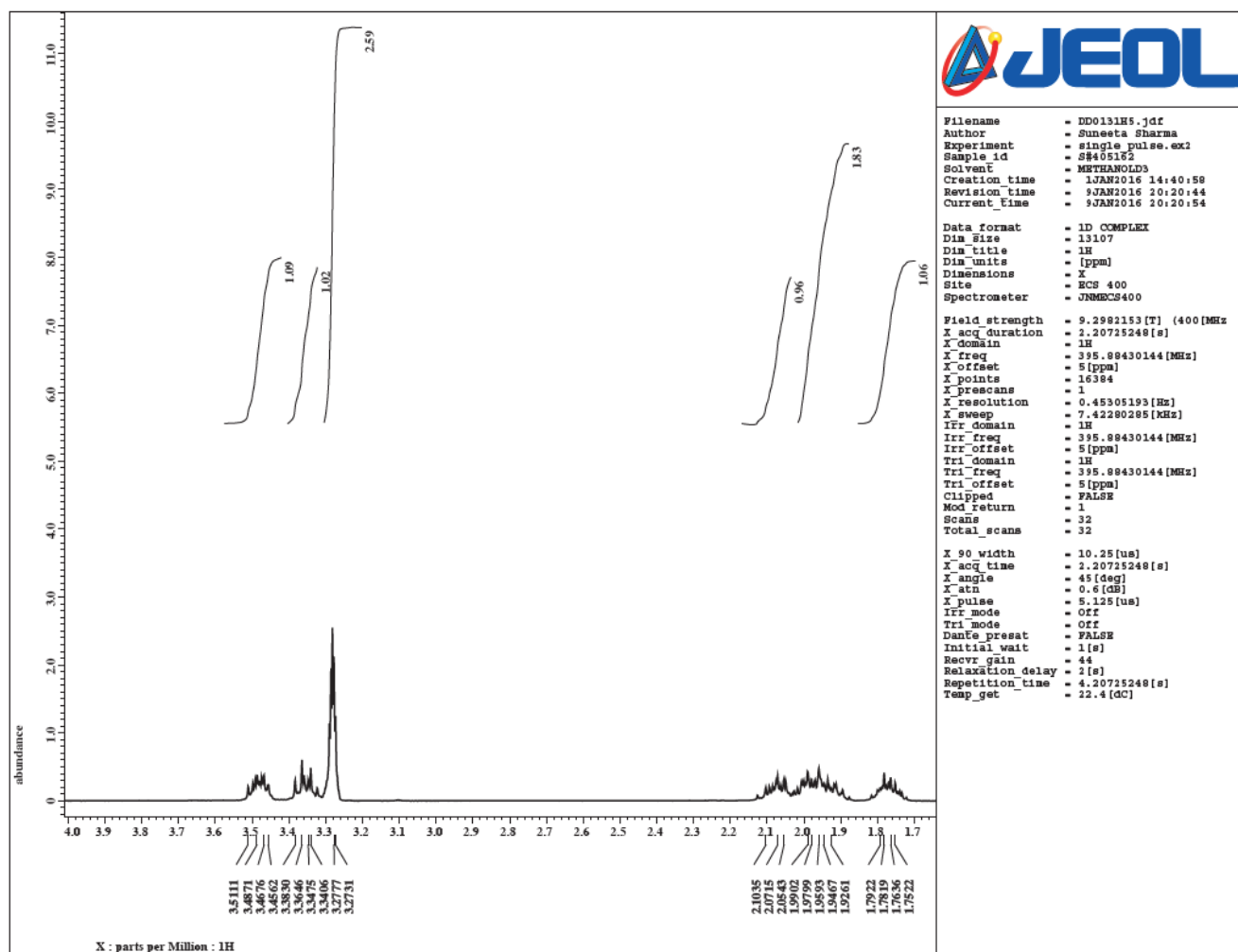
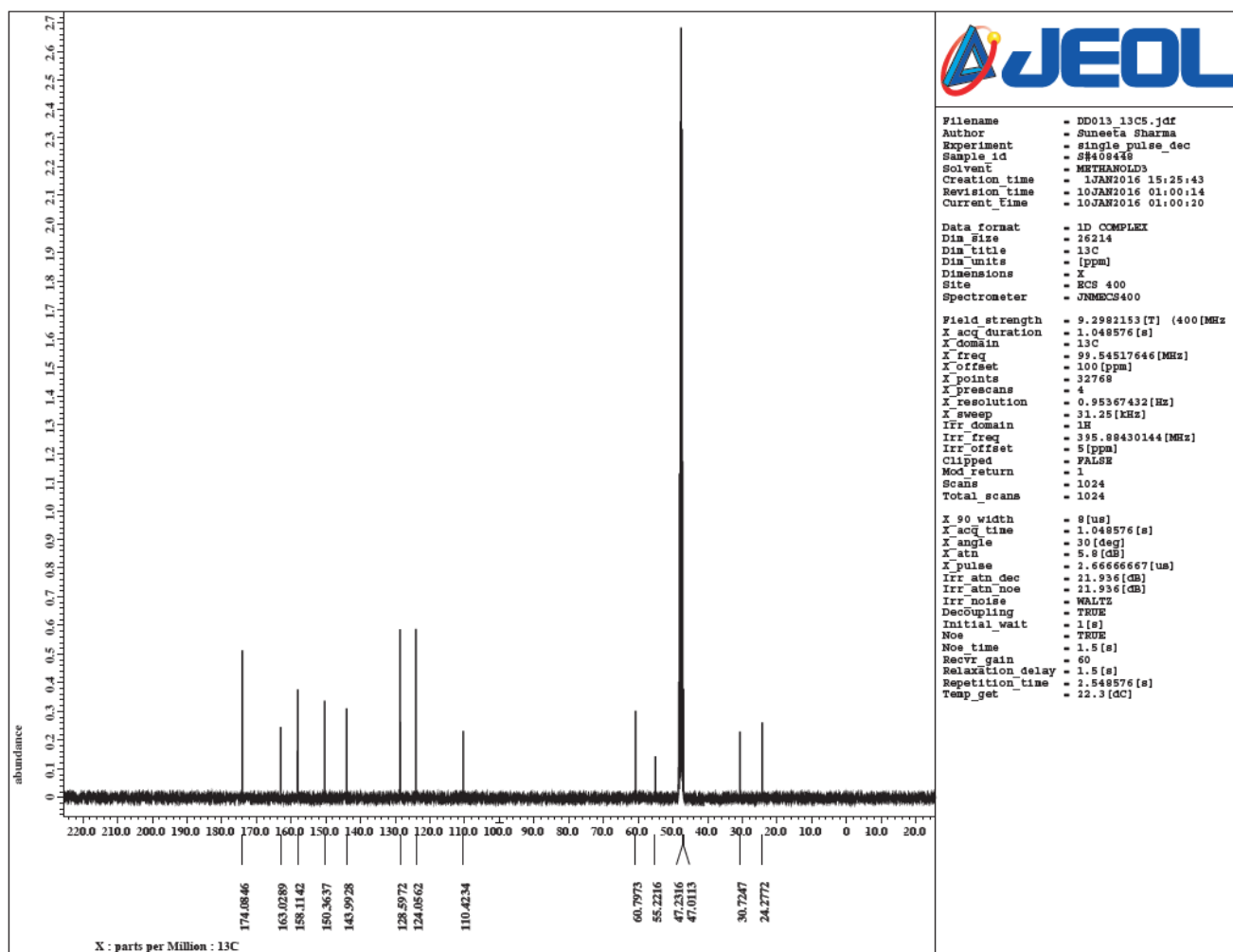


Fig. S-58 ^1H NMR spectrum of compound **27n** (expansion)



128

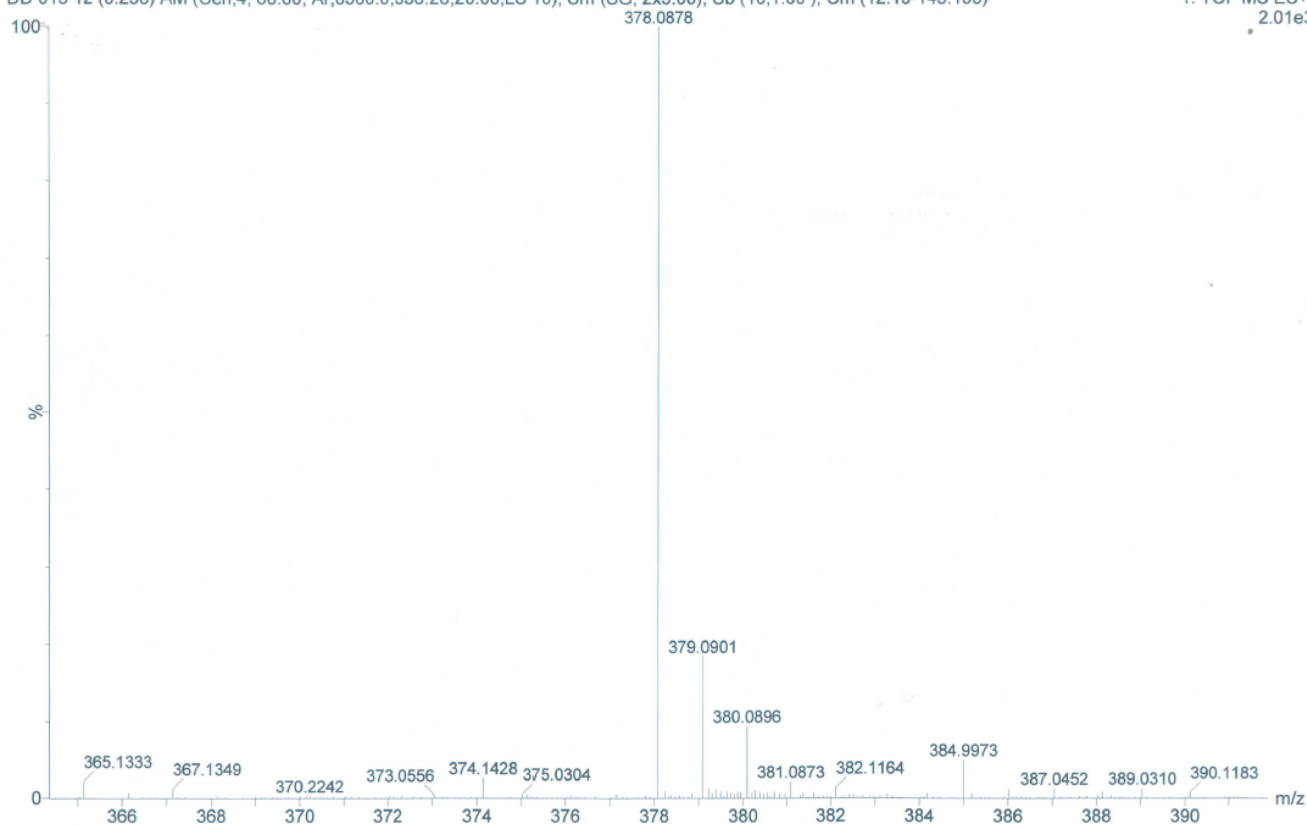
129

Fig. S-59 ^{13}C NMR spectrum of compound **27n**

DD 013 12 (0.258) AM (Cen,4, 60.00, Ar,8500.0,556.28,20.00,LS 10); Sm (SG, 2x5.00); Sb (10,1.00); Cm (12:15-145:153)

1: TOF MS ES+

2.01e3



130

131

Fig. S-60 mass spectrum of compound 27n

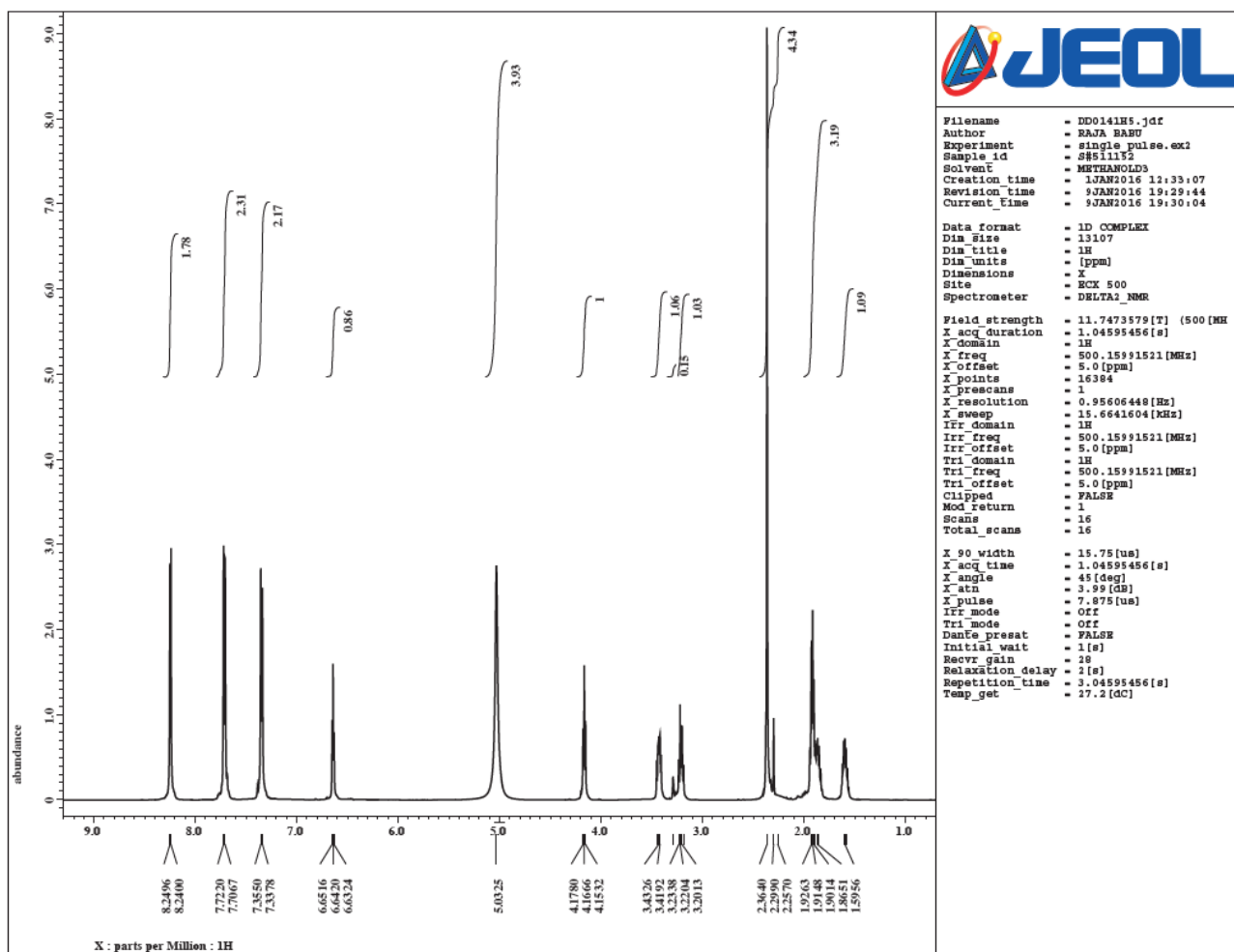


Fig. S-61 ^1H NMR spectrum of compound **27o**

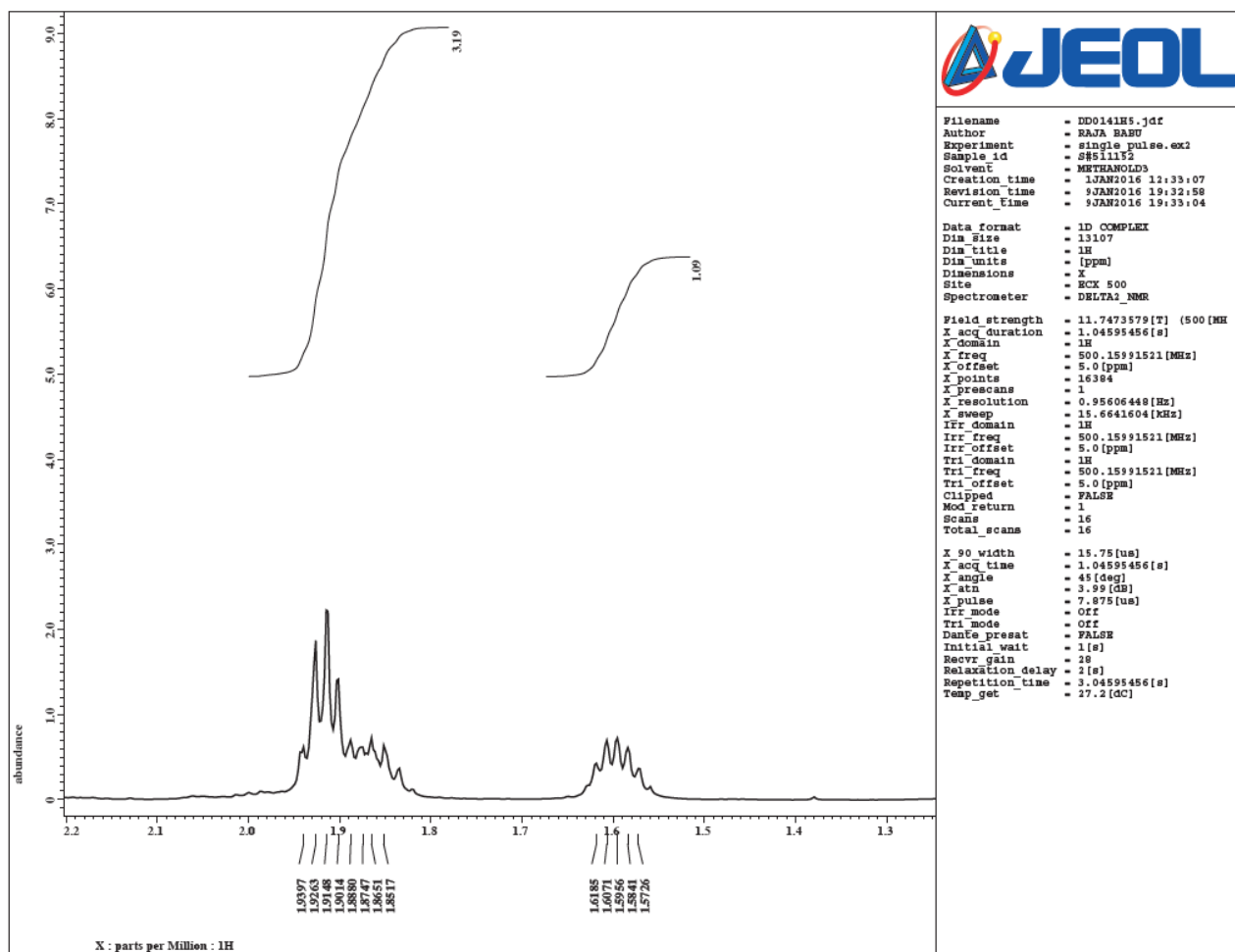


Fig. S-62 ^1H NMR spectrum of compound **27o** (expansion)

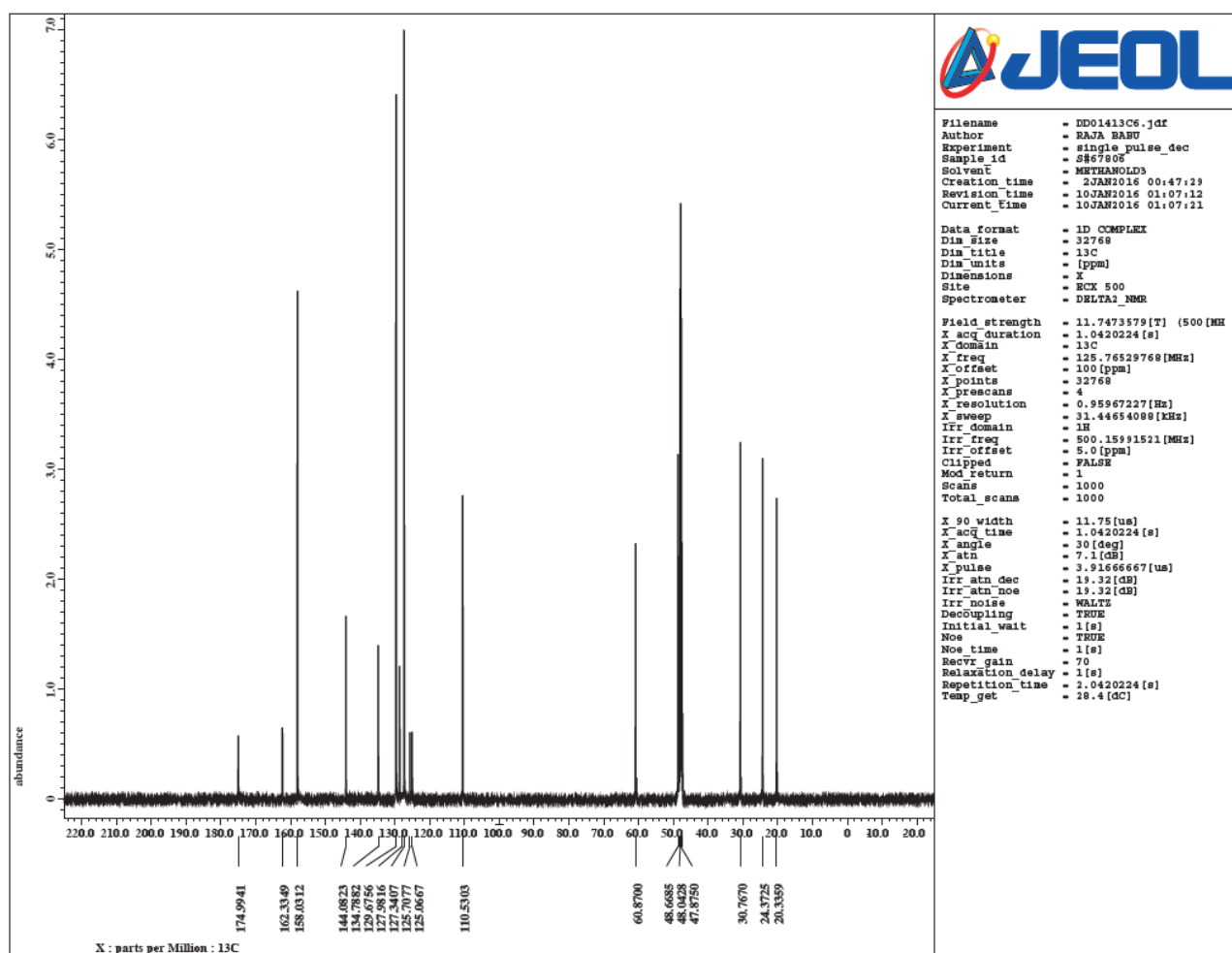


Fig. S-63 ^{13}C NMR spectrum of compound **27o**

DD 014 16 (0.332) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.00,LS 10); Sm (SG, 2x5.00); Sb (10,1.00)

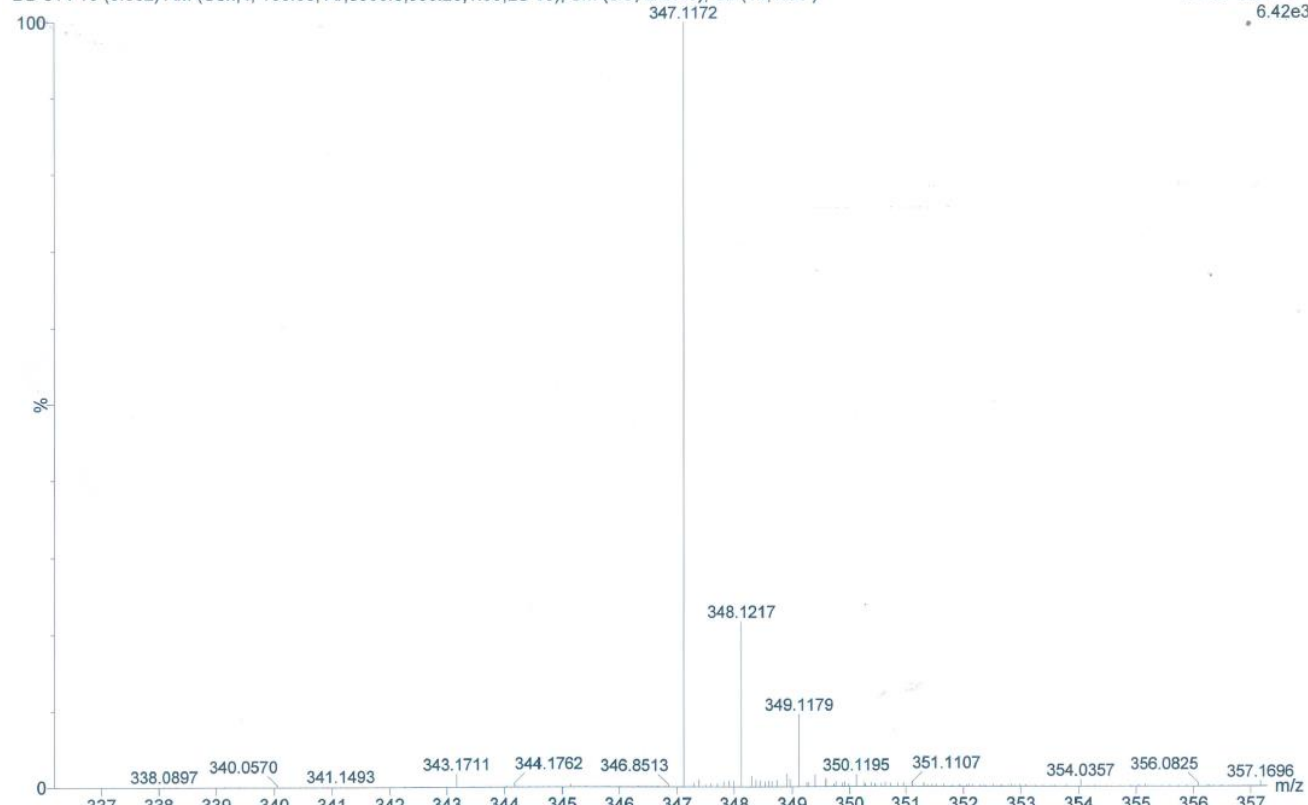
1: TOF MS ES+
6.42e3

Fig. S-64 mass spectrum of compound 27o

DD-94 16 (0.333) AM (Cen,4, 100.00, Ar,8500.0,556.28,1.10,LS 10); Sm (SG, 2x5.00); Sb (10,1.00)

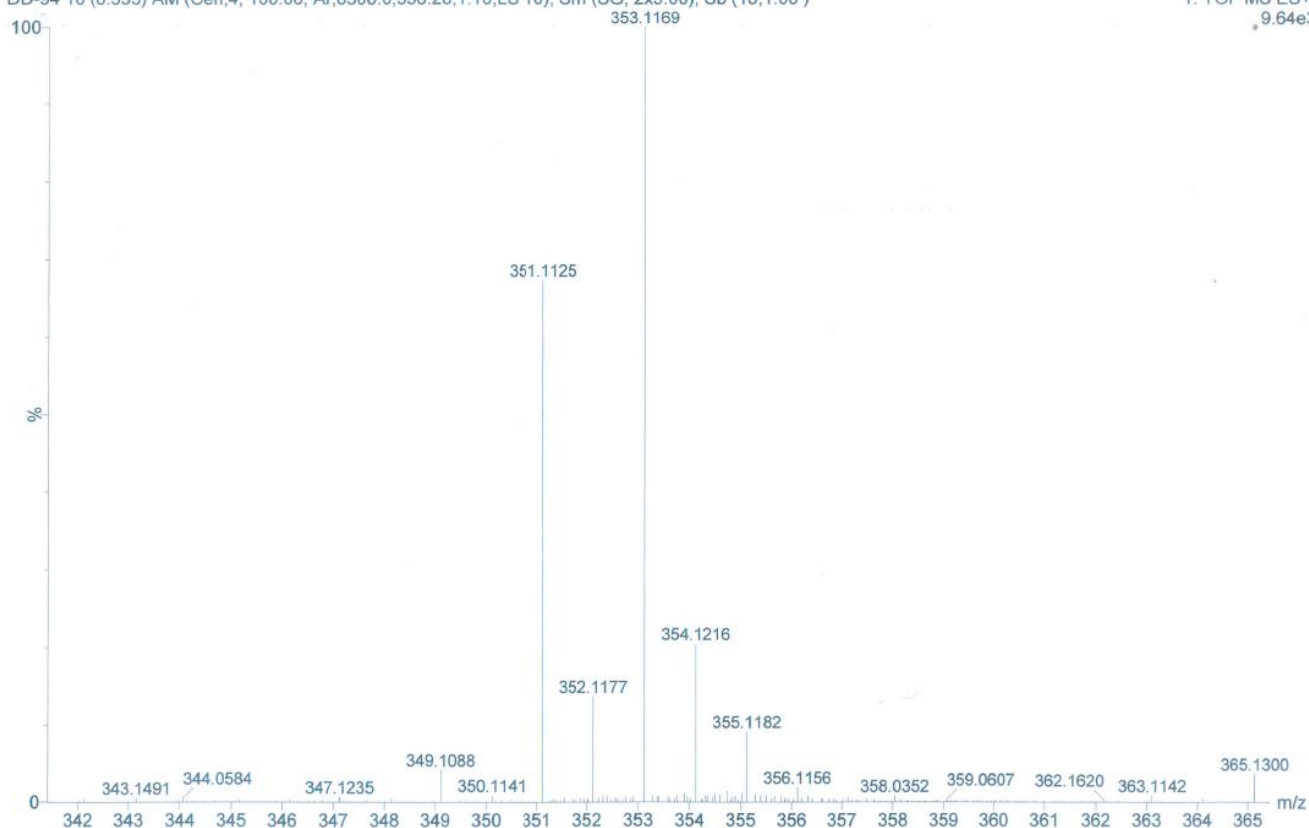
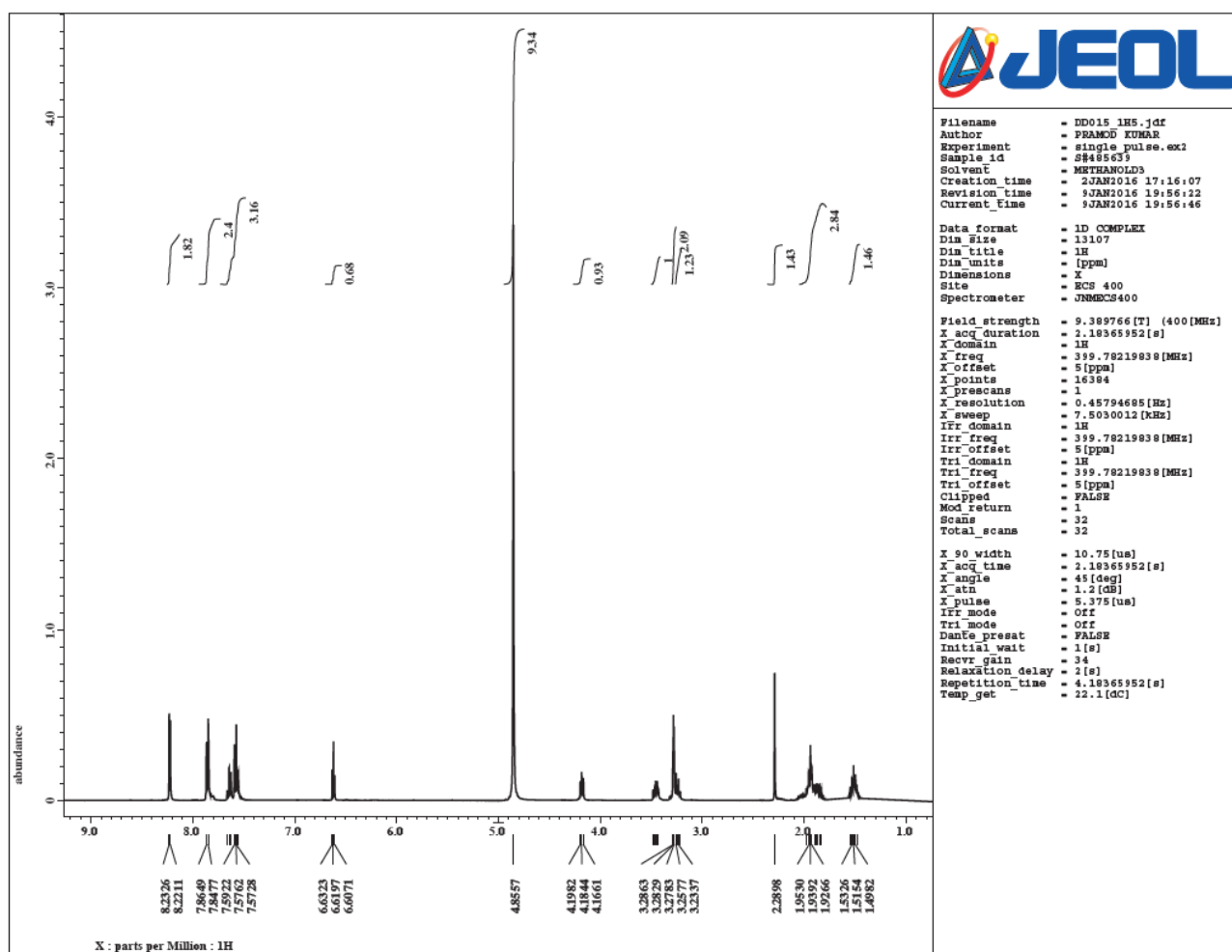
1: TOF MS ES+
9.64e3

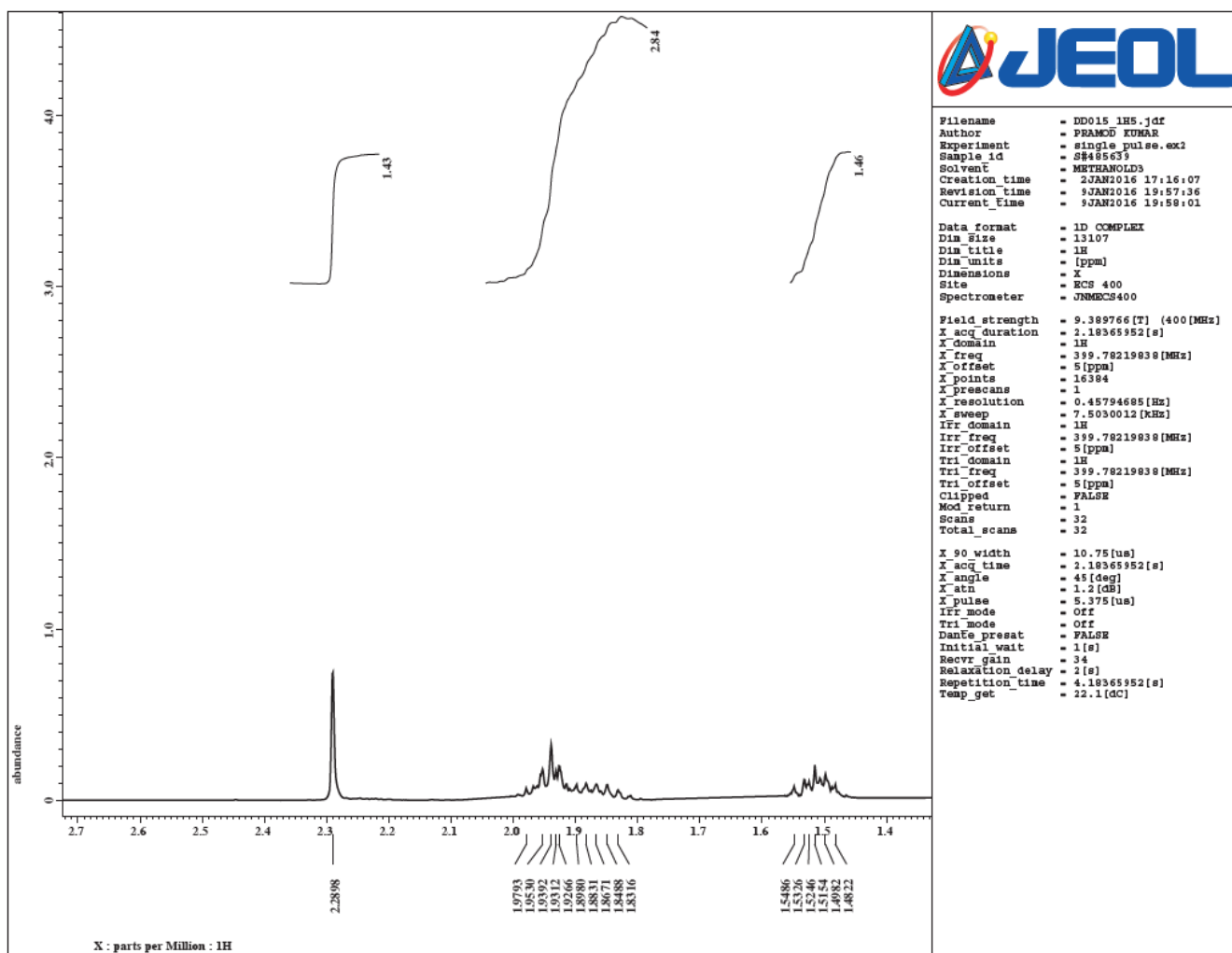
Fig. S-65 mass spectrum of compound 27p



146

147

Fig. S-66 ¹H NMR spectrum of compound **27q**



148

149

Fig. S-67 ^1H NMR spectrum of compound **27q** (expansion)

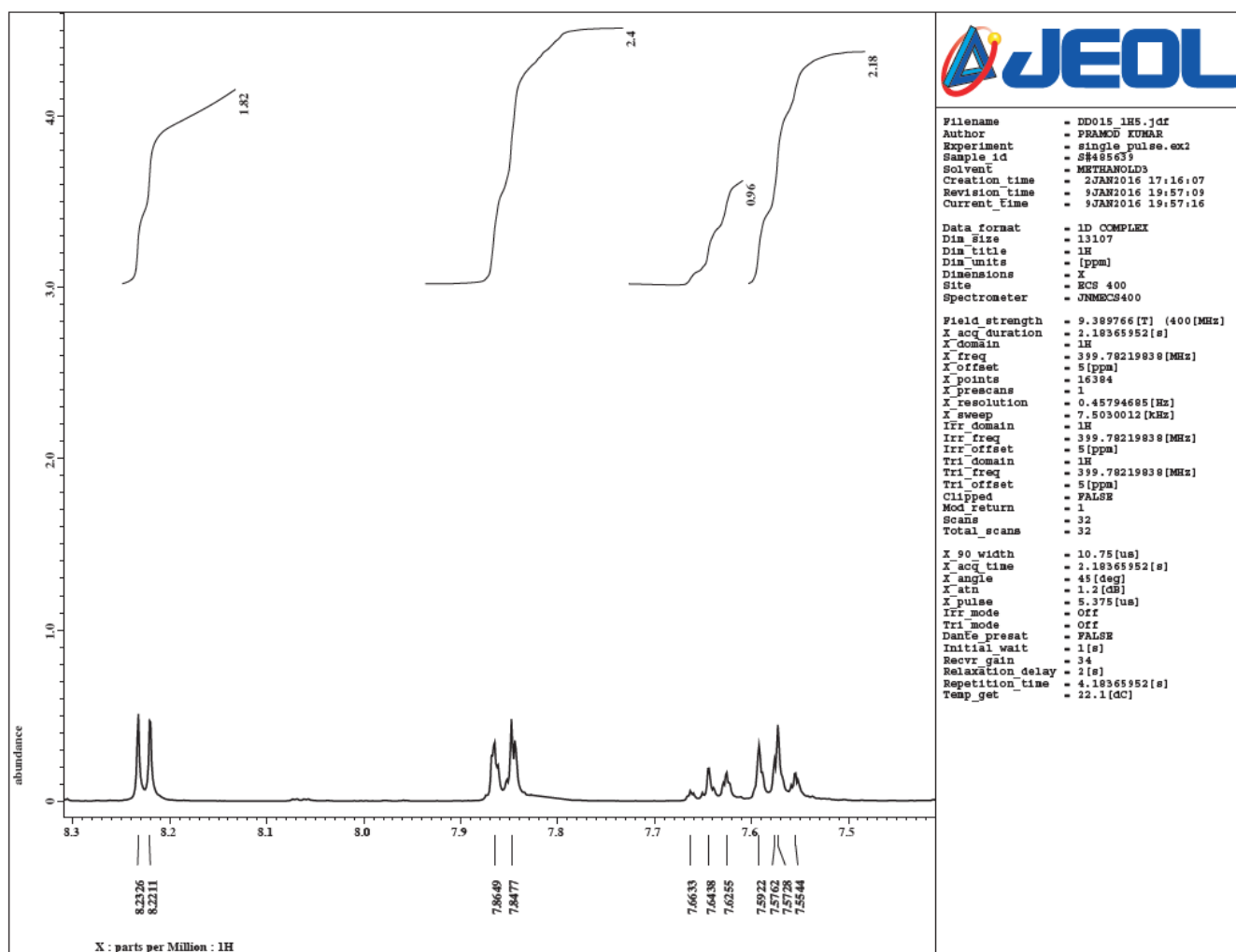


Fig. S-68 ^1H NMR spectrum of compound **27q** (expansion)

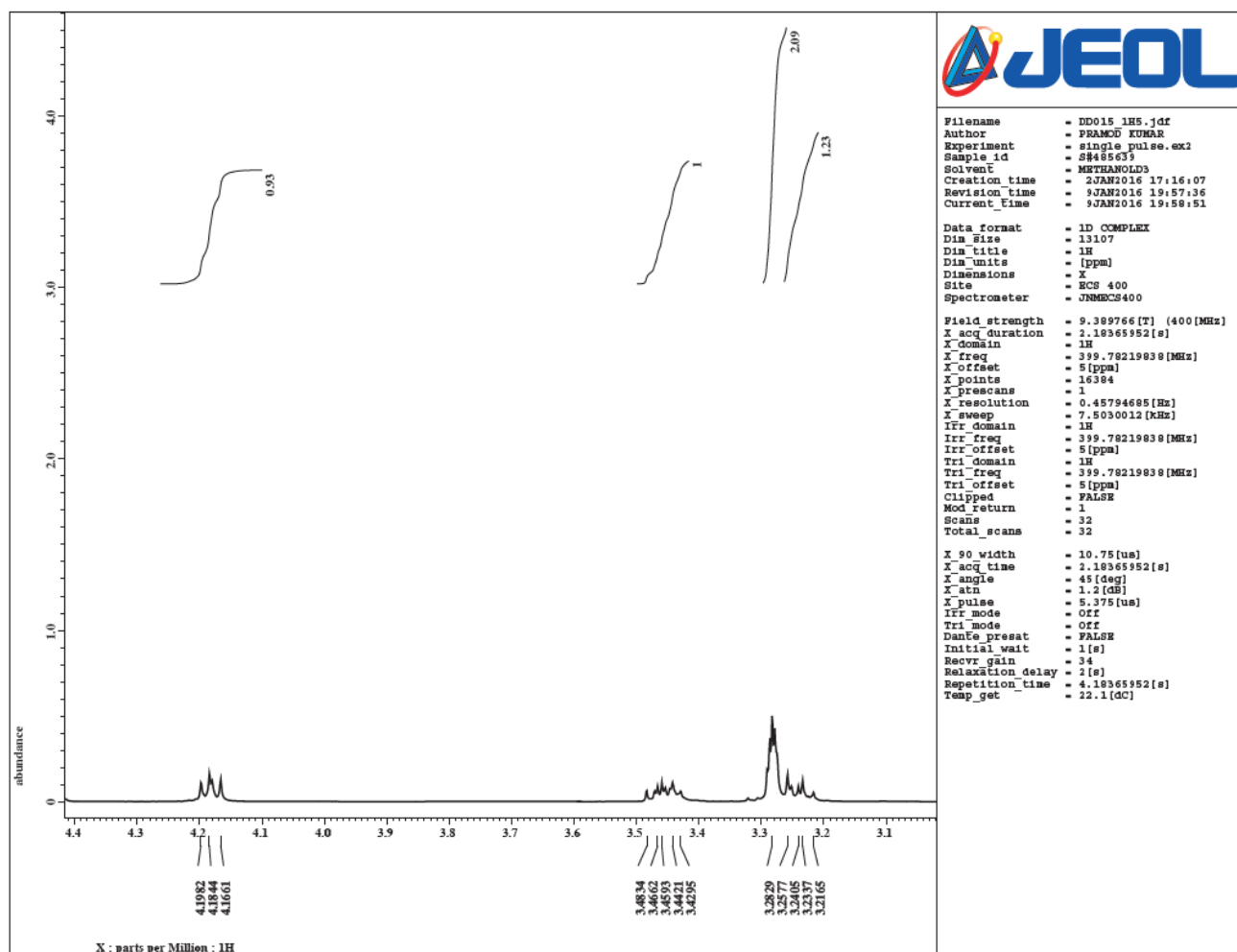
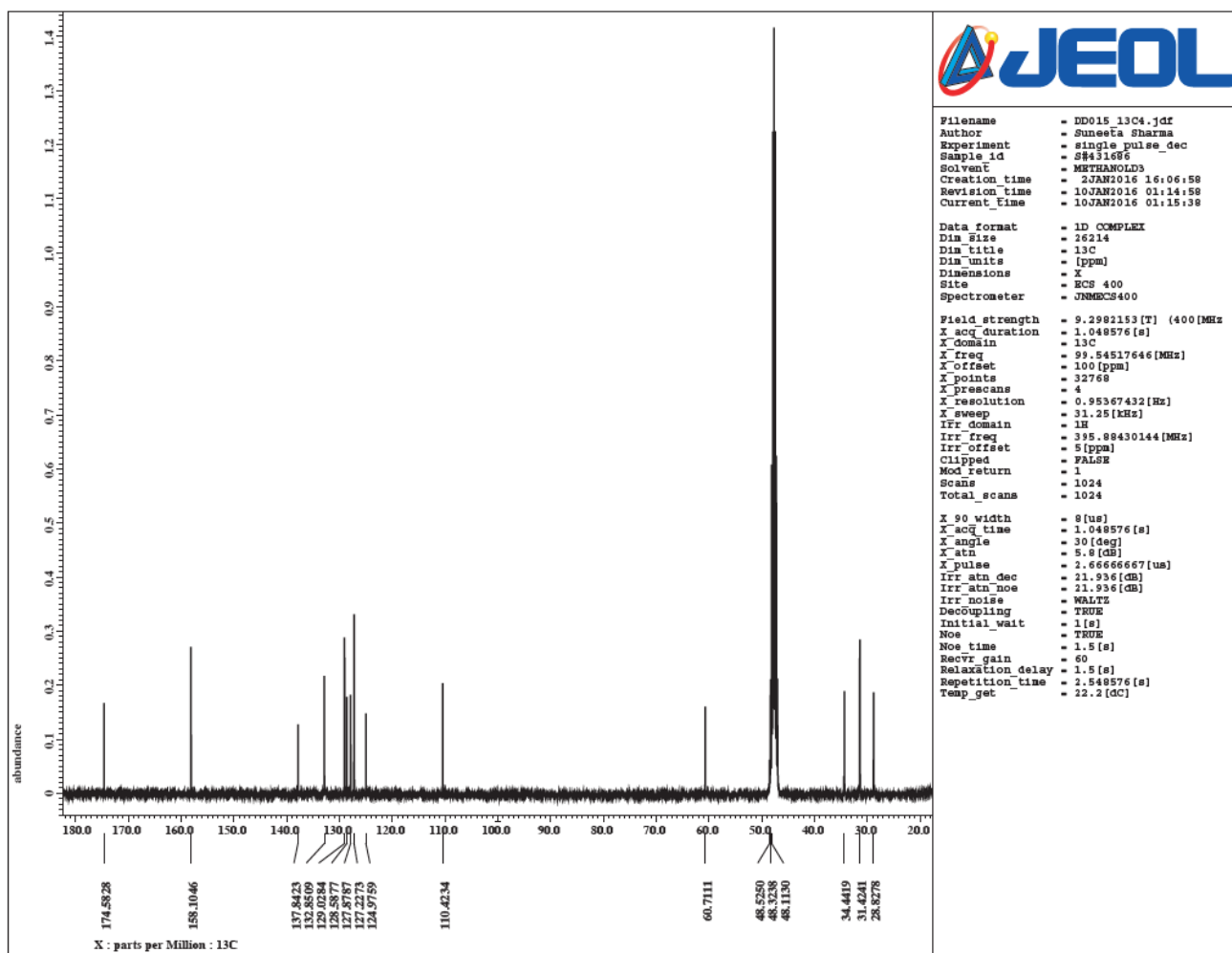


Fig. S-69 ^1H NMR spectrum of compound **27q** (expansion)



154
 155 Fig. S-70 ^{13}C NMR spectrum of compound **27q**

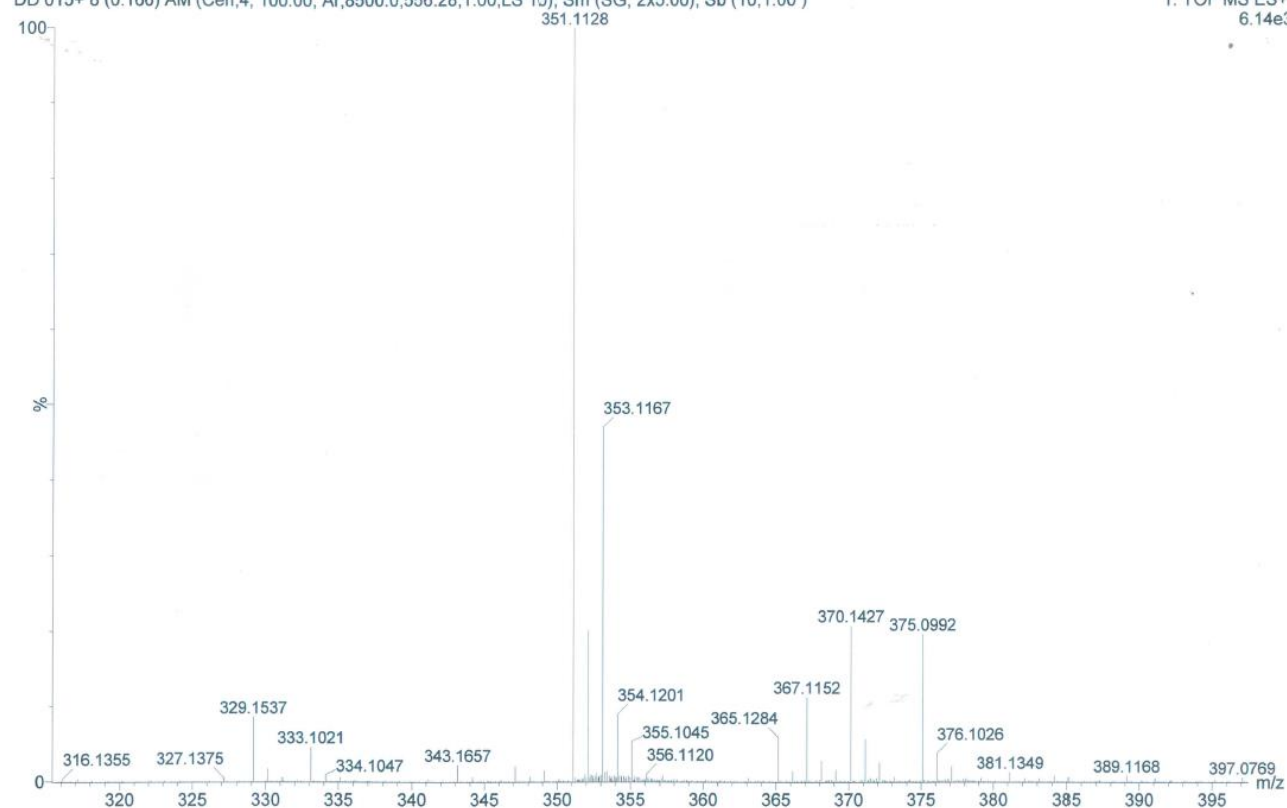


Fig. S-71 mass spectrum of compound 27q