

Supporting Information

Synthesis, Characterizations, and Hole-transporting Properties of Pyrenyl N-Substituted Triazatruxenes

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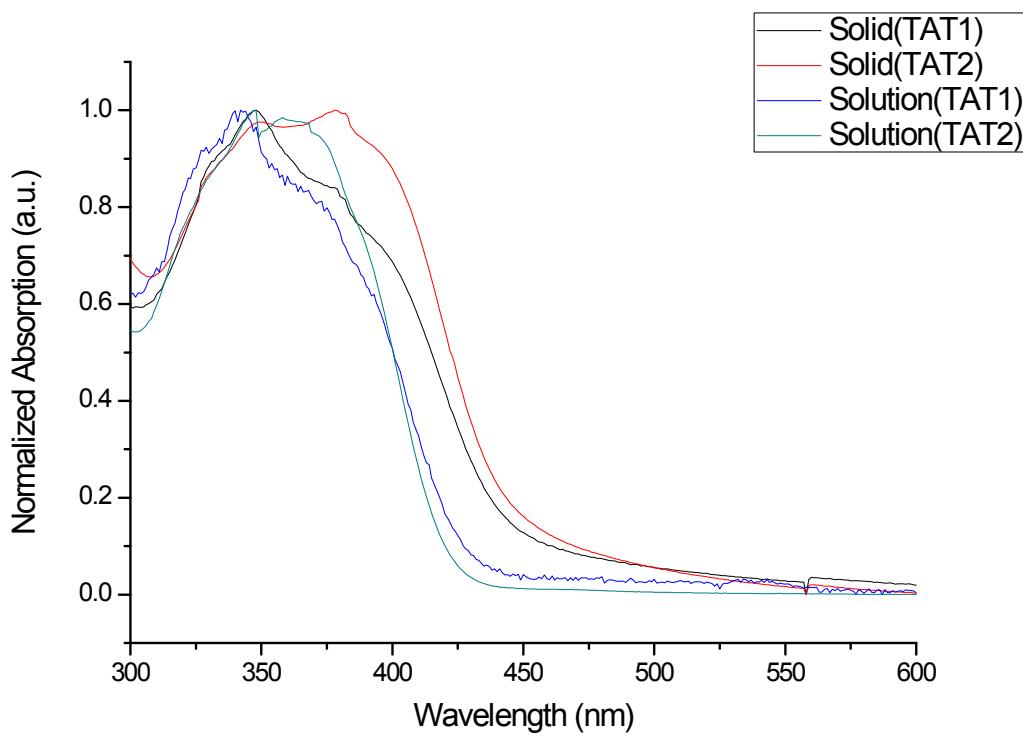


Fig. S1 Normalized absorption spectra of **TAT1** and **TAT2** in solution phase and thin film

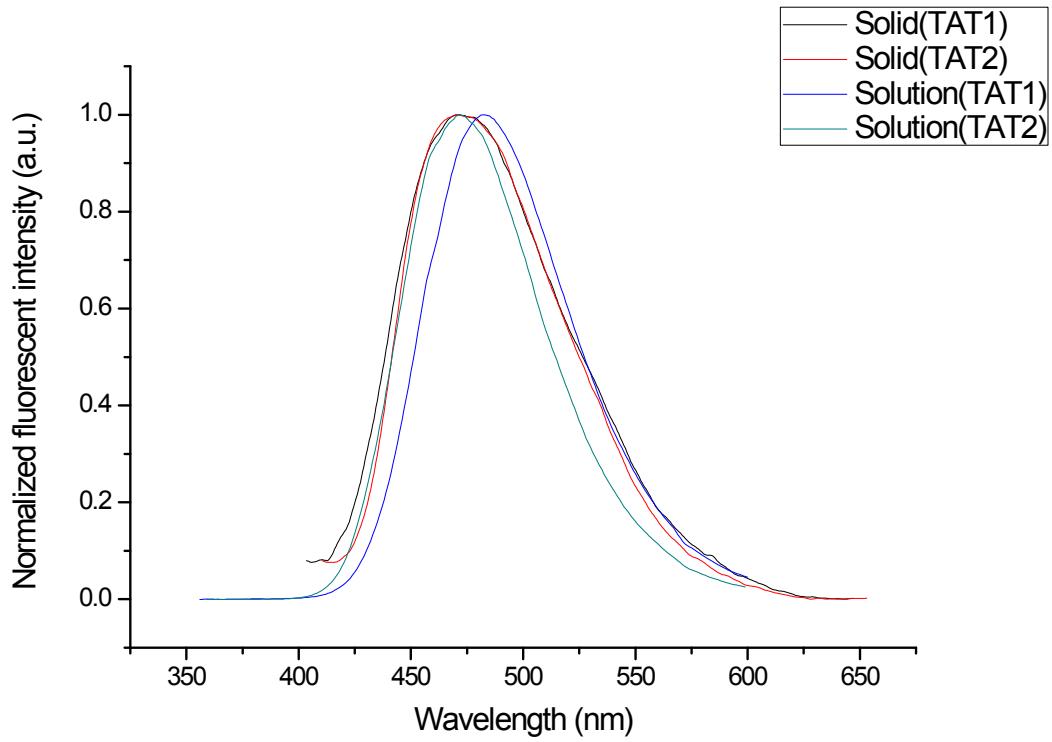


Fig. S2 Normalized emission spectra of **TAT1** and **TAT2** in solution phase and thin film

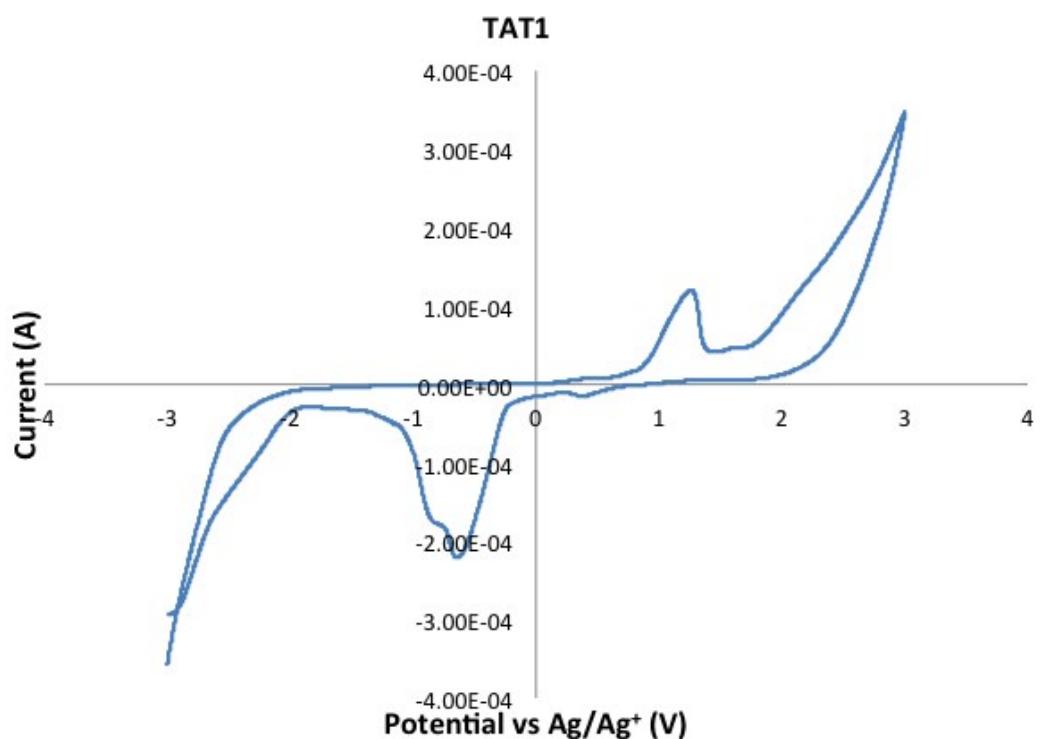


Fig. S3 Cyclic voltammogram of **TAT1**

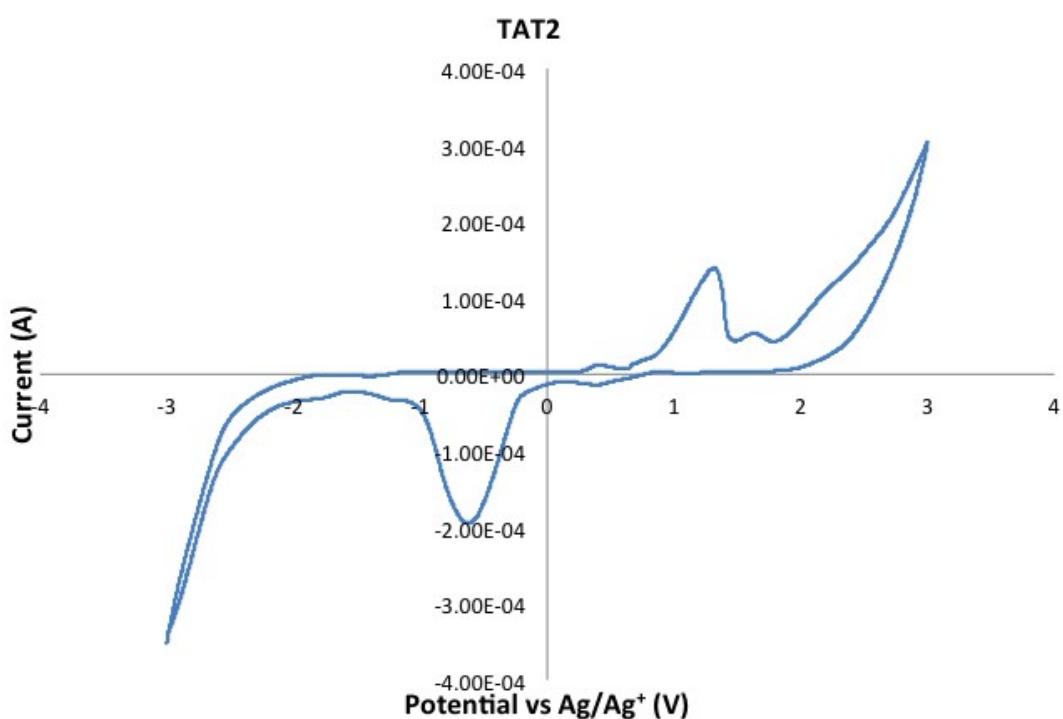


Fig. S4 Cyclic voltammogram of **TAT2**

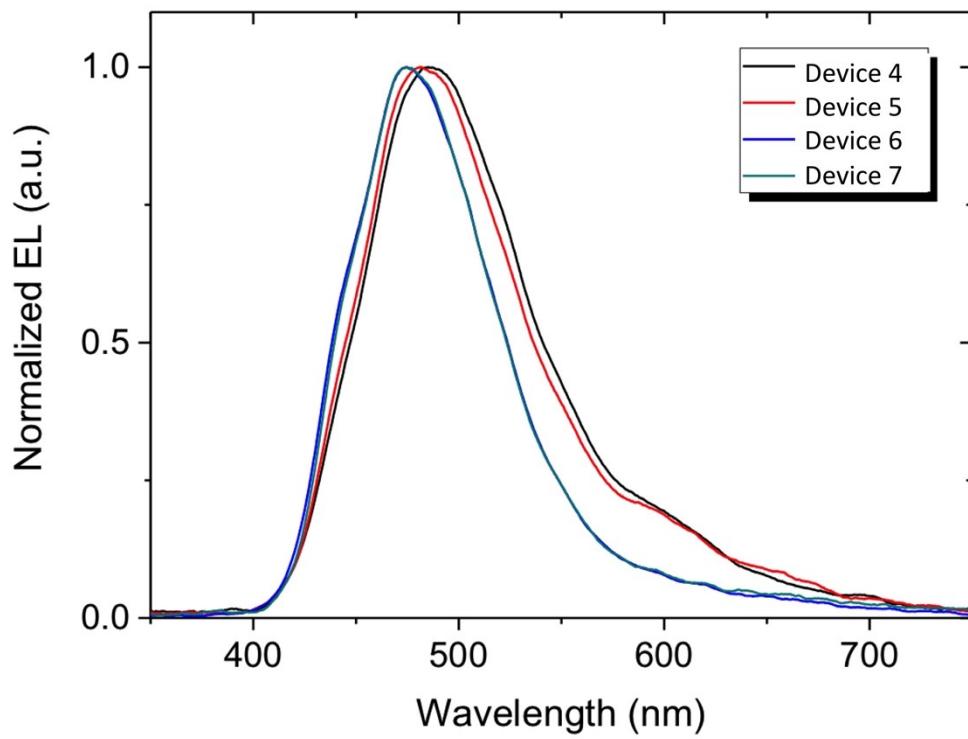


Fig. S5. EL spectra of Device 4-7

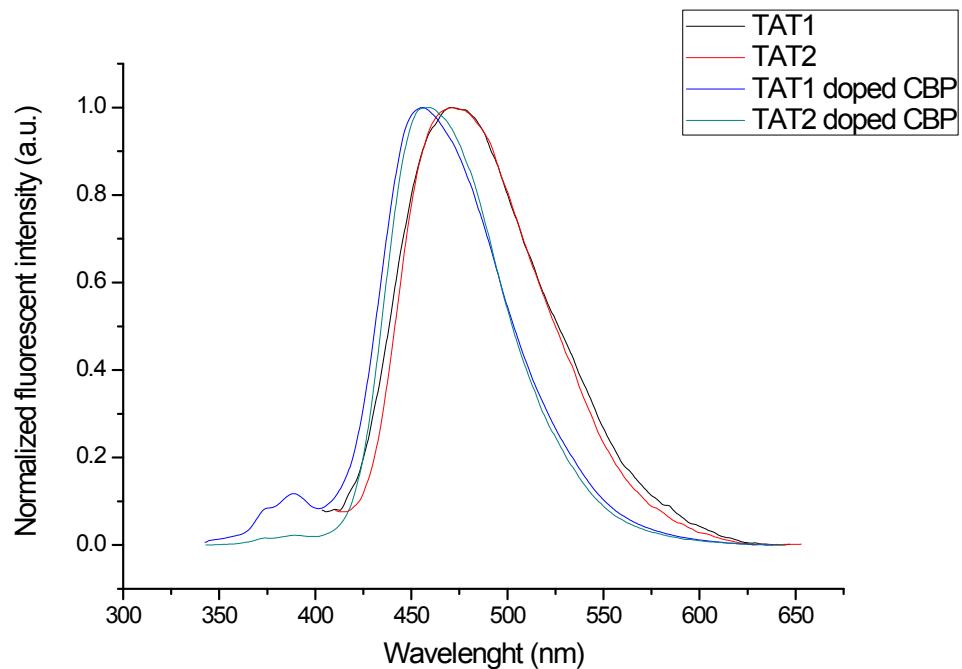


Fig. S6. PL spectra of **TAT1**, **TAT2** and CBP films doped with either **TAT1** or **TAT2**.

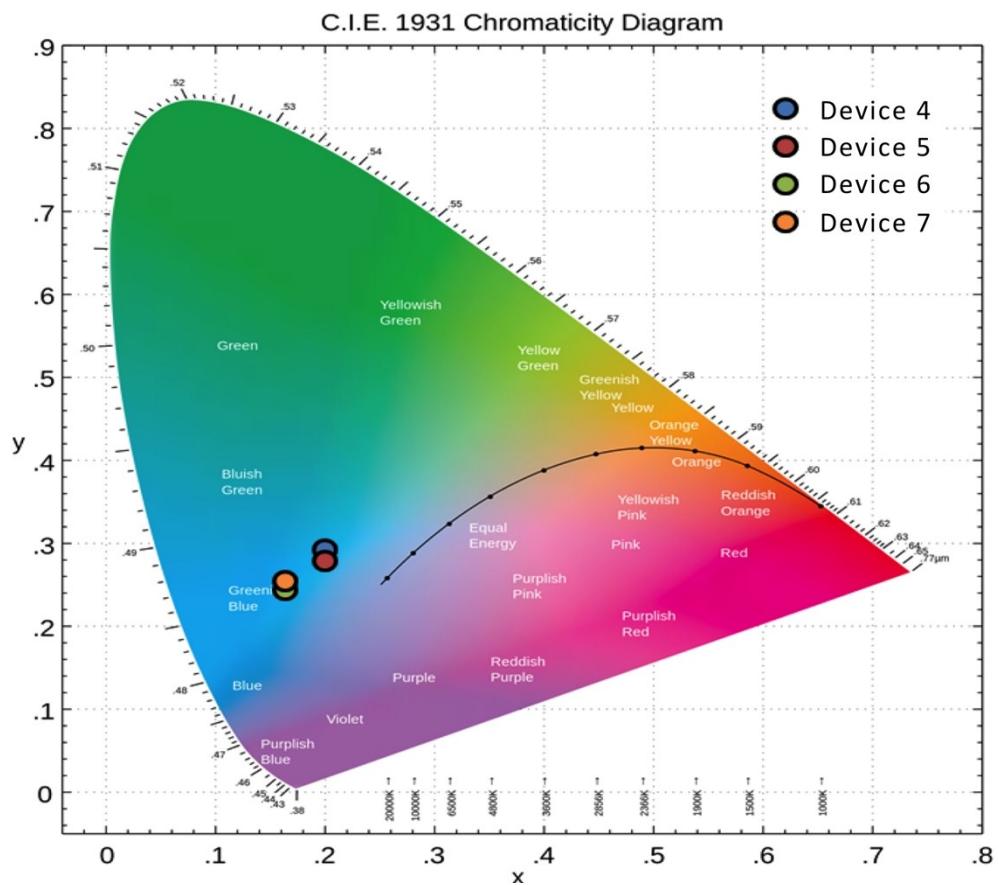
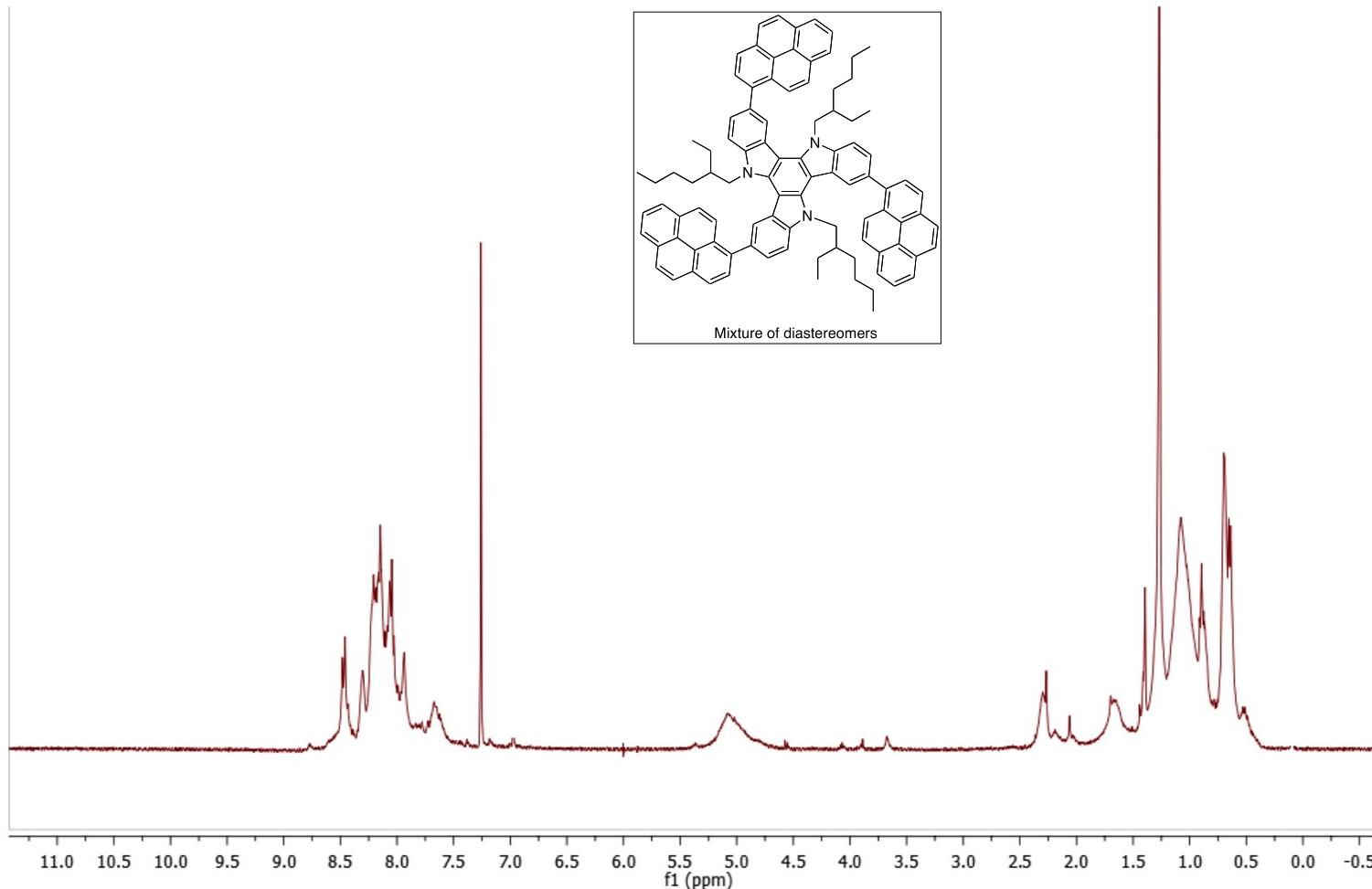


Fig. S7. CIE coordination (x,y) of Device 4-7.

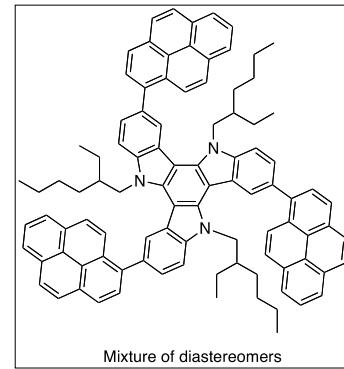


^1H -NMR of TAT1 in CDCl_3

Oct10-2014-psa003
I-PRTT-020-2-P
chula_carbon10k

— 141.44

131.64
131.14
130.98
130.07
129.71
128.89
128.82
128.10
127.92
127.36
126.96
126.62
125.80
125.17
124.74
124.68
122.55
122.00
113.64



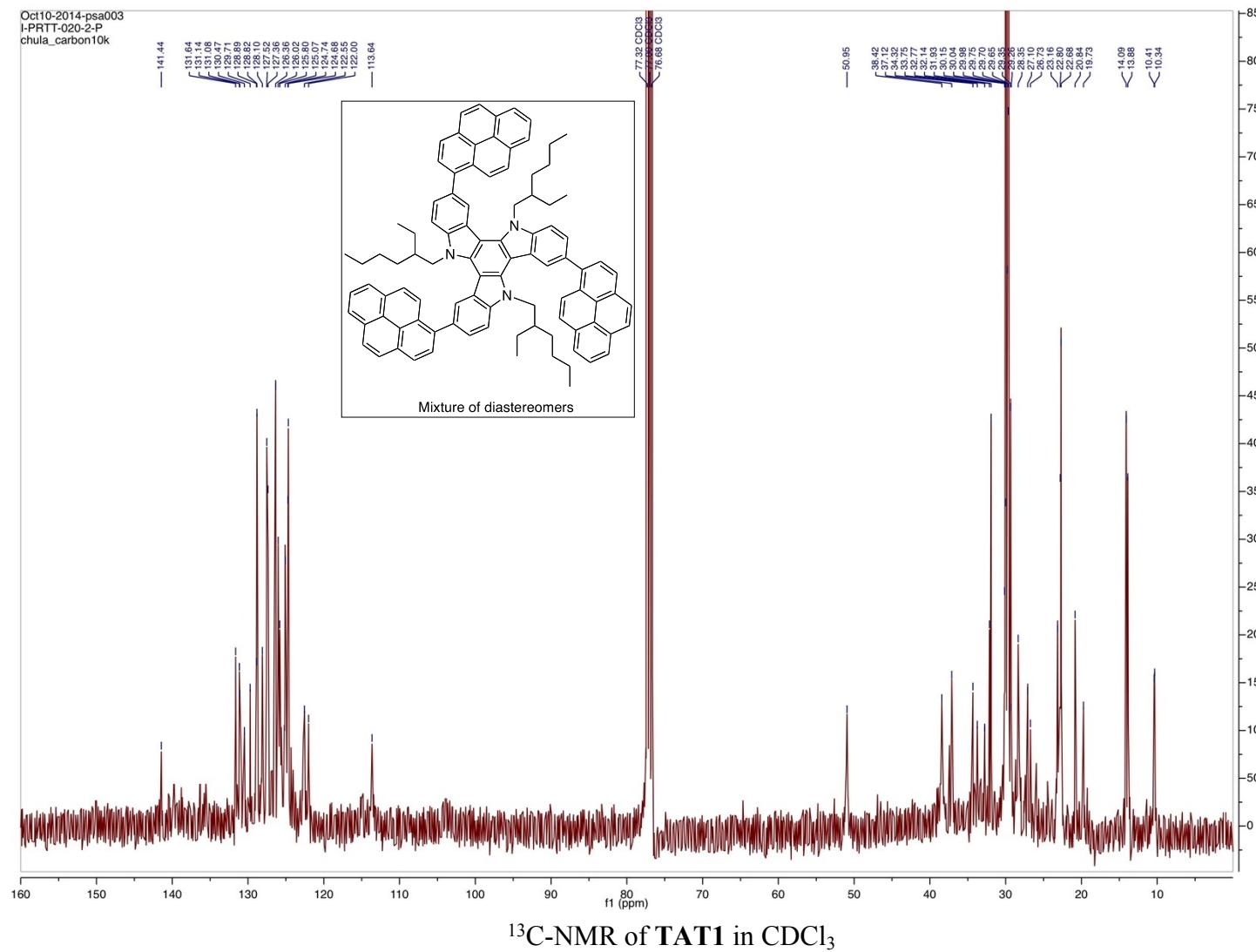
— 77.32 CDCl₃

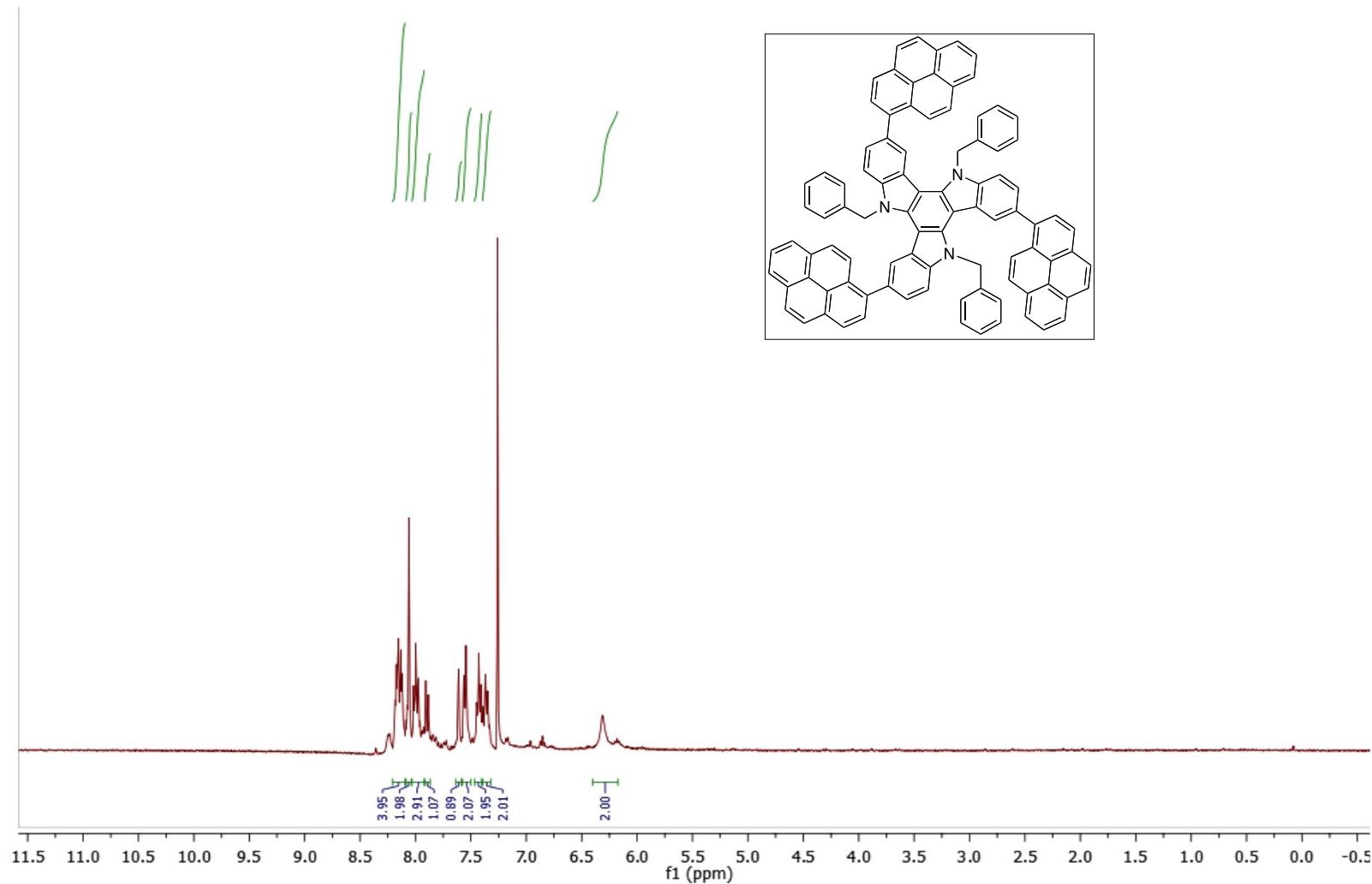
— 76.69 CDCl₃

— 50.95

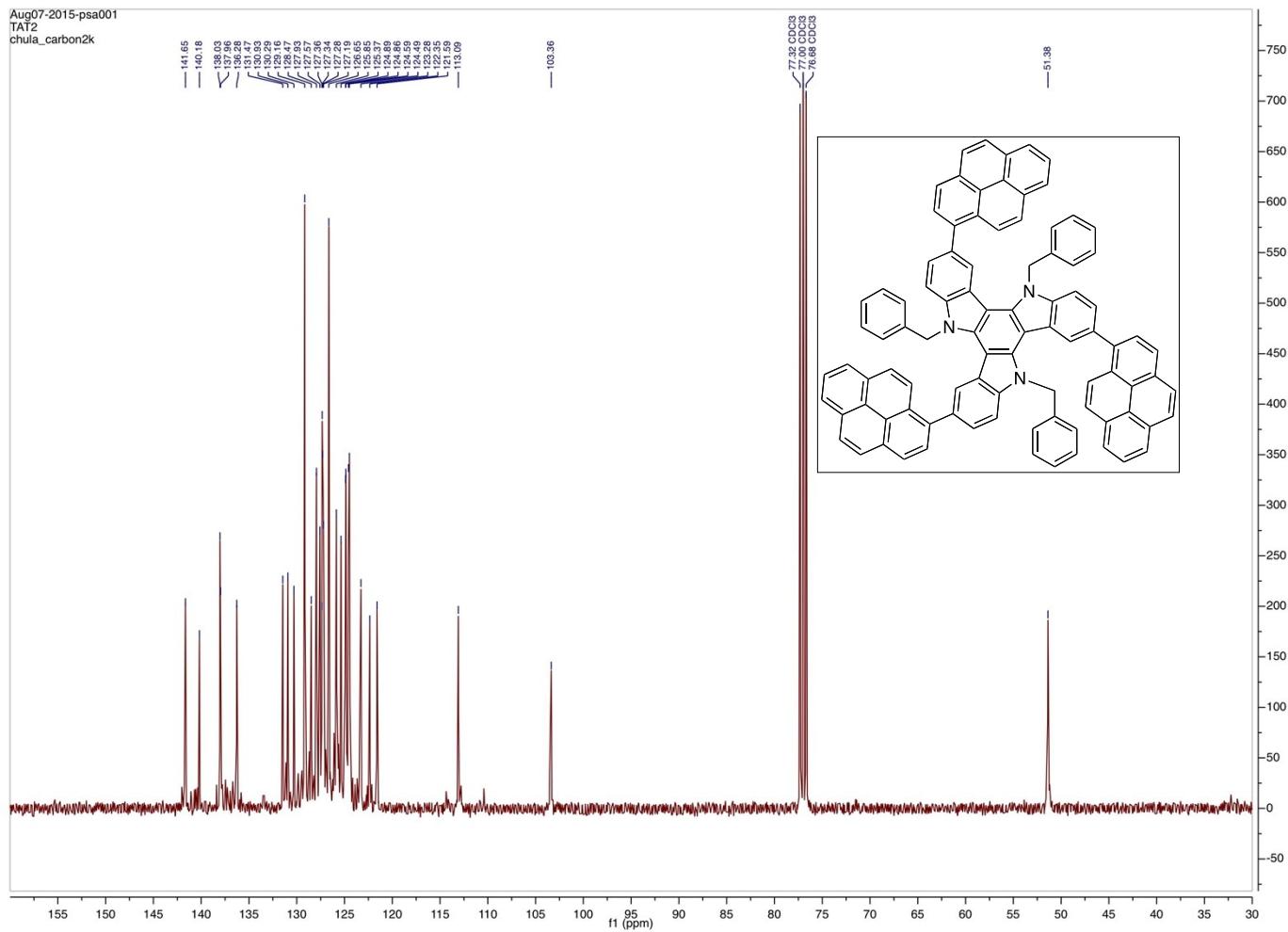
38.42
37.12
34.32
33.75
32.77
32.14
31.93
30.15
29.98
29.75
29.70
29.65
28.25
28.35
27.35
27.10
26.73
23.16
22.80
22.68
20.84
19.73

14.09
13.88
10.41
10.34

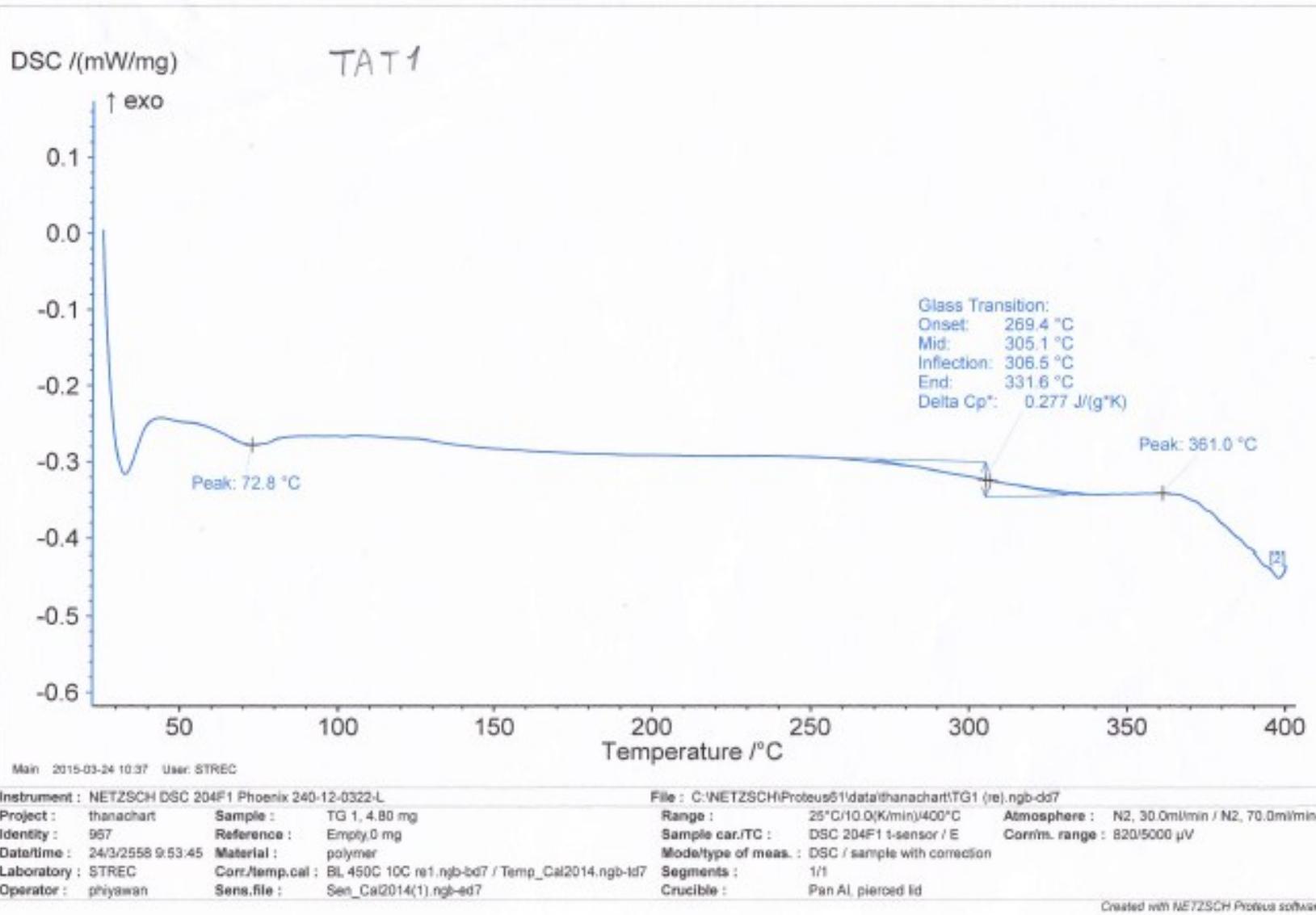




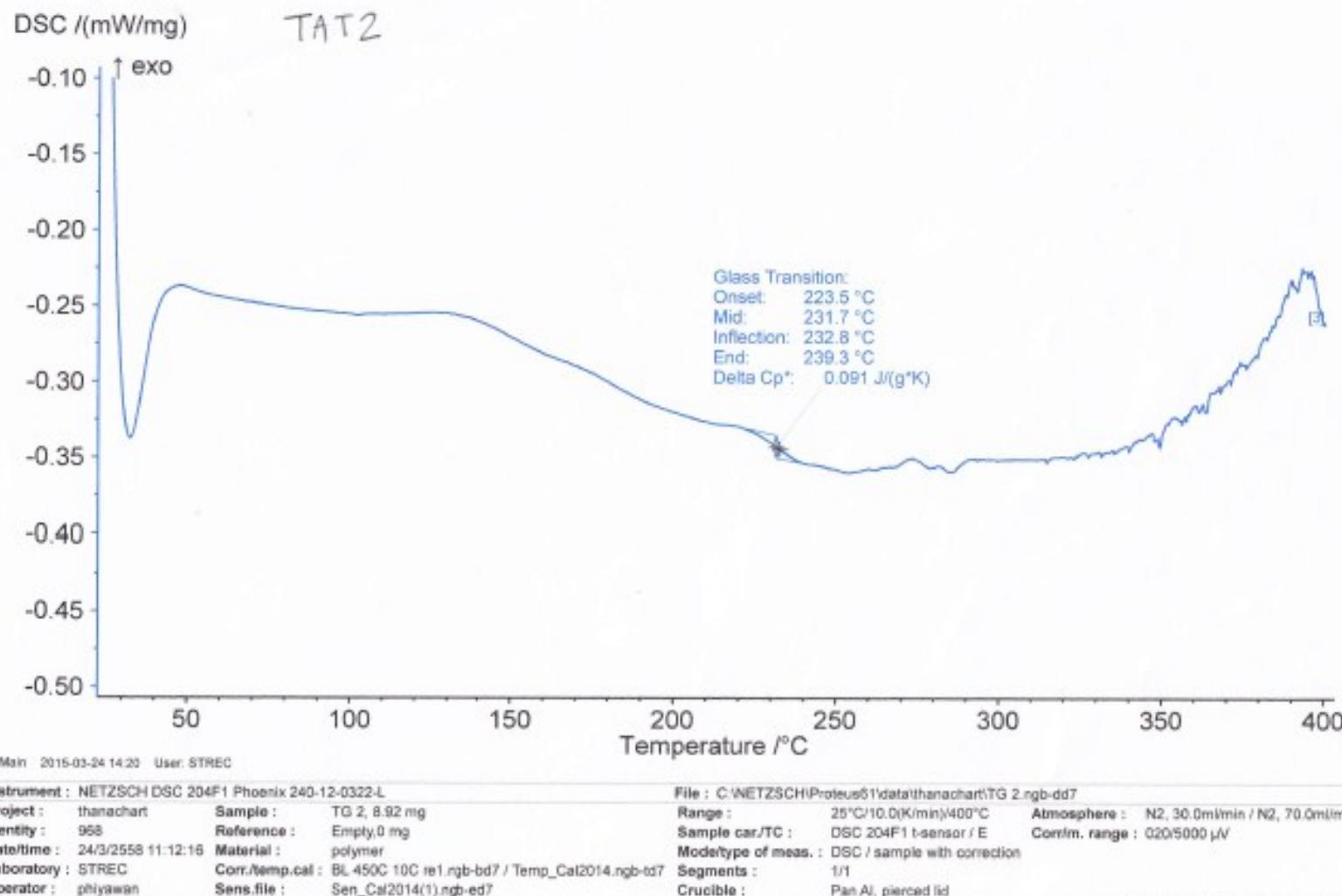
^1H -NMR of **TAT2** in CDCl_3



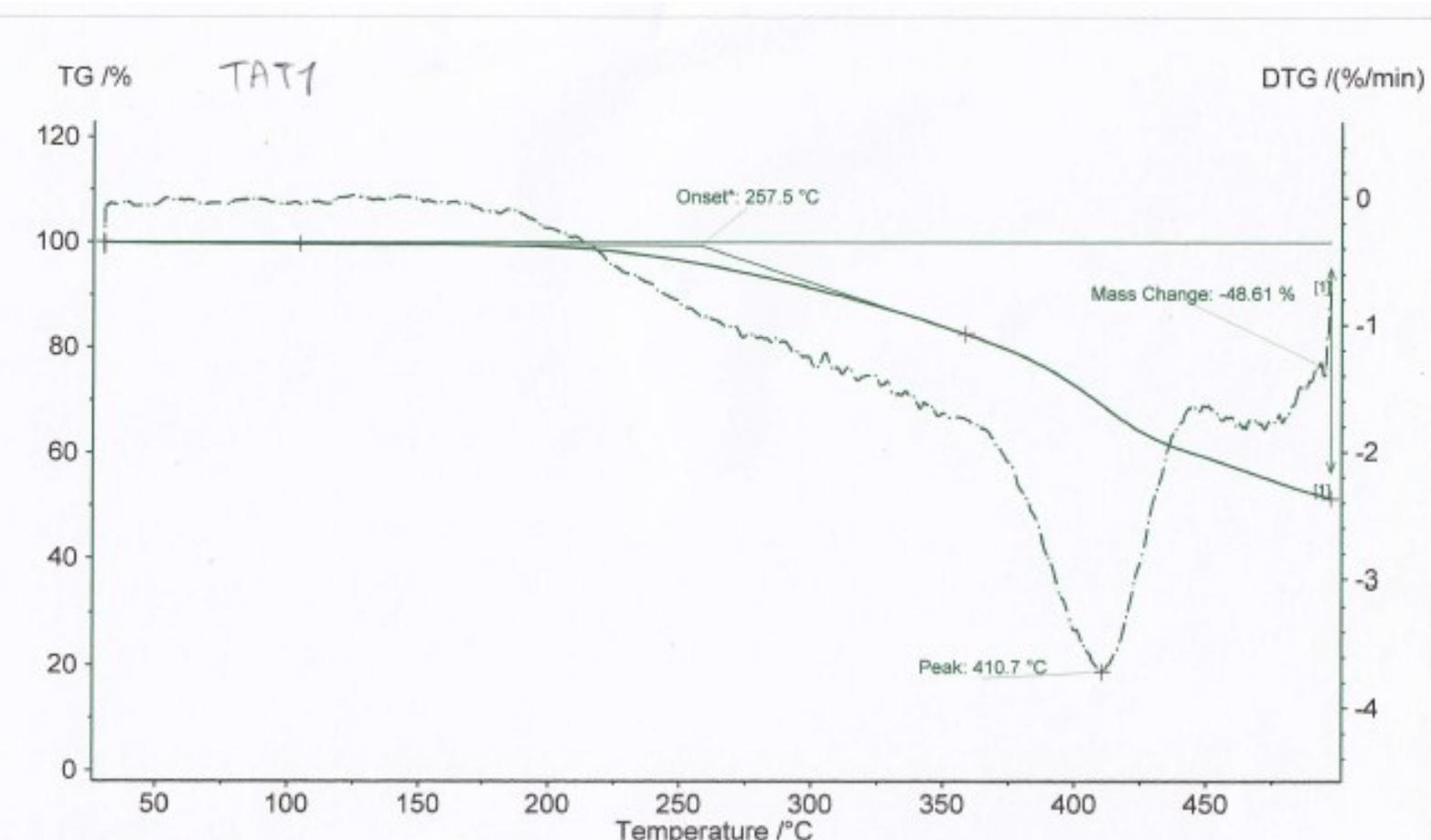
¹³C-NMR of **TAT2** in CDCl_3



DSC Thermogram of TAT1



DSC Thermogram of TAT2



Main: 2015-04-01 12:35 User: STREC

Instrument : NETZSCH TG 209F3 TGA209F3A-0364-L

File : C:\NETZSCH\Proteus61\data\DATA 2014\thanachart\TG 1.ngb-dt6

Project : thanachart

Sample :

TG 1

Sample car./TC :

TG 209F3 standard/P

Atmosphere : -- / N₂ / N₂

Identity : 487

Material :

organic

Sample mass :

2.8939 mg

Corr./m. range : 020/2000 mg

Date/time : 1/4/2014 11:41:59

Correction file : BL 500C 10C N2 (4).ngb-dt6

Model/type of meas. : TG/sample with correction

Laboratory : STREC

Temp. calib. file : Temp_Cal2014.ngb-dt6

Segments :

1/1

Operator : phiyawan

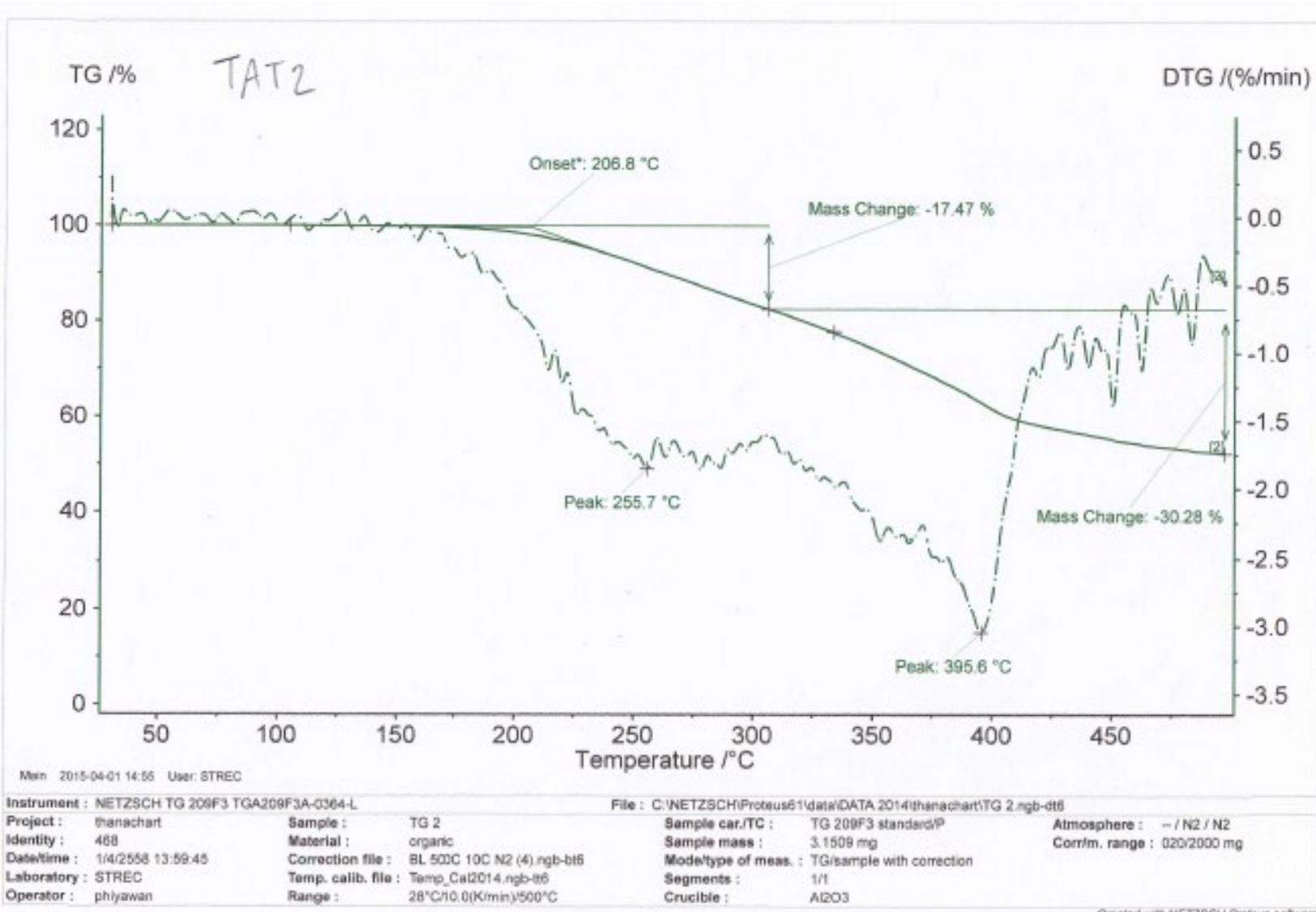
Range : 28°C/10.0(K/min)/500°C

Crucible :

A/2D3

Created with NETZSCH Proteus software

TGA Thermogram of TAT1



TGA Thermogram of TAT2