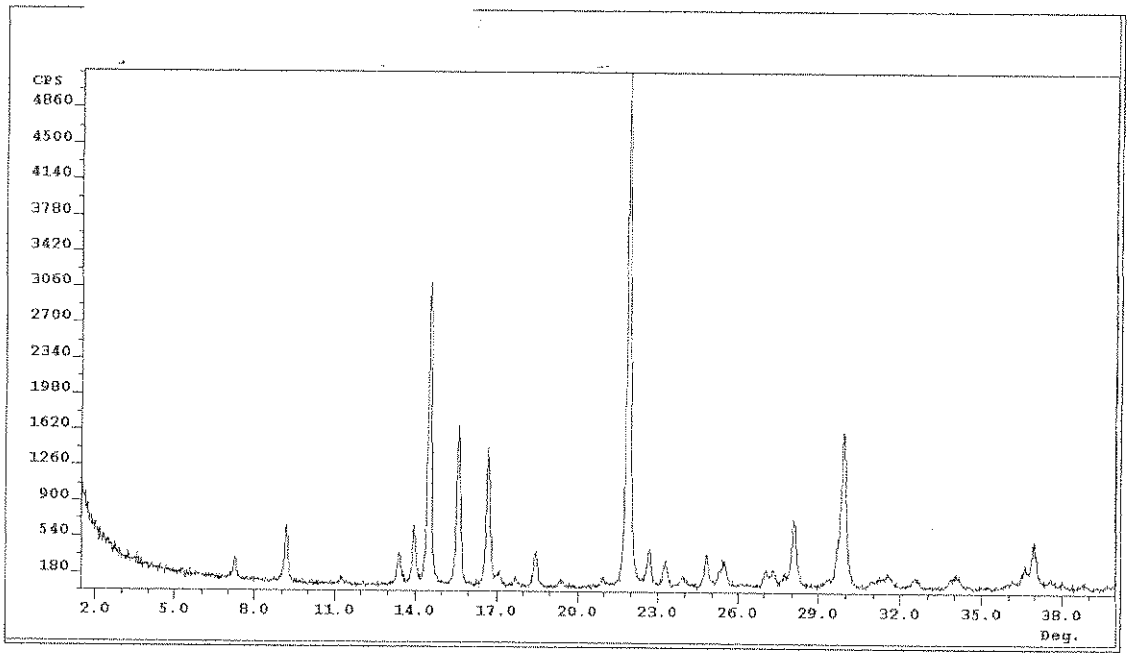

CPS
4860
4500
4140
3780
3420
3060
2700
2340
1980
1620
1260
900
540
180
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 1

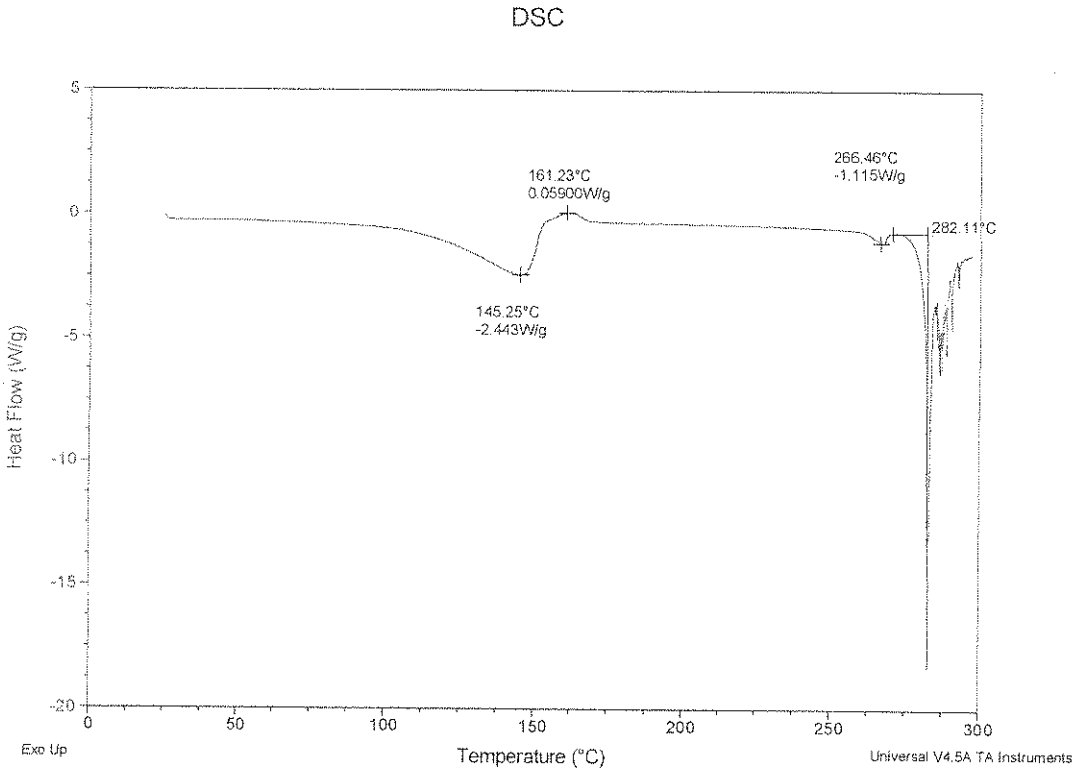

DSC
161.23°C
0.05900W/g
266.46°C
-1.115W/g
282.11°C
145.25°C
-2.443W/g
Heat Flow (W/g)
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 2

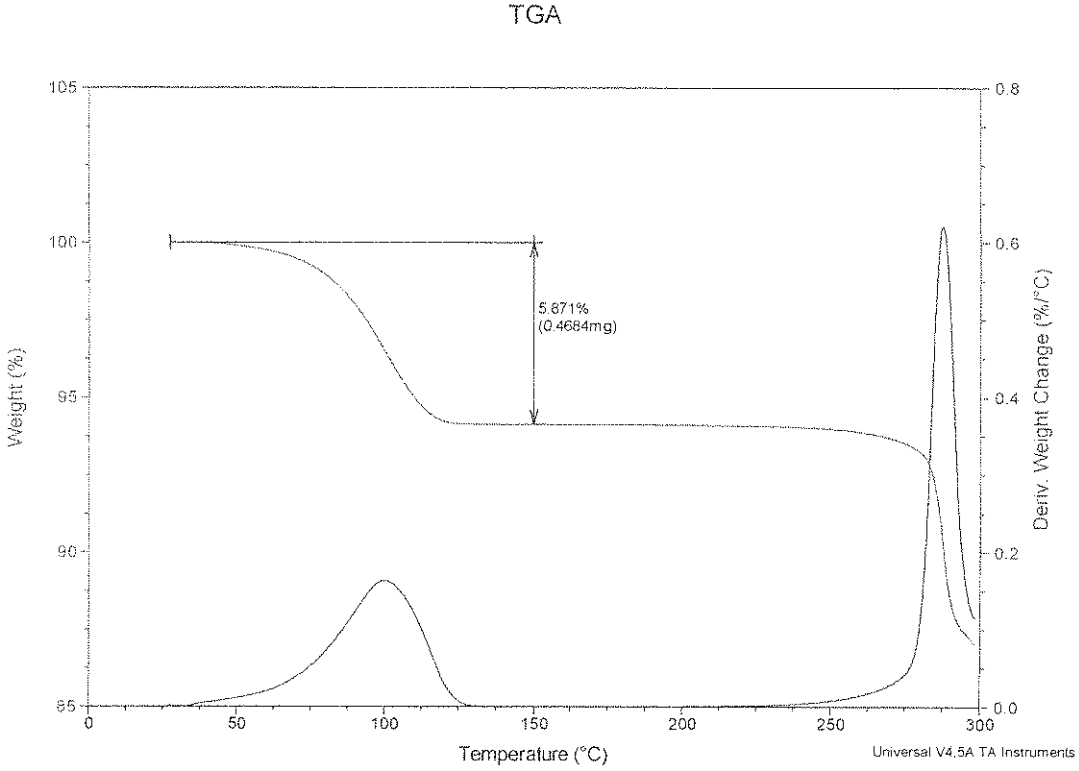

TGA
105
100
95
90
85
Weight (%)
0.8
0.6
0.4
0.2
0.0
Deriv. Weight Change (%/°C)
5.871%
(0.4684mg)
0
50
100
150
200
250
300
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 3

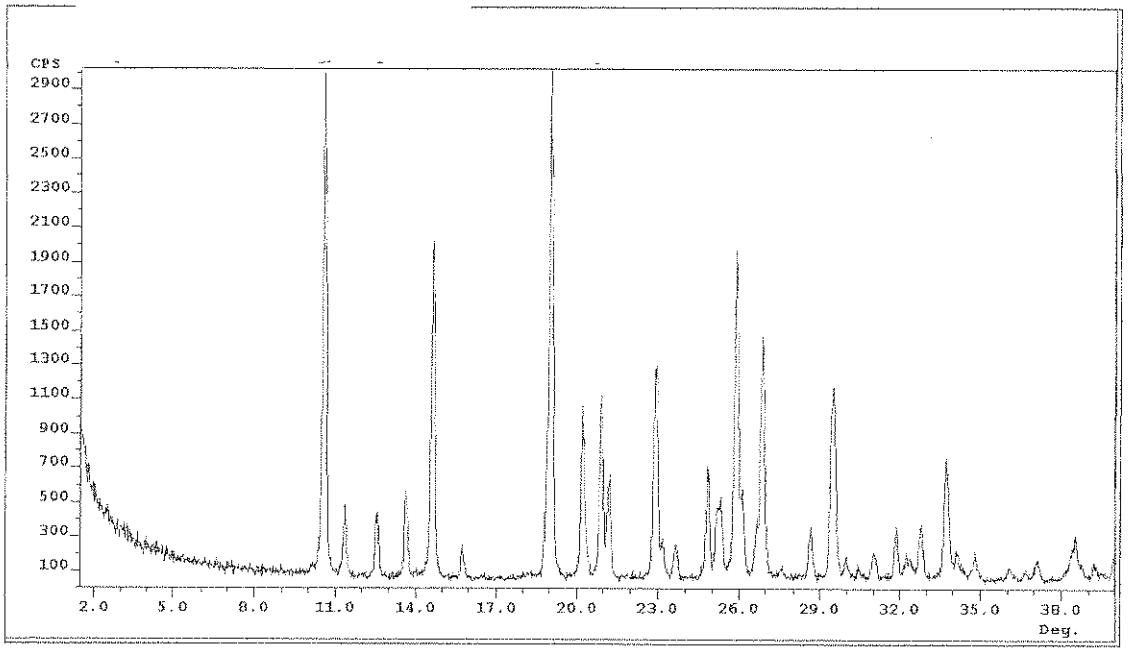

CPS
2900
2700
2500
2300
2100
1900
1700
1500
1300
1100
900
700
500
300
100
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 4

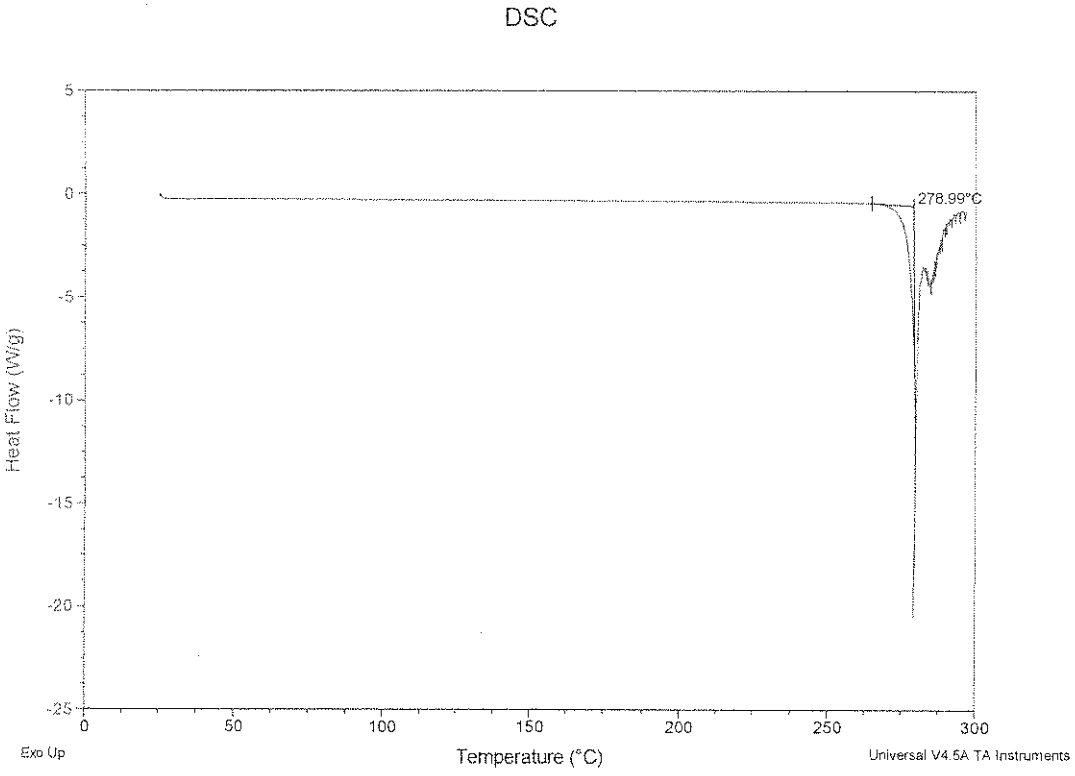

DSC
5
0
-5
-10
-15
-20
-25
Heat Flow (W/g)
278.99°C
0
50
100
150
200
250
300
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 5

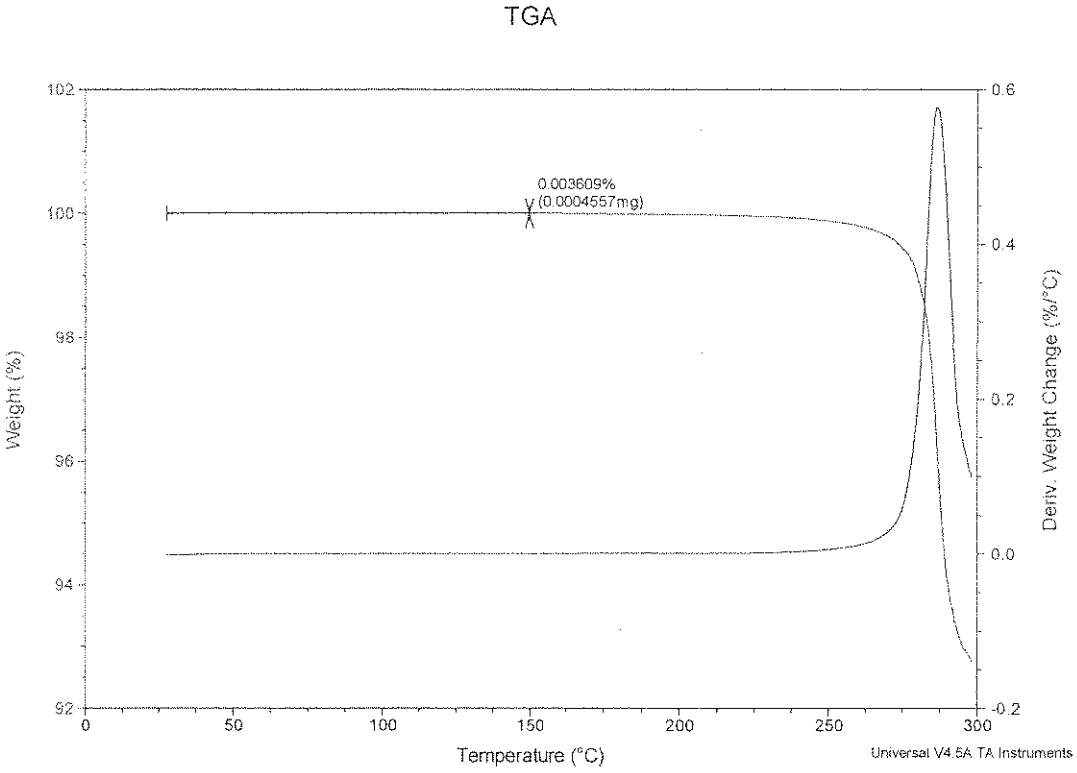

TGA
102
100
98
96
94
92
0.6
0.4
0.2
0.0
-0.2
0.003609%
(0.0004557mg)
Weight (%)
Deriv. Weight Change (%/°C)
0
50
100
150
200
250
300
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 6

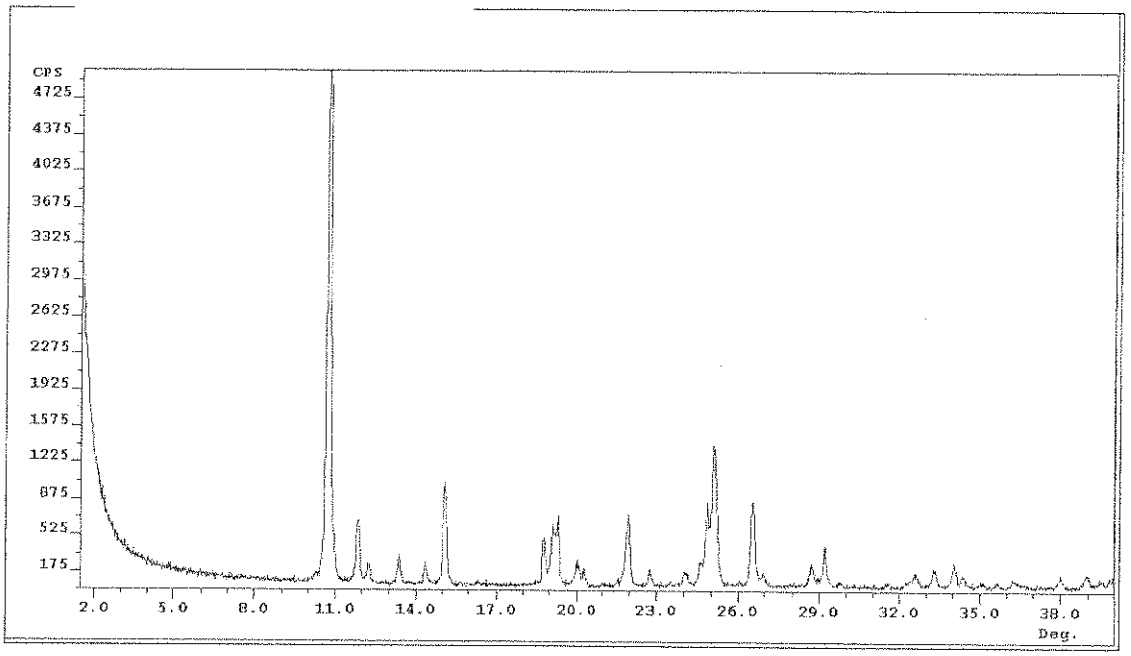

CPS
4725
4375
4025
3675
3325
2975
2625
2275
1925
1575
1225
875
525
175
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 7

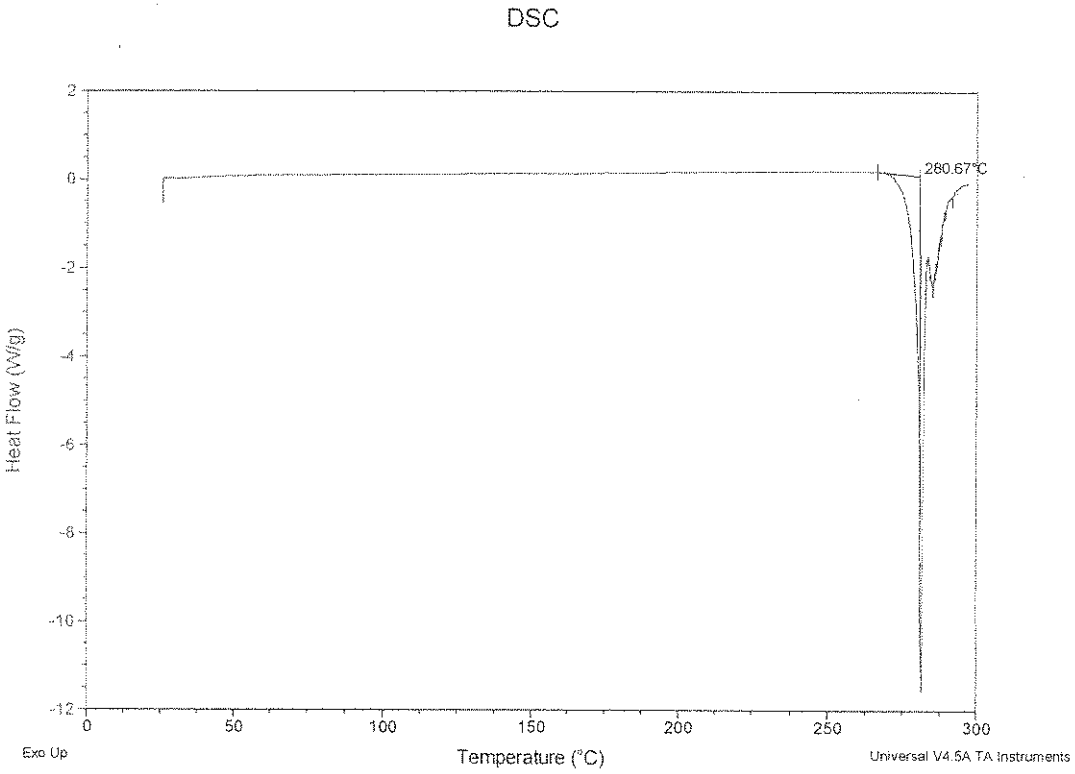

DSC
2
0
-2
-4
-6
-8
-10
-12
Heat Flow (W/g)
280.67°C
0
50
100
150
200
250
300
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 8

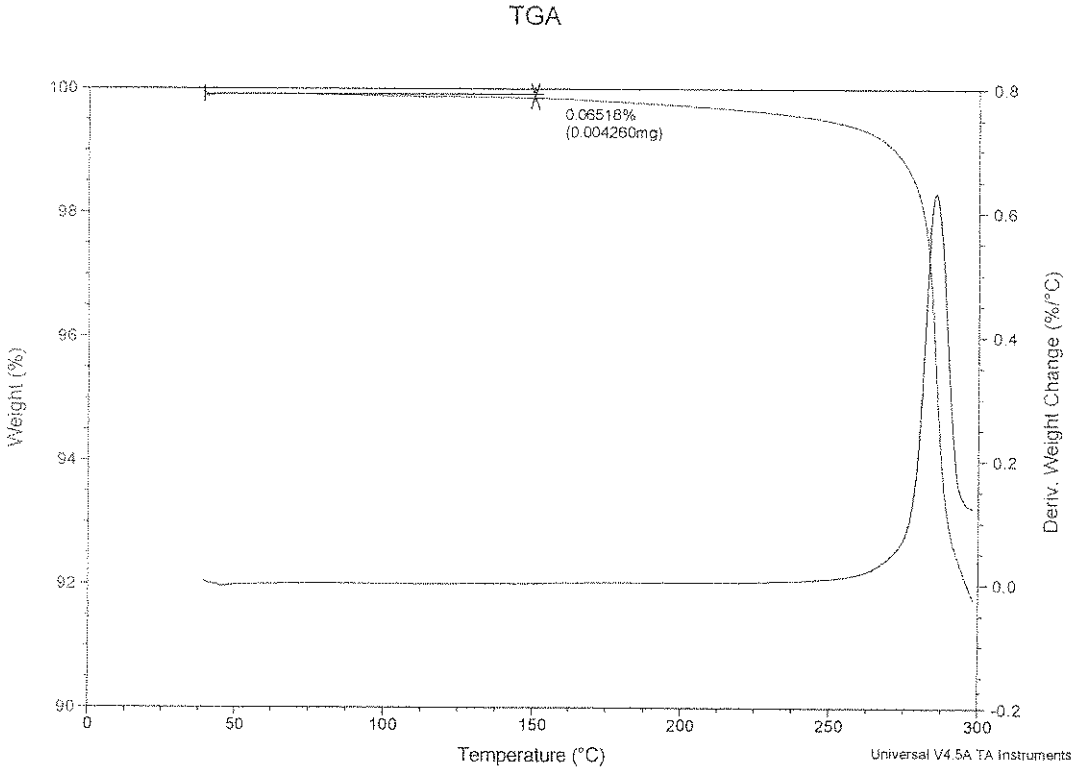

TGA
0.06518%
(0.004260mg)
Weight (%)
Deriv. Weight Change (%/°C)
Temperature (°C)
Universal V4.5A TA Instruments
100
98
96
94
92
90
0.8
0.6
0.4
0.2
0.0
-0.2
0
50
100
150
200
250
300

FIG. 9

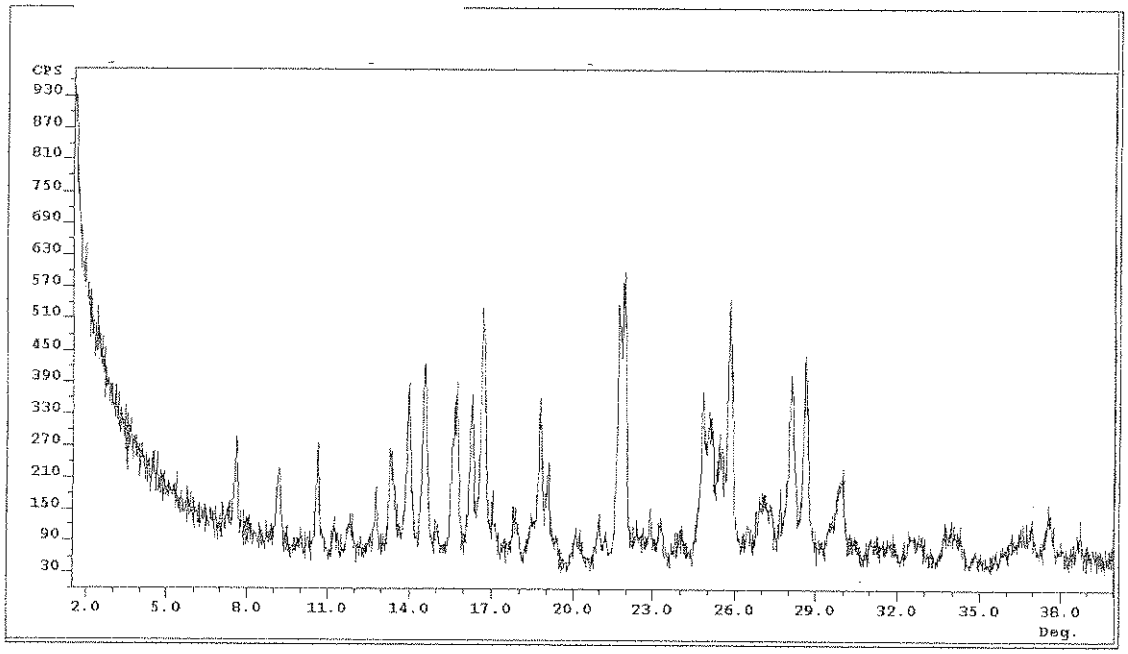

CPS
930
870
810
750
690
630
570
510
450
390
330
270
210
150
90
30
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 10

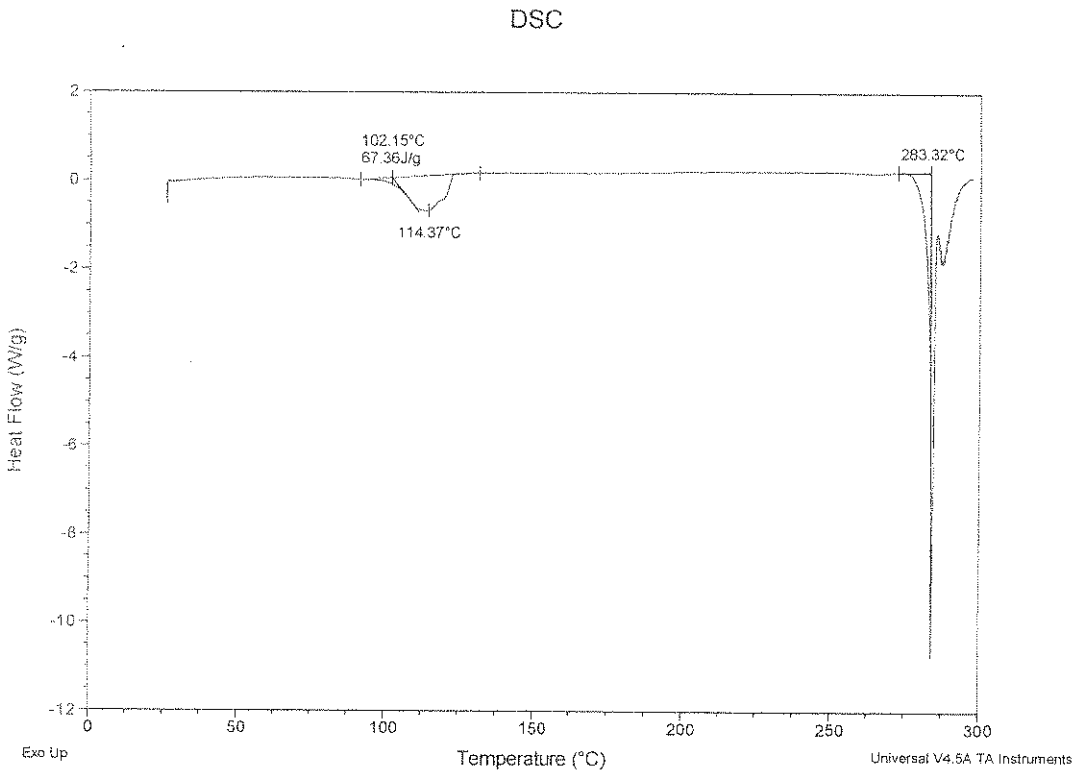

DSC
102.15°C
67.36J/g
114.37°C
283.32°C
Heat Flow (W/g)
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 11

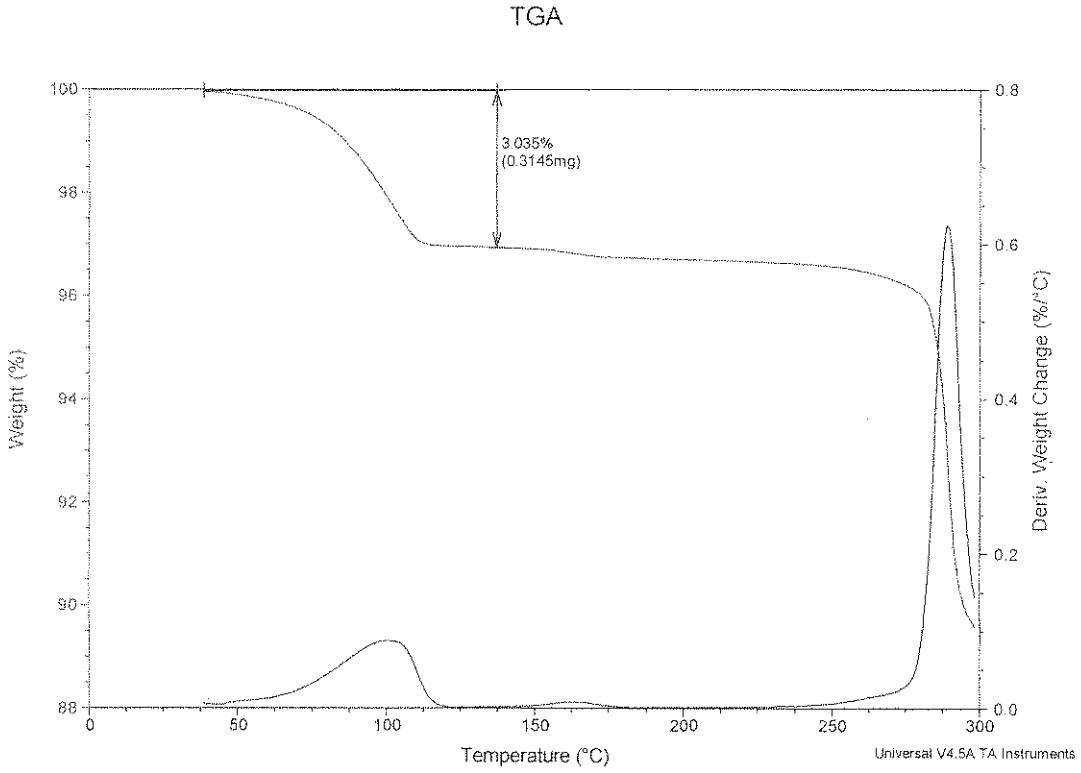

TGA
3.035%
(0.3145mg)
Weight (%)
Deriv. Weight Change (%/°C)
Temperature (°C)
Universal V4.5A TA Instruments
100
98
96
94
92
90
88
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
250
300

FIG. 12

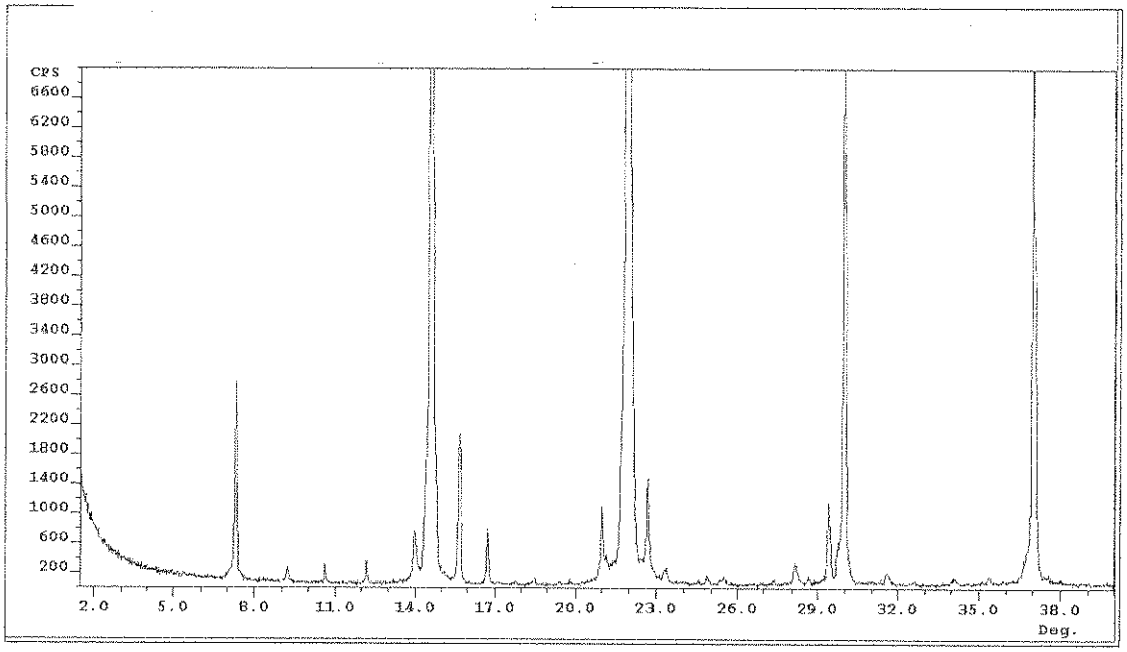

CPS
6600
6200
5800
5400
5000
4600
4200
3800
3400
3000
2600
2200
1800
1400
1000
600
200
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 13

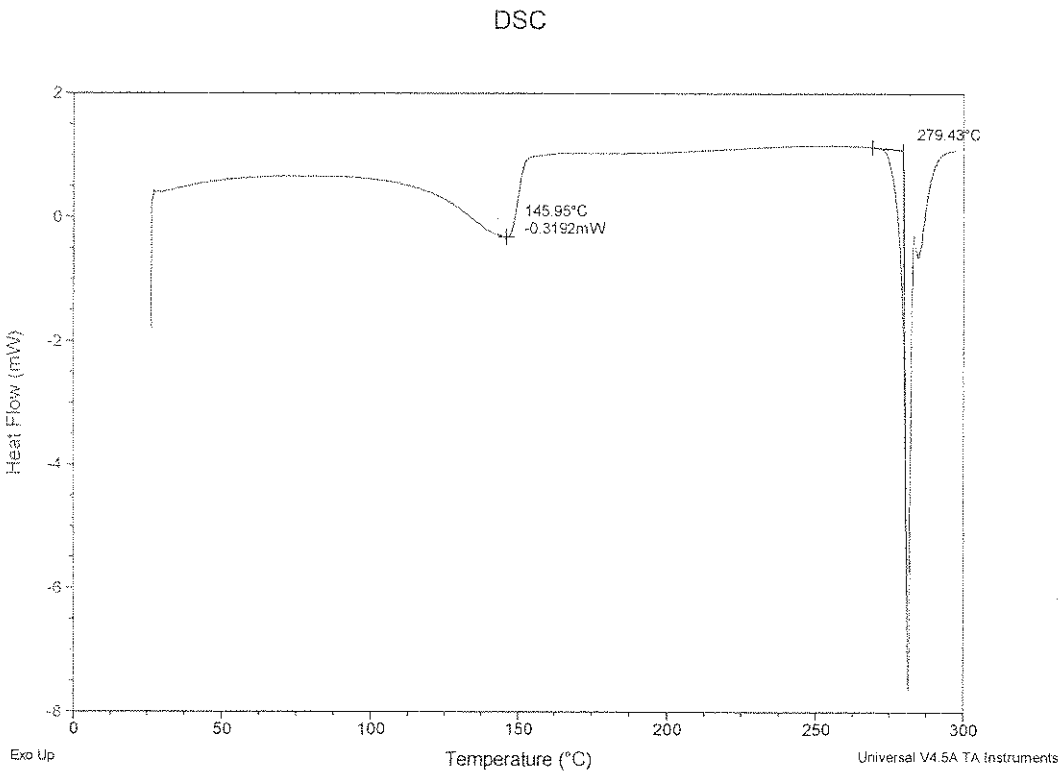

DSC
279.43°C
145.95°C
-0.3192mW
Heat Flow (mW)
2
0
-2
-4
-6
-8
0
50
100
150
200
250
300
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 14

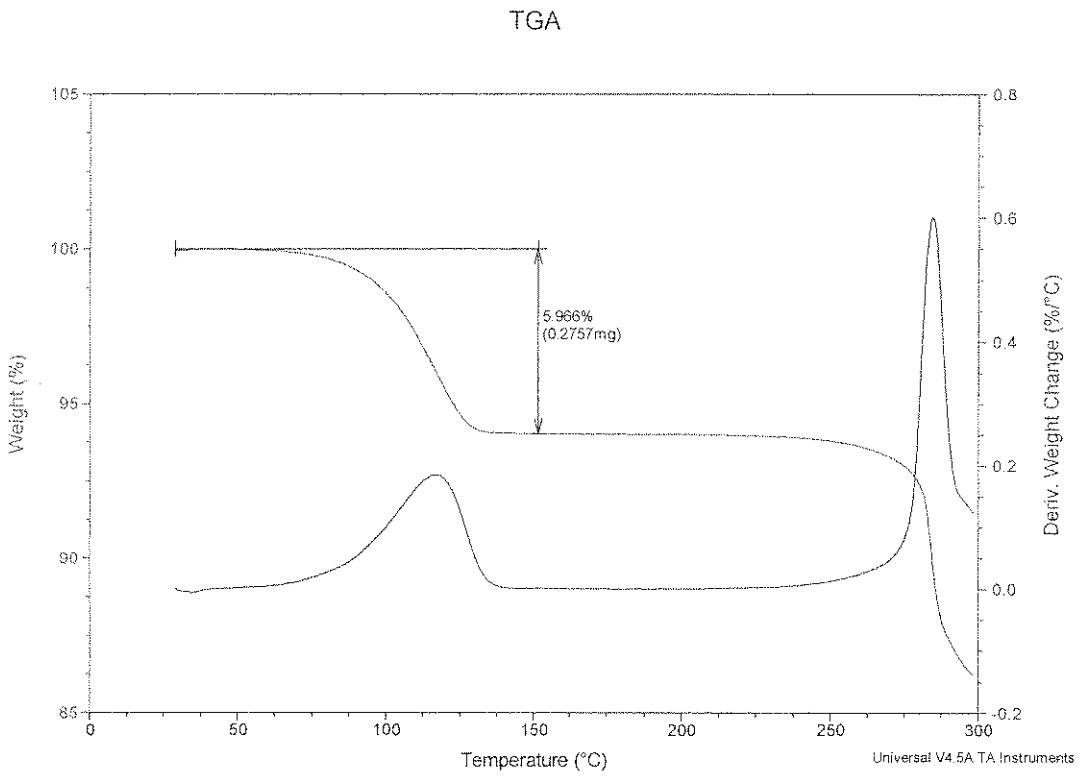

TGA
105
100
95
90
85
0.8
0.6
0.4
0.2
0.0
-0.2
Weight (%)
Deriv. Weight Change (%/°C)
5.966%
(0.2757mg)
0
50
100
150
200
250
300
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 15

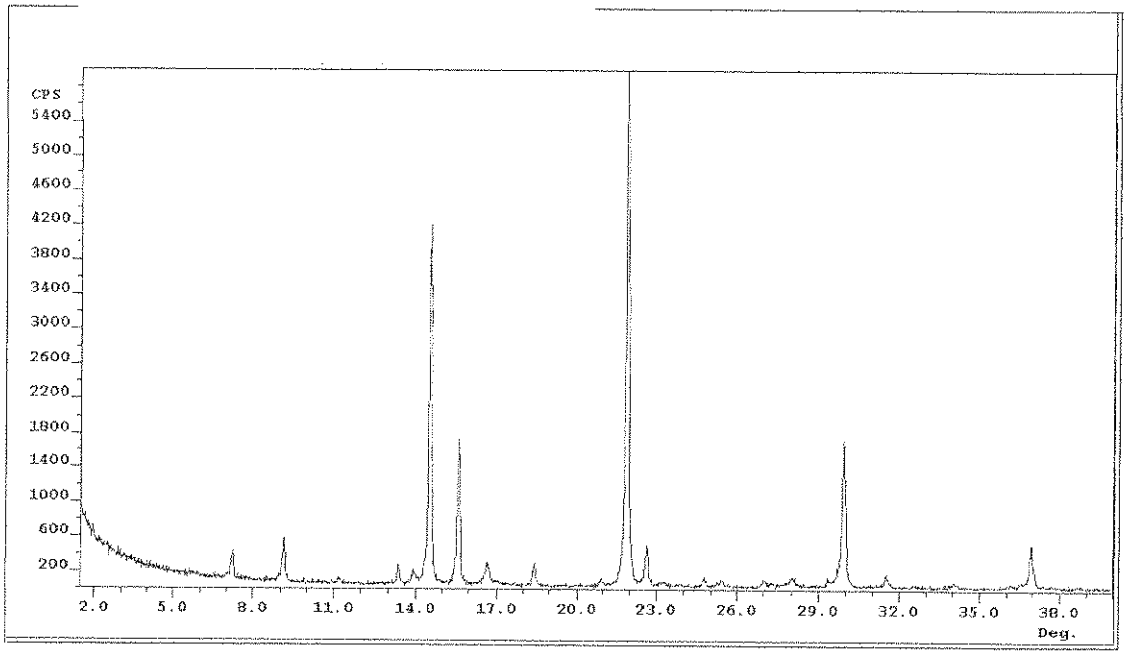

CPS
5400
5000
4600
4200
3800
3400
3000
2600
2200
1800
1400
1000
600
200
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 16

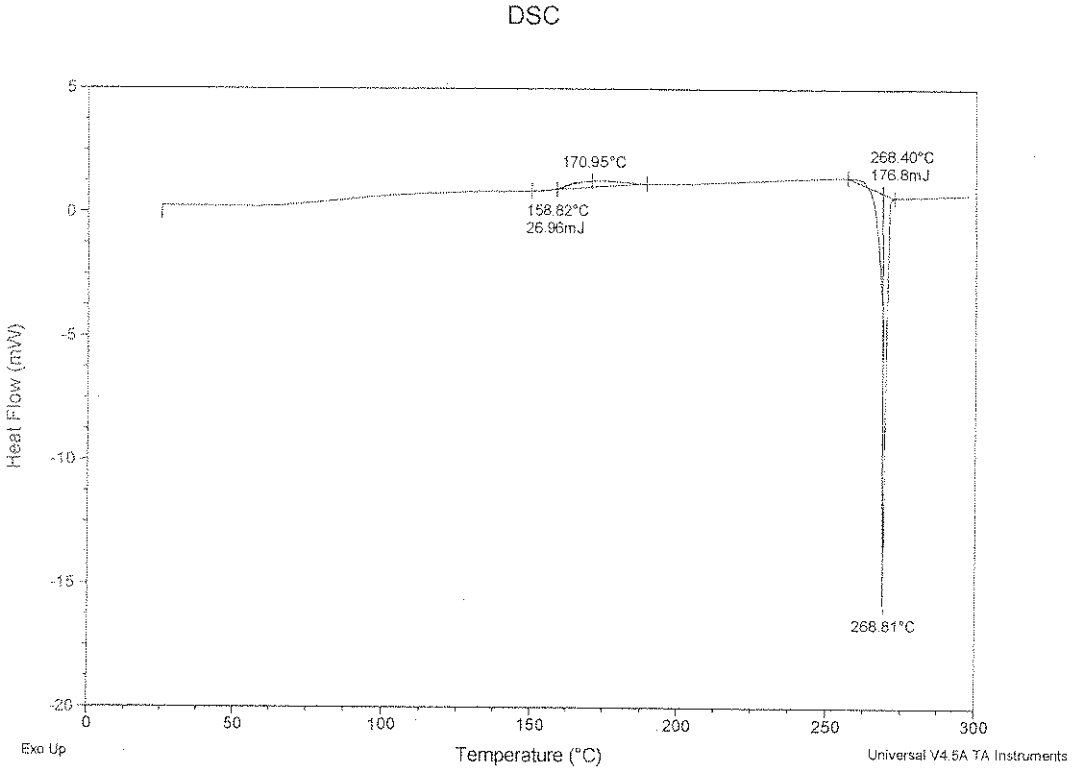

DSC
5
0
-5
-10
-15
-20
Heat Flow (mW)
170.95°C
158.62°C
26.96mJ
268.40°C
176.8mJ
268.81°C
0
50
100
150
200
250
300
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 17

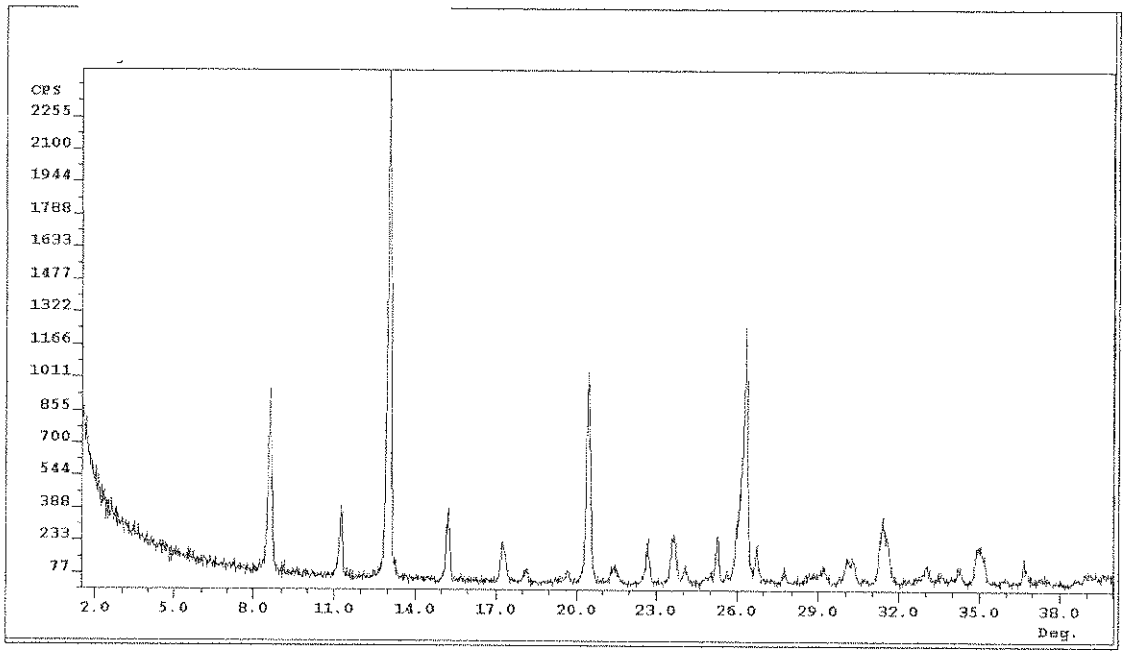

CPS
2255
2100
1944
1788
1633
1477
1322
1166
1011
855
700
544
388
233
77
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
Deg.

FIG. 18

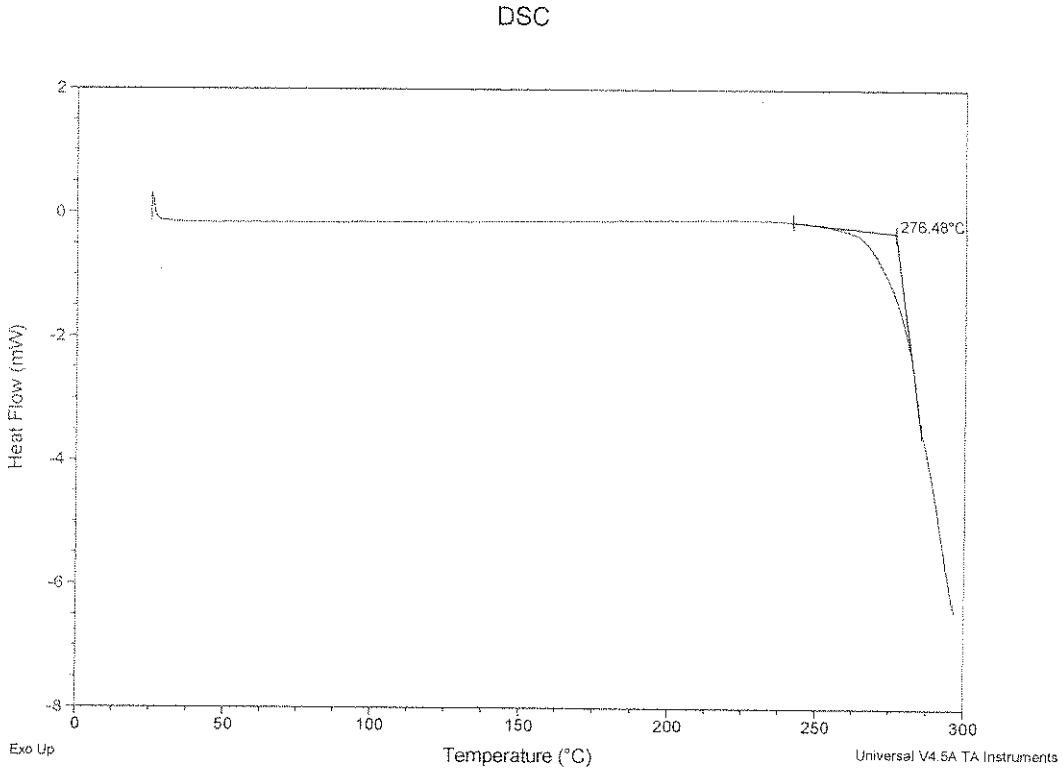

DSC
2
0
-2
-4
-6
-8
Heat Flow (mW)
276.48°C
0
50
100
150
200
250
300
Exo Up
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 19

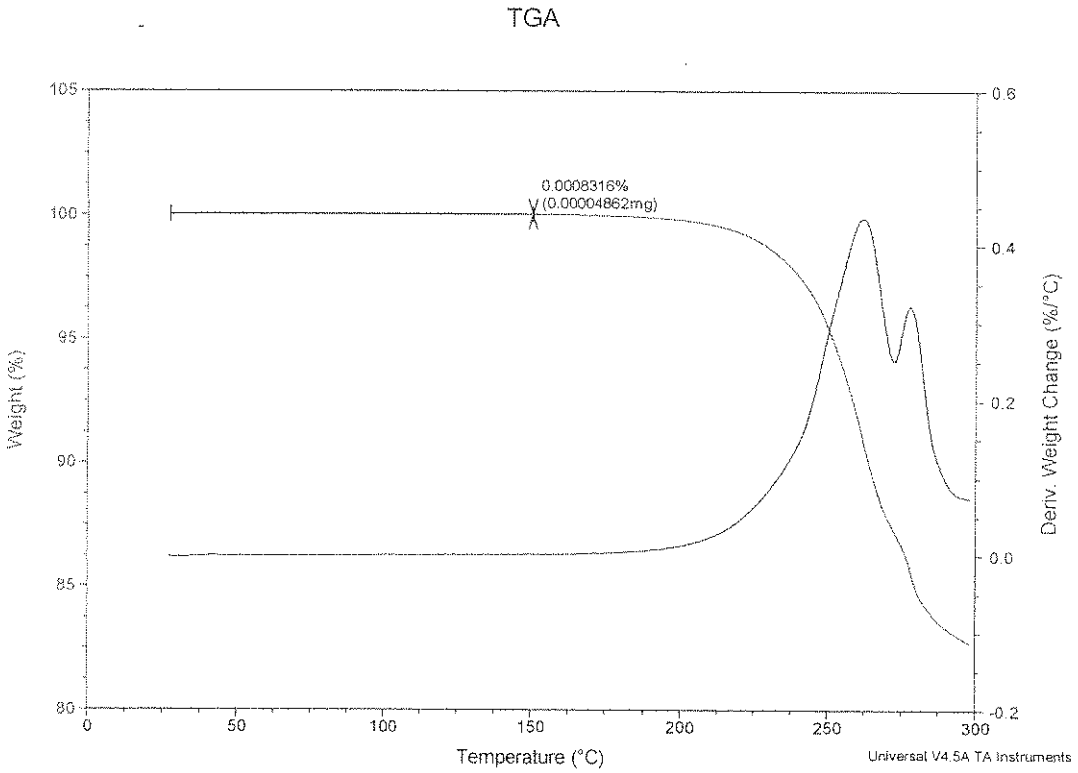

TGA
105
100
95
90
85
80
Weight (%)
0.6
0.4
0.2
0.0
-0.2
Deriv. Weight Change (%/°C)
0.0008316%
(0.00004862mg)
0
50
100
150
200
250
300
Temperature (°C)
Universal V4.5A TA Instruments

FIG. 20

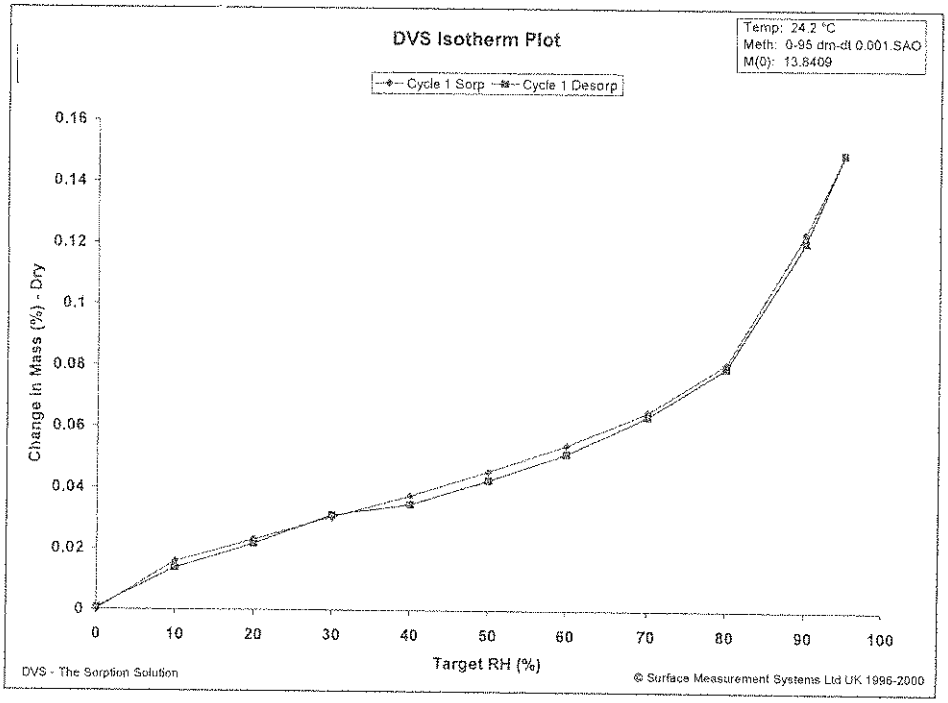

DVS Isotherm Plot
Temp: 24.2 °C
Meth: 0-95 dm-dt 0.001.SAO
M(0): 13.8409
Cycle 1 Sorp
Cycle 1 Desorp
Change in Mass (%) - Dry
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
10
20
30
40
50
60
70
80
90
100
Target RH (%)
DVS - The Sorption Solution
© Surface Measurement Systems Ltd UK 1995-2000

FIG. 21

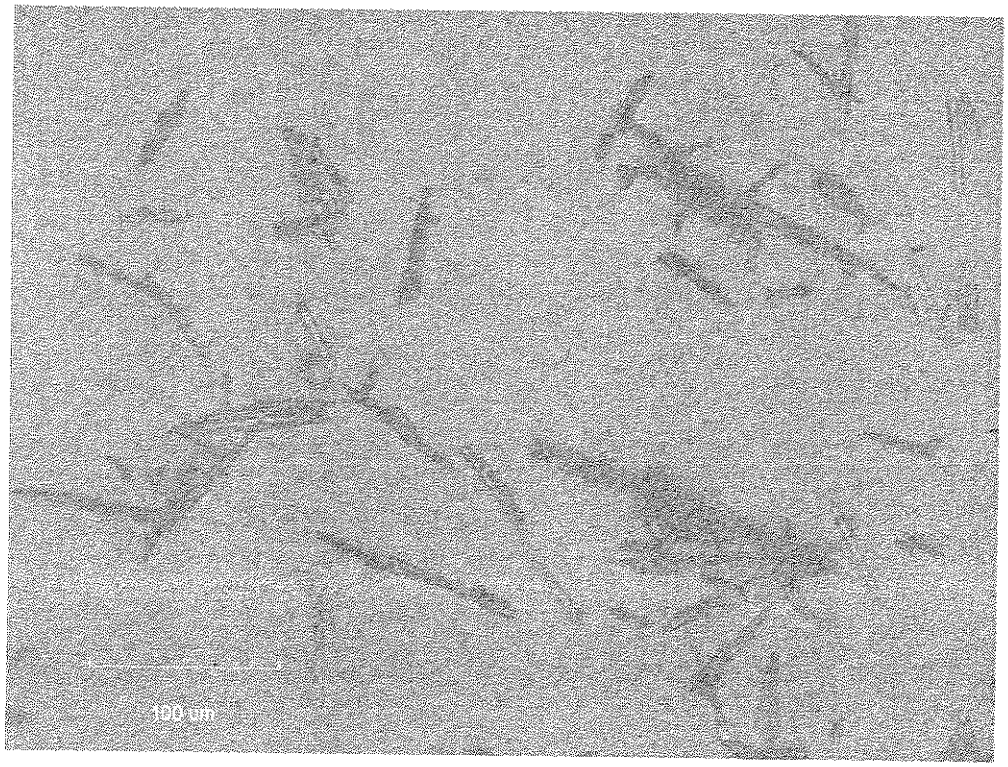
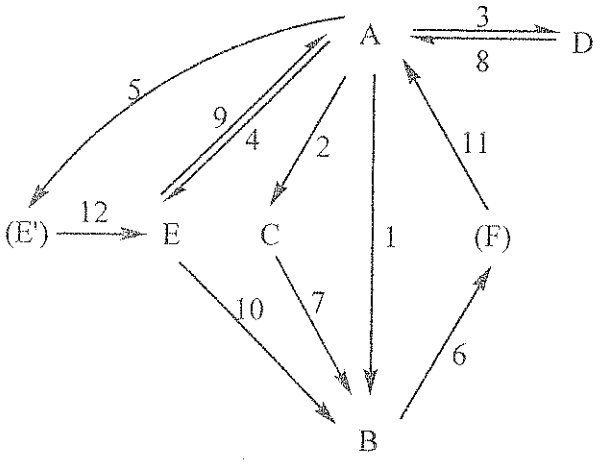


FIG. 22



1. Slurry in MeOH at RT, or in acetone, MeCN, or MeOH at 50 °C
2. Slurry in EtOAC, EtOH, IPA, MEK, n-BuOH or THF at 50 °C
3. Dried in vacuum oven at ~ 70 °C
4. Slurry in MeCN or IPA at RT
5. Slurry in EtOH at RT
6. Slurry in water at RT
7. Slurry in organic solvents at RT or elevated temperature
8. Exposure to moisture at RT
9. Slurry in water at RT
10. Slurry in organic solvents at elevated temperature
11. Slurry in water at RT
12. Exposure to moisture in DVS

FIG. 23