Supplementary Material (ESI) for Journal of Materials Chemistry

Electronic Supplementary Information

White Light-Emitting Devices with Single Emitting Layer Based on Bisindolylmaleimide Fluorophores

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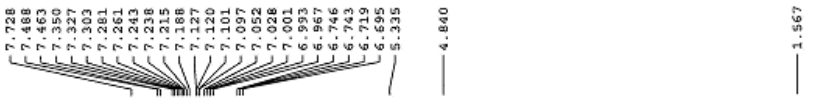
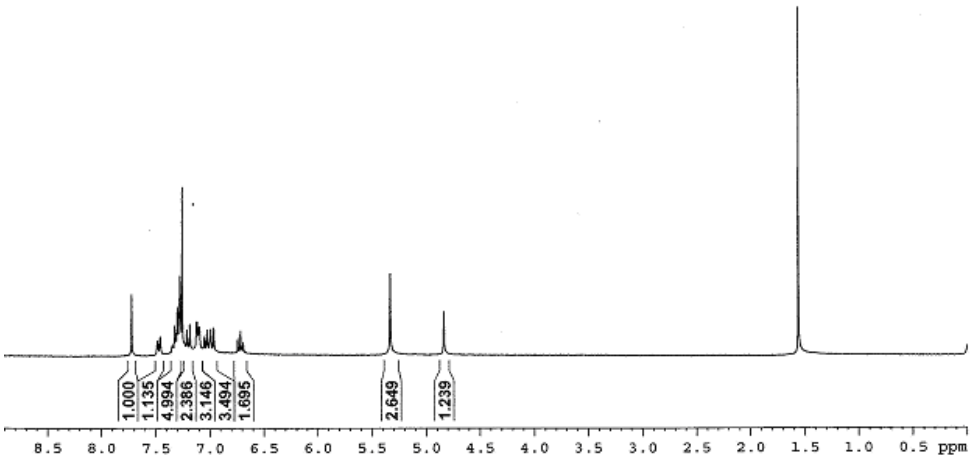
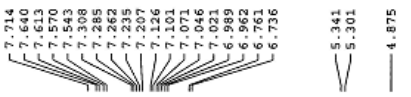
Contents:

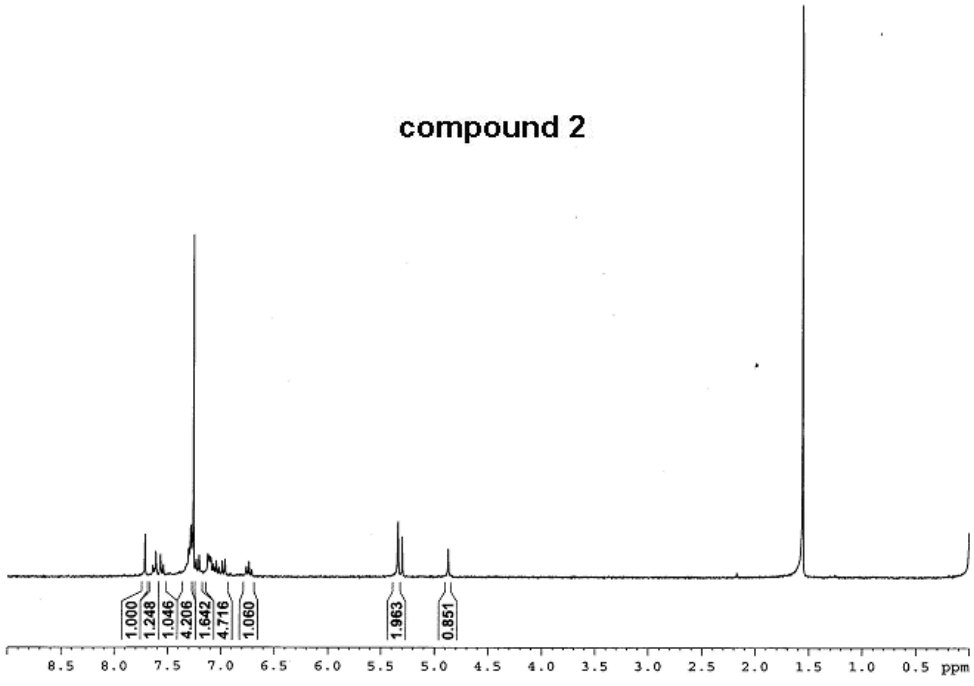


compound 1

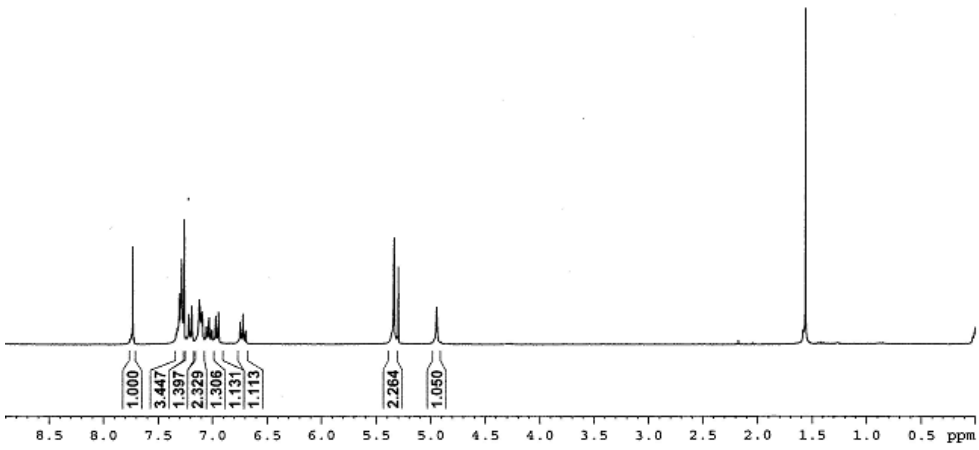


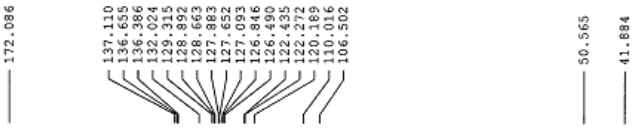


compound 2

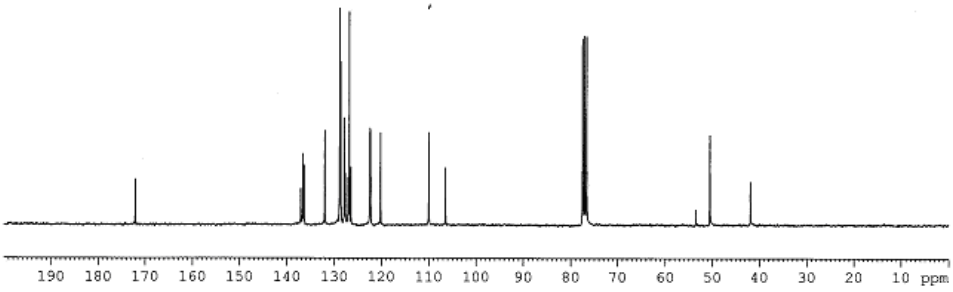


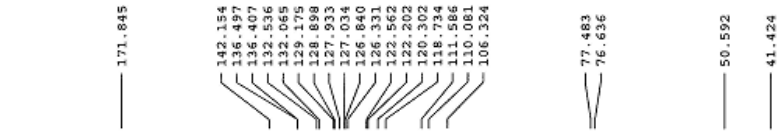
compound 3





compound 1





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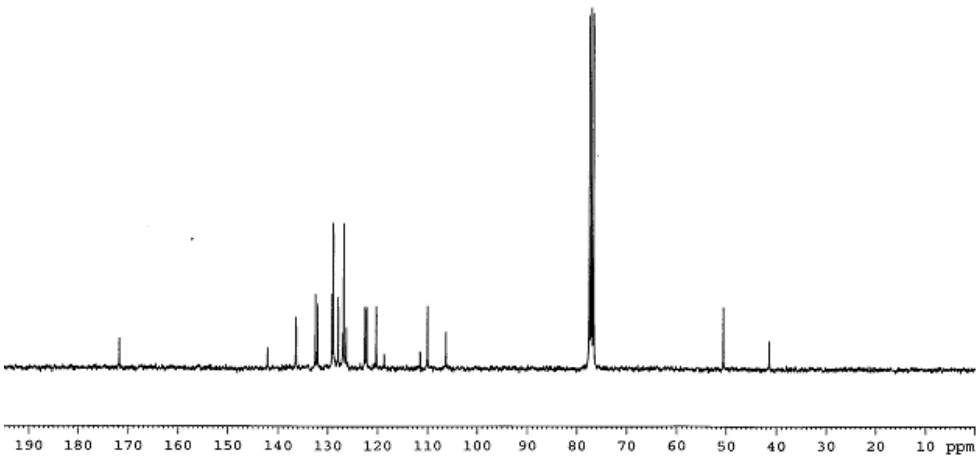

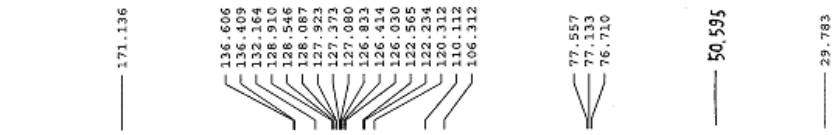

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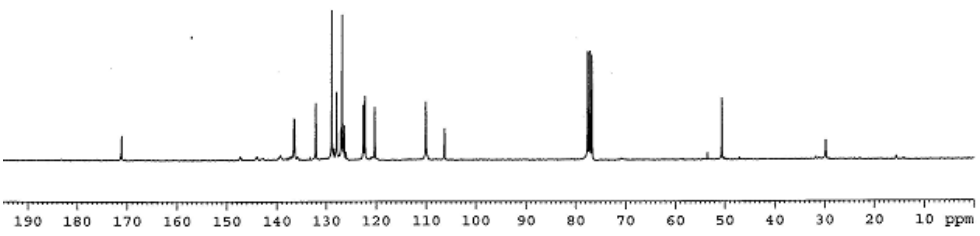
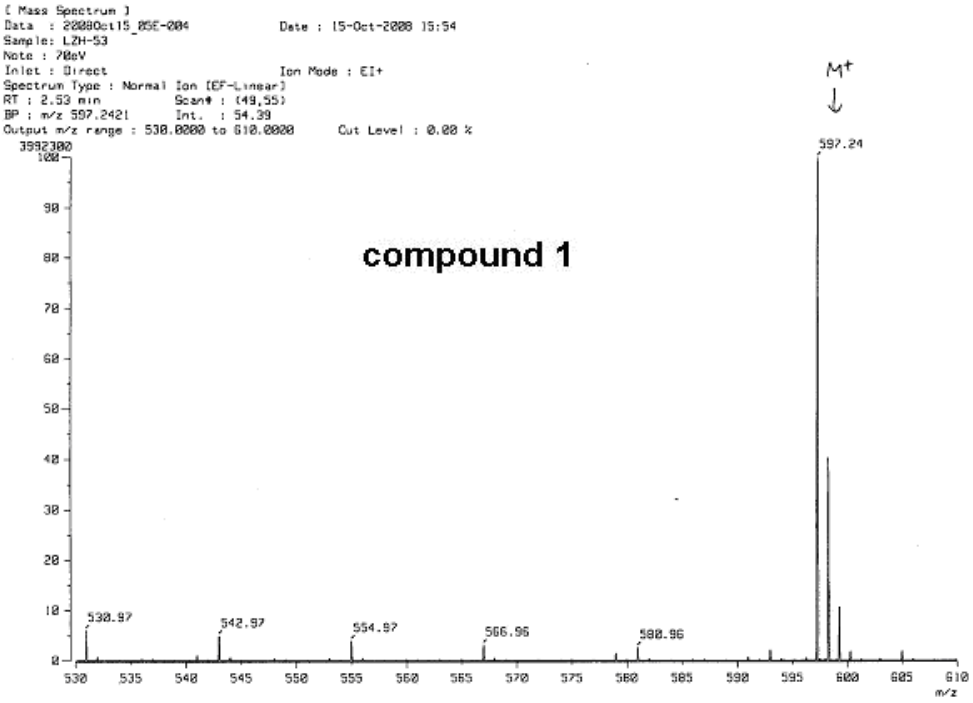
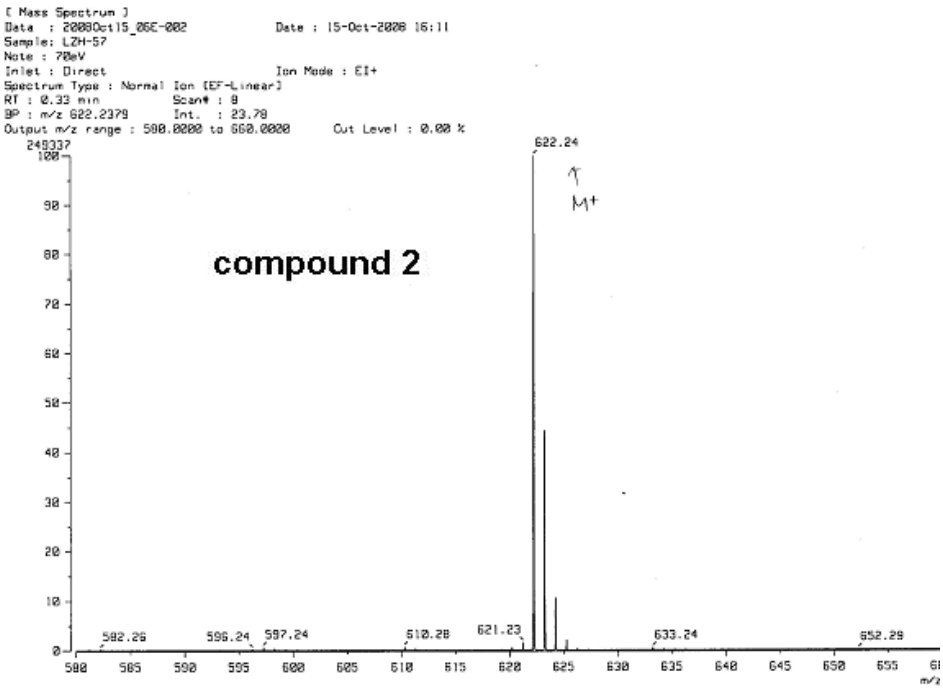
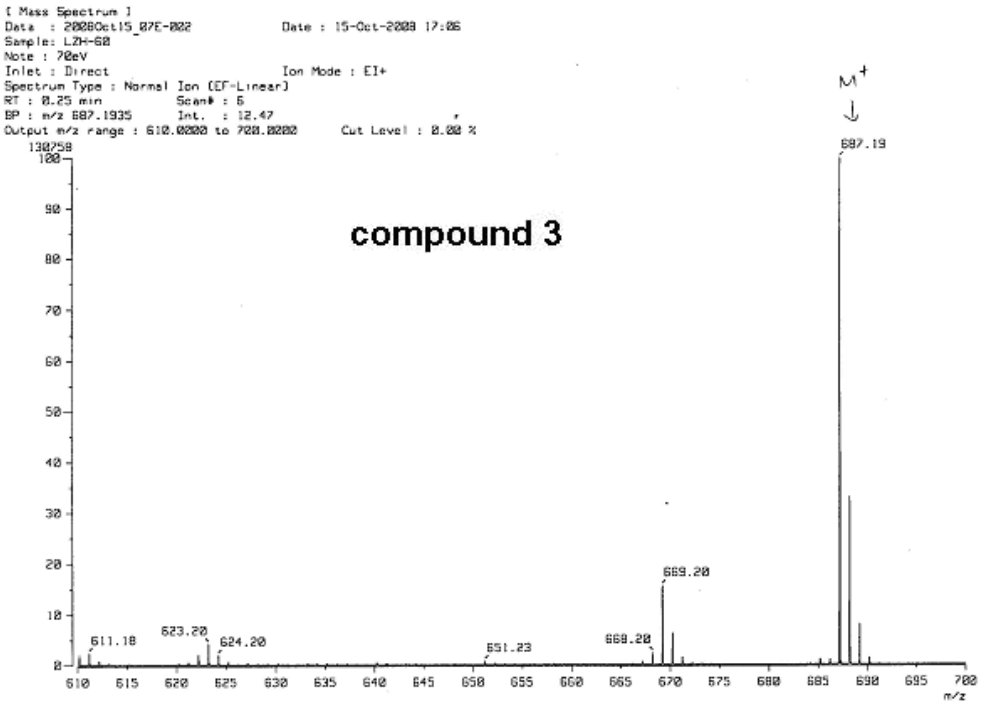
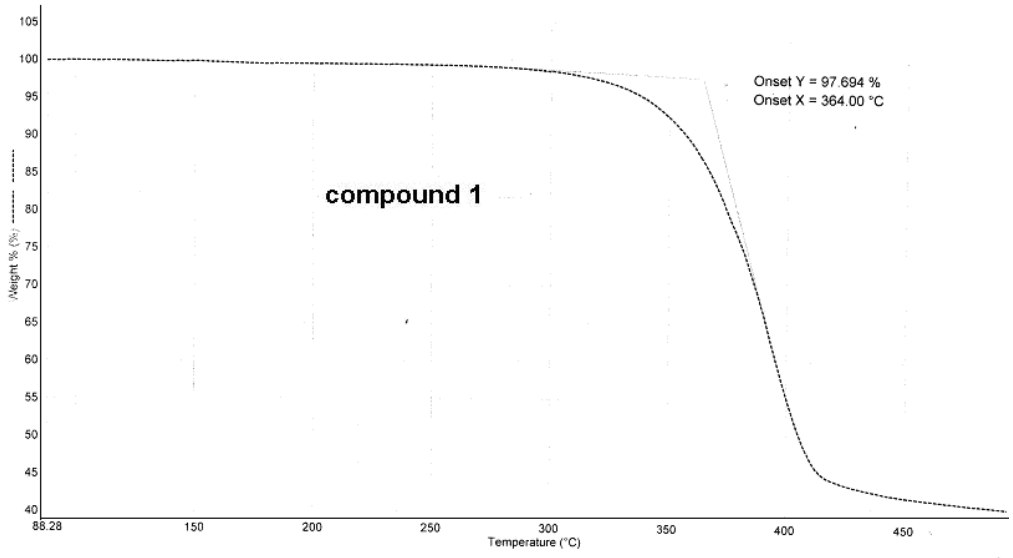
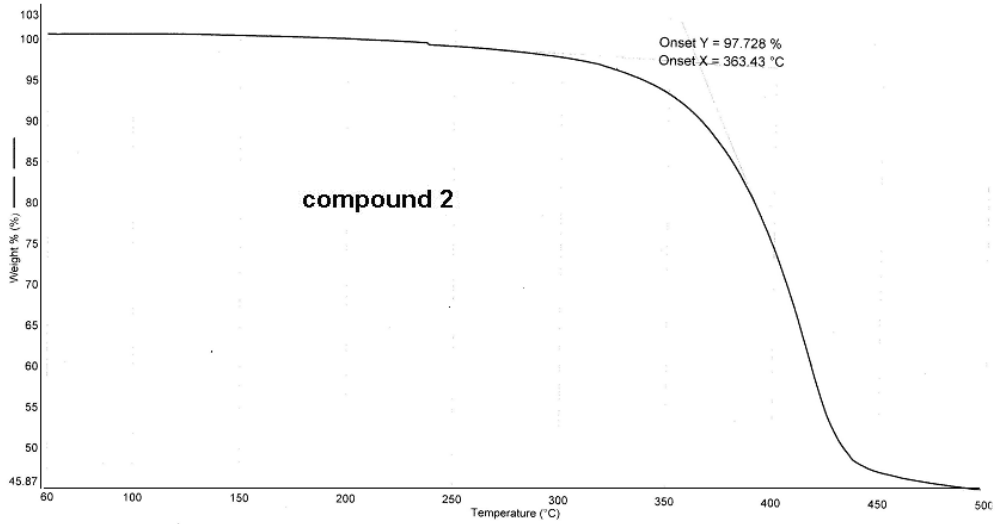


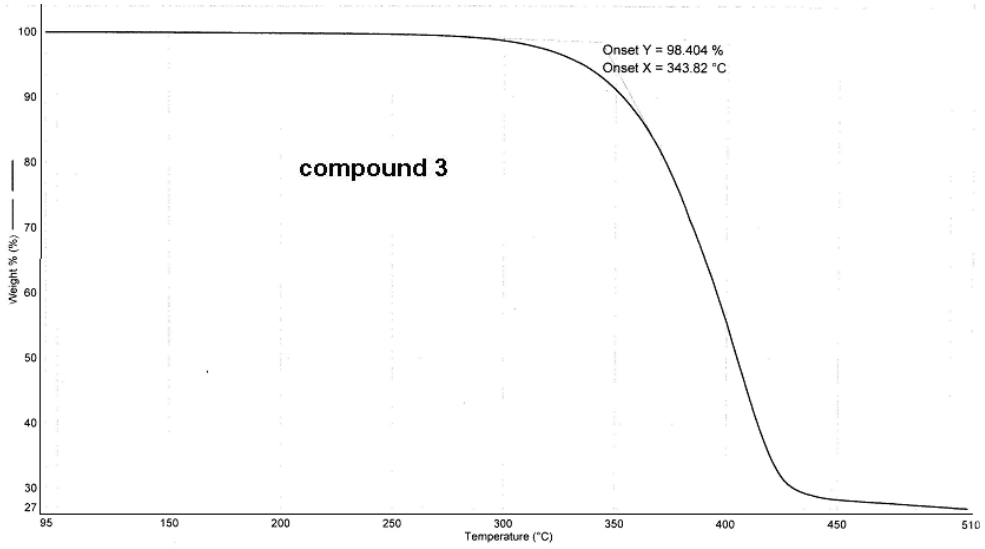

[Mass Spectrum]
Data : 20080ct15_05E-004 Date : 15-Oct-2008 15:54
Sample: LZH-53
Note : 70eV
Inlet : Direct Ion Mode : EI+
Spectrum Type : Normal Ion [EF-Linear]
RT : 2.53 min Scan# : (49,55)
BP : m/z 597.2421 Int. : 54.39
Output m/z range : 530.0000 to 610.0000 Cut Level : 0.00 %
3592380
compound 1
M+
597.24
530.97
542.97
554.97
566.96
580.96
m/z


[Mass Spectrum]
Data : 20080ct15_06E-002 Date : 15-Oct-2008 16:11
Sample: LZH-57
Note : 70eV
Inlet : Direct Ion Mode : EI+
Spectrum Type : Normal Ion [EF-Linear]
RT : 0.33 min Scan# : 8
BP : m/z 622.2379 Int. : 23.78
Output m/z range : 580.0000 to 660.0000 Cut Level : 0.00 %
248337
compound 2
622.24
M+
582.26
596.24
597.24
610.28
621.23
633.24
652.29
m/z

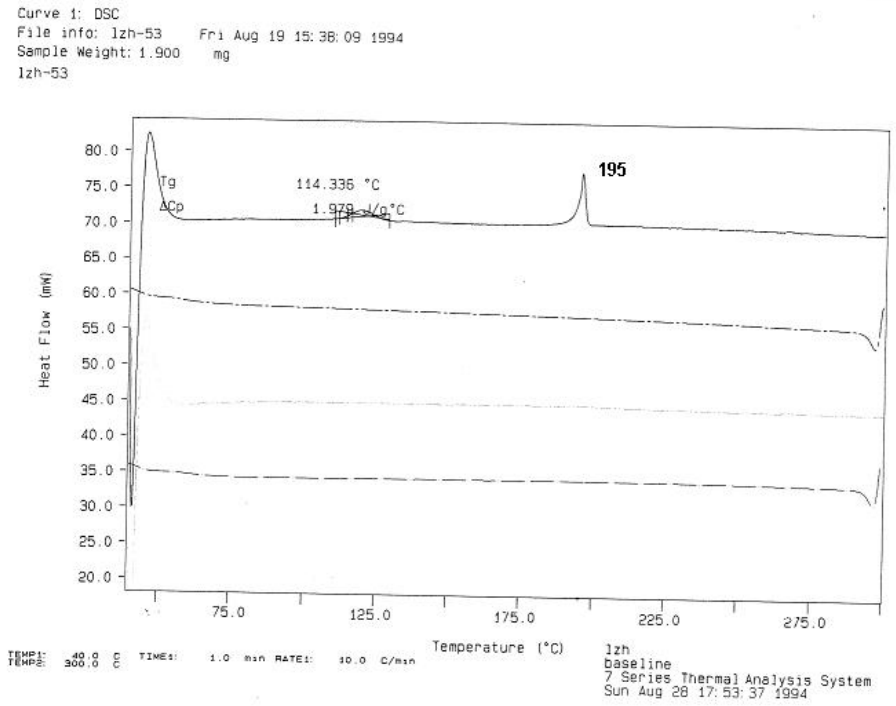

[Mass Spectrum]
Data : 2008Oct15_07E-002
Date : 15-Oct-2008 17:06
Sample: LZH-68
Note : 70eV
Inlet : Direct
Ion Mode : EI+
Spectrum Type : Normal Ion (EF-Linear)
RT : 0.25 min
Scan# : 6
BP : m/z 687.1935
Int. : 12.47
Output m/z range : 610.0000 to 700.0000
Cut Level : 0.00 %
130758
compound 3
M+
687.19
689.20
611.18
623.20
624.20
651.23
668.20
m/z


compound 1
Onset Y = 97.694 %
Onset X = 364.00 °C
Weight % (%)
Temperature (°C)

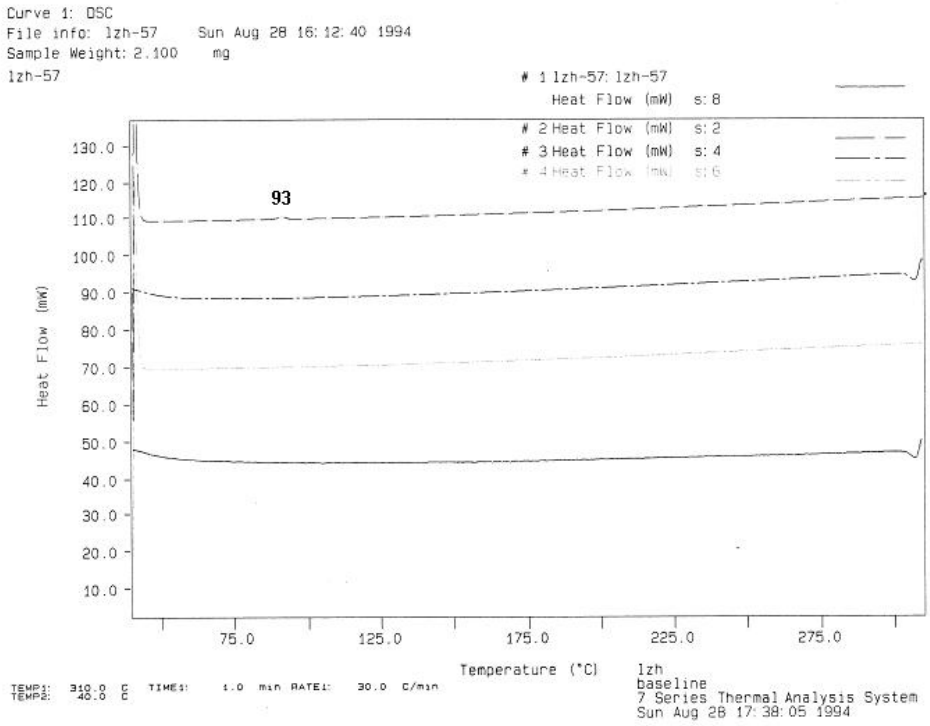

Onset Y = 97.728 %
Onset X = 363.43 °C
compound 2
Weight % (%)
Temperature (°C)


Onset Y = 98.404 %
Onset X = 343.82 °C
compound 3
Weight % (%)
Temperature (°C)

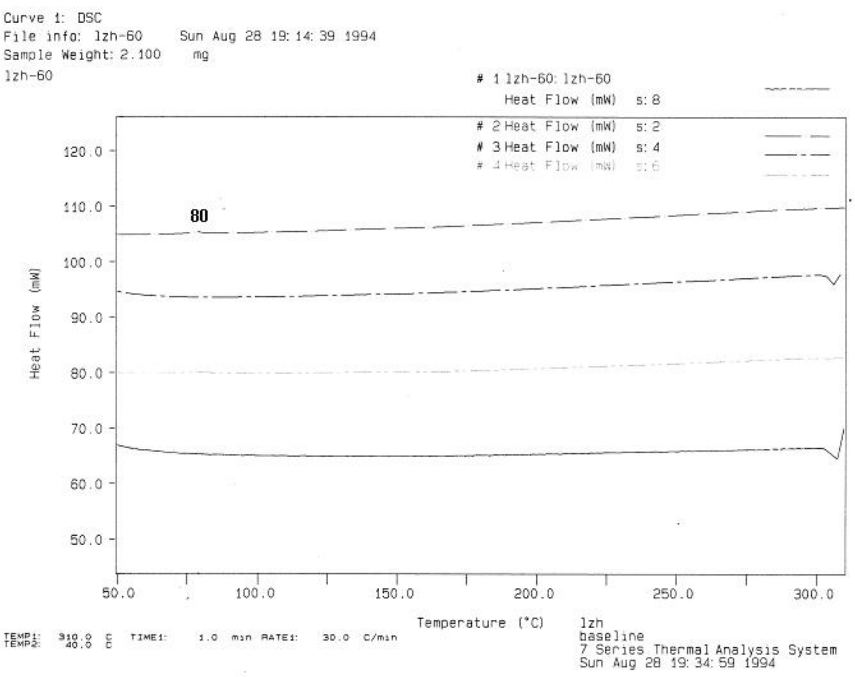
compound 1



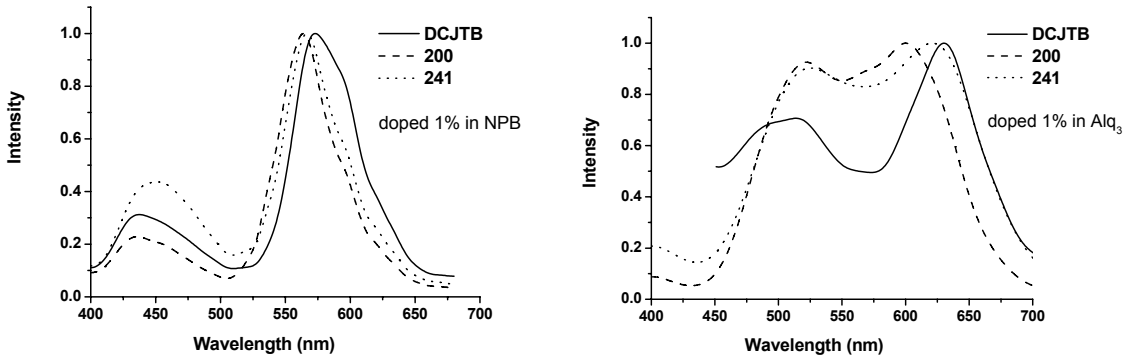
compound 2

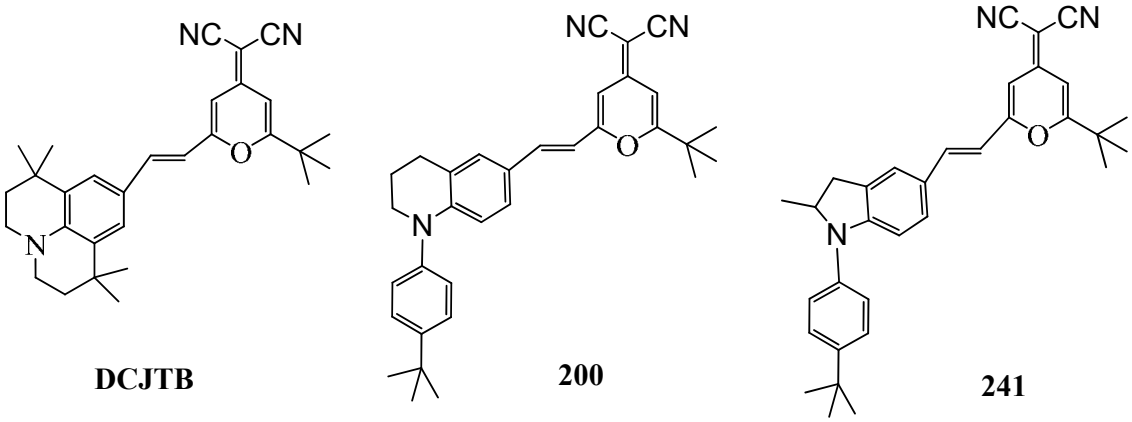


compound 3


Curve 1: DSC
File info: lzh-60 Sun Aug 28 19:14:39 1994
Sample Weight: 2.100 mg
lzh-60
1 lzh-60: lzh-60
Heat Flow (mW) s: 8
2 Heat Flow (mW) s: 2
3 Heat Flow (mW) s: 4
4 Heat Flow (mW) s: 6
80
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
Heat Flow (mW)
50.0
100.0
150.0
200.0
250.0
300.0
Temperature (°C)
TEMP1: 310.0 °C TIME1: 1.0 min RATE1: 30.0 °C/min
TEMP2: 40.0 °C
lzh
baseline
7 Series Thermal Analysis System
Sun Aug 28 19:34:59 1994

Comparison of PL spectra of three polar dyes doped in NPB (1%) (left) and in Alq_3 (1%) (right). The structures of the polar dyes are shown below. They are know to emit from a charge-transfer excited state, therefore may be used to reflect the relative polarity of the media.





DCJTB **200** **241**