

Electronic Supplementary Information

The effects of asymmetric bent-shaped compounds on the temperature range and electro-optical performances of liquid crystalline blue phases

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Figure S1 is the ¹H NMR of CN-OXD-C5H.

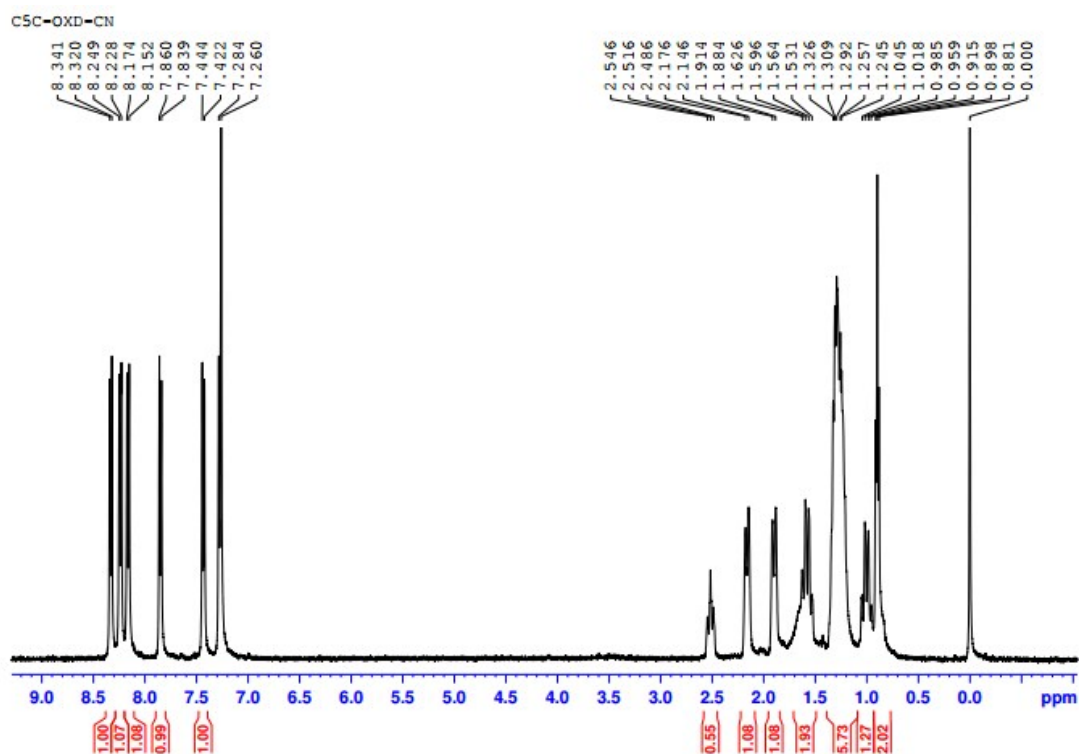


Figure S1. The spectrum of ¹H NMR of CN-OXD-C5H

Figure S2 is the Mass Spectrometry of CN-OXD-C5H.

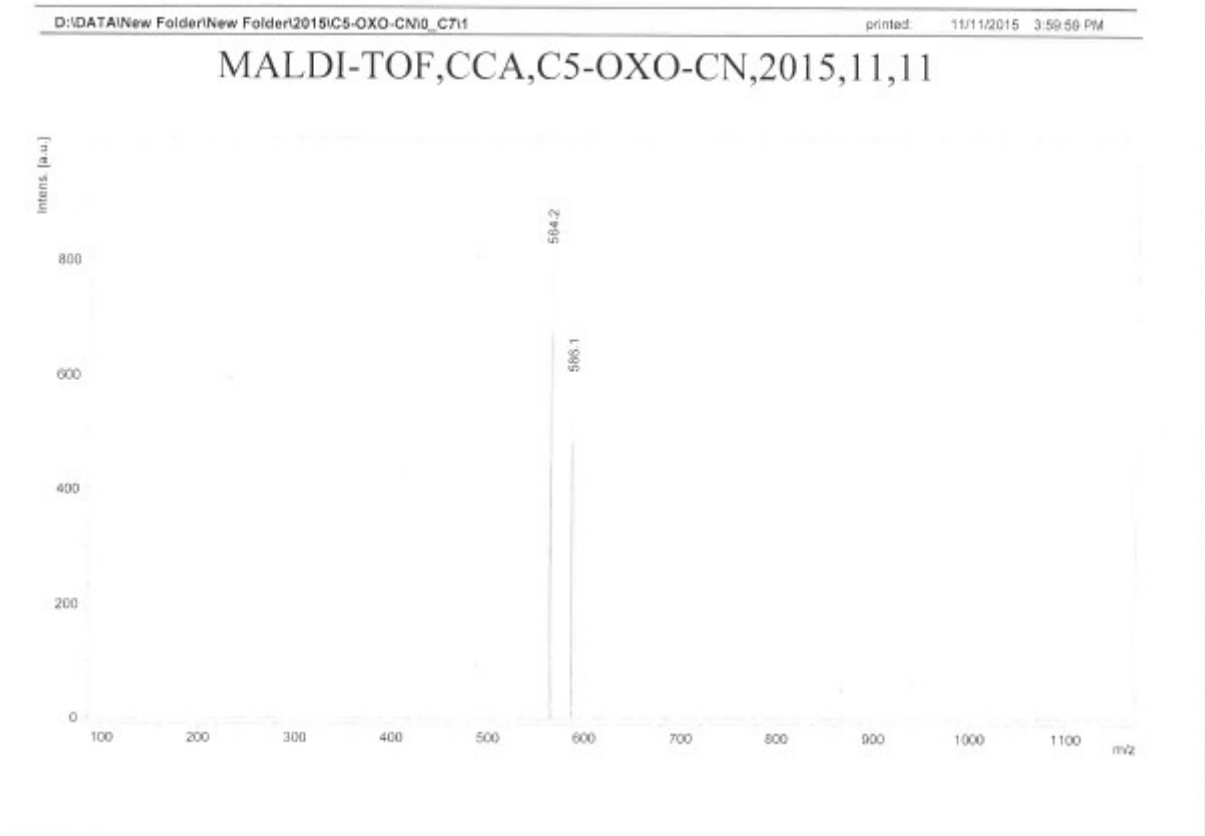


Figure S2. The Mass Spectrometry of CN-OXD-C5H

Figure S3 is the ^1H NMR of C5H-OXD-C5H.

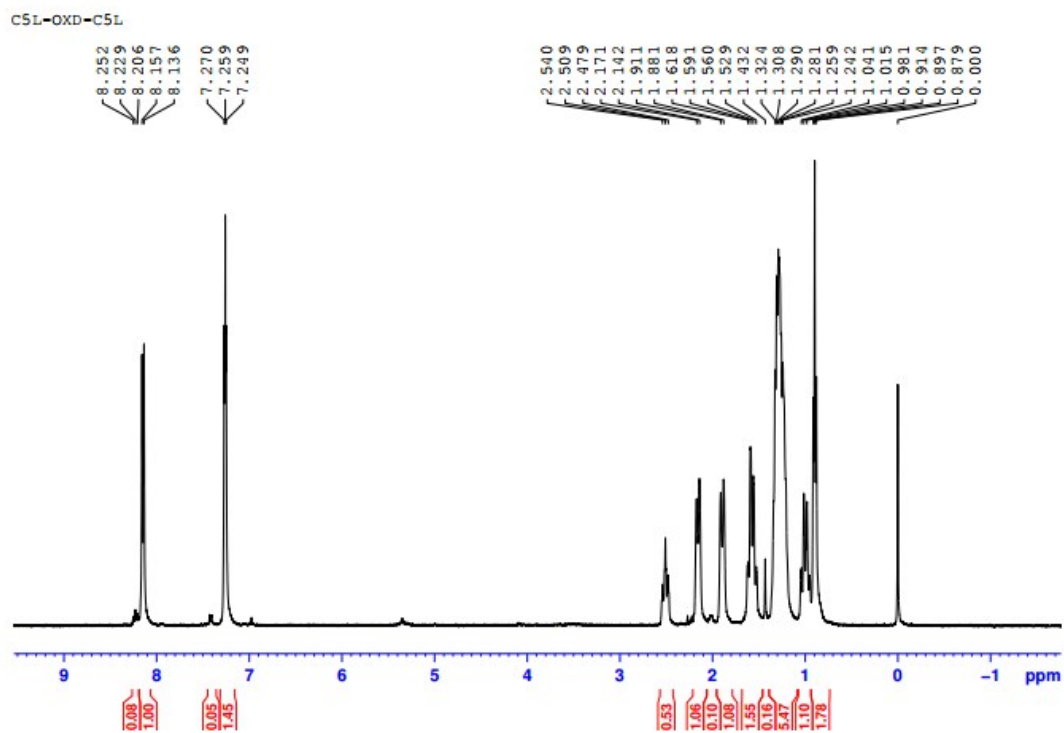


Figure S3. The spectrum of ^1H NMR of C5H-OXD-C5H

Figure S4 is the Mass Spectrometry of C5H-OXD-C5H.

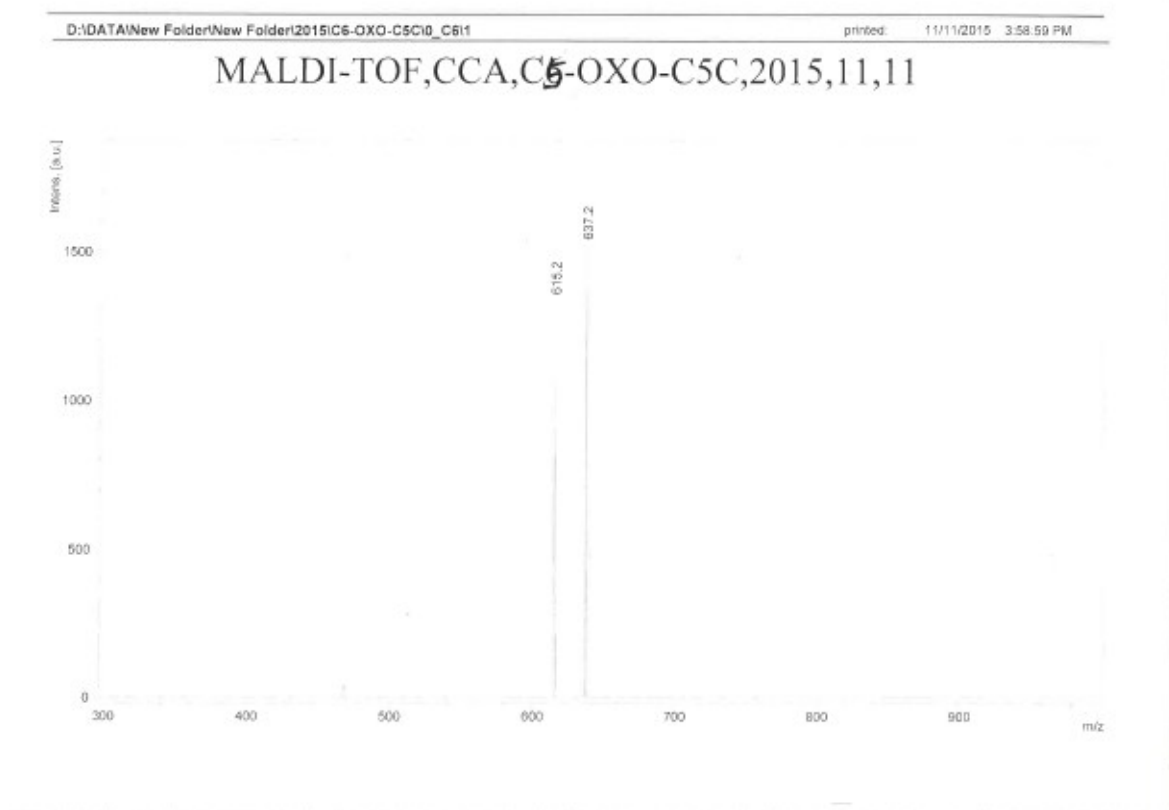


Figure S4. The Mass Spectrometry of C5H-OXD-C5H

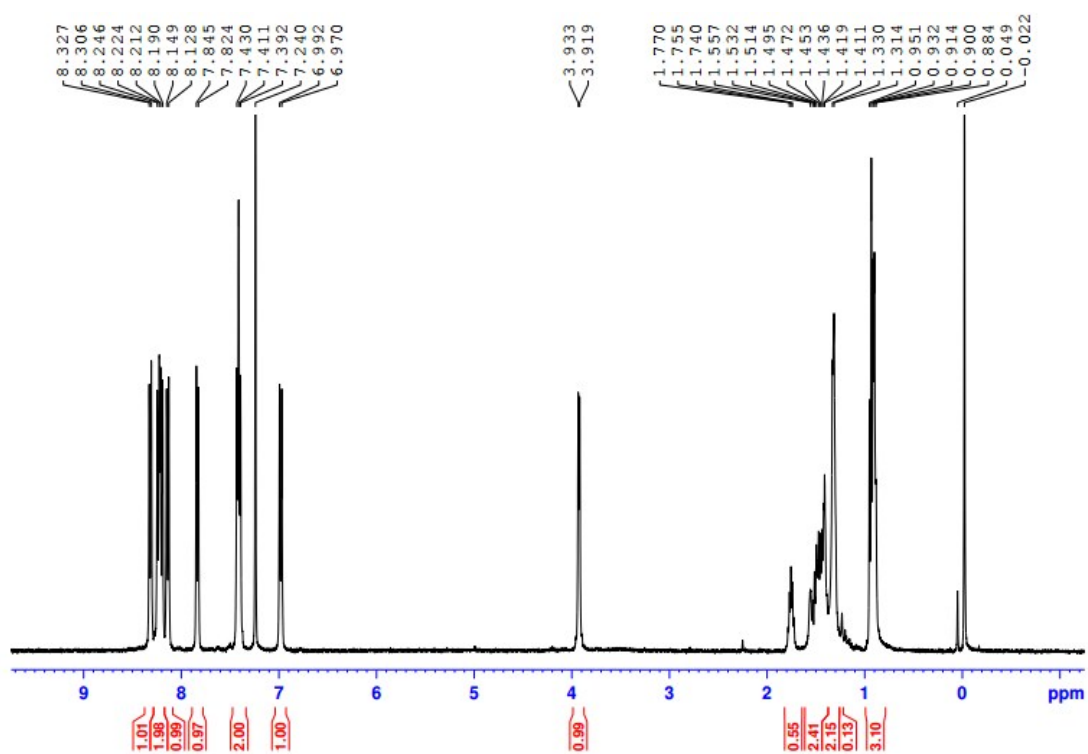
Figure S5 is the ^1H NMR of CN-OXD-C6H.Figure S5. The spectrum of ^1H NMR of CN-OXD-C6H

Figure S6 is the Mass Spectrometry of CN-OXD-C6H.

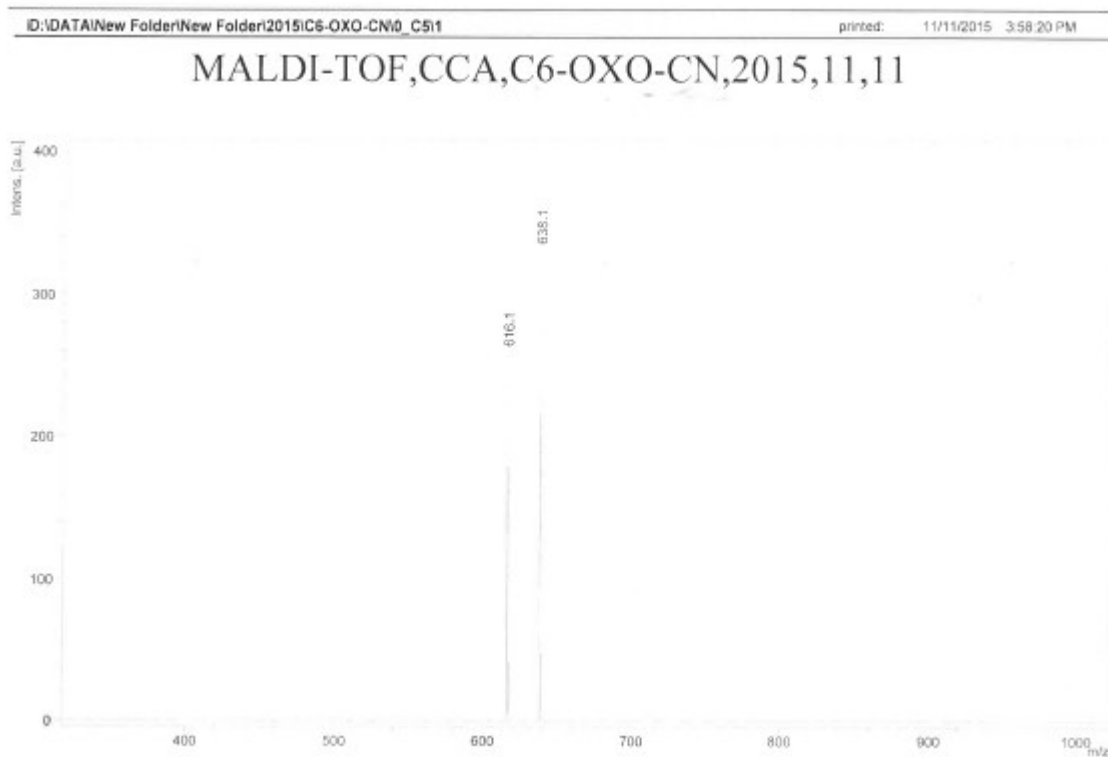


Figure S6. The Mass Spectrometry of CN-OXD-C6H

Figure S7 is the ^1H NMR of C6H-OXD-C6H.

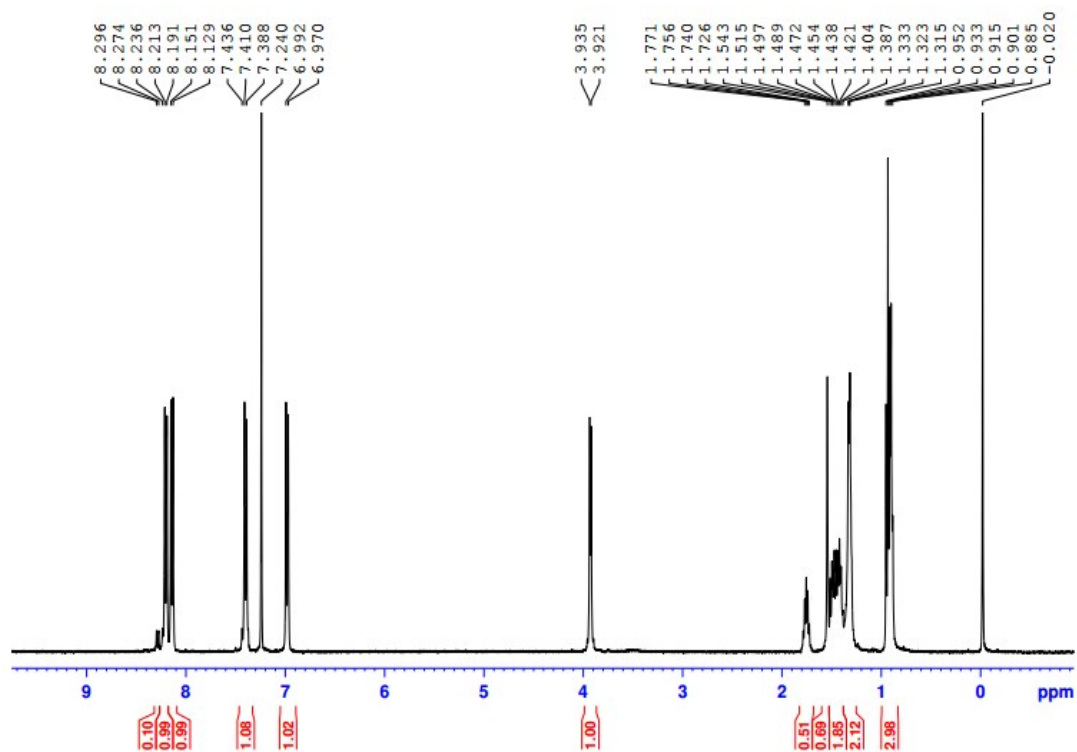


Figure S7. The spectrum of ^1H NMR of C6H-OXD-C6H

Figure S8 is the Mass Spectrometry of C6H-OXD-C5H.

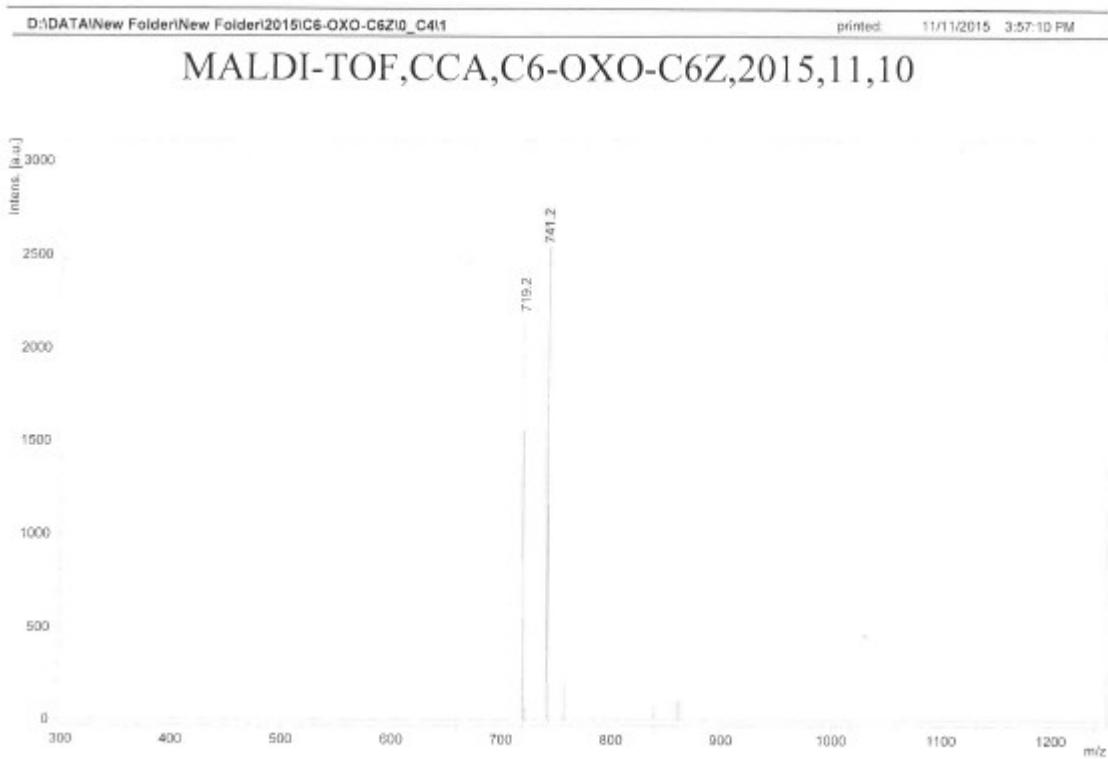


Figure S8. The Mass Spectrometry of C6H-OXD-C6H

Figure S9 is the ^1H NMR of CN-OXD-C6HF.

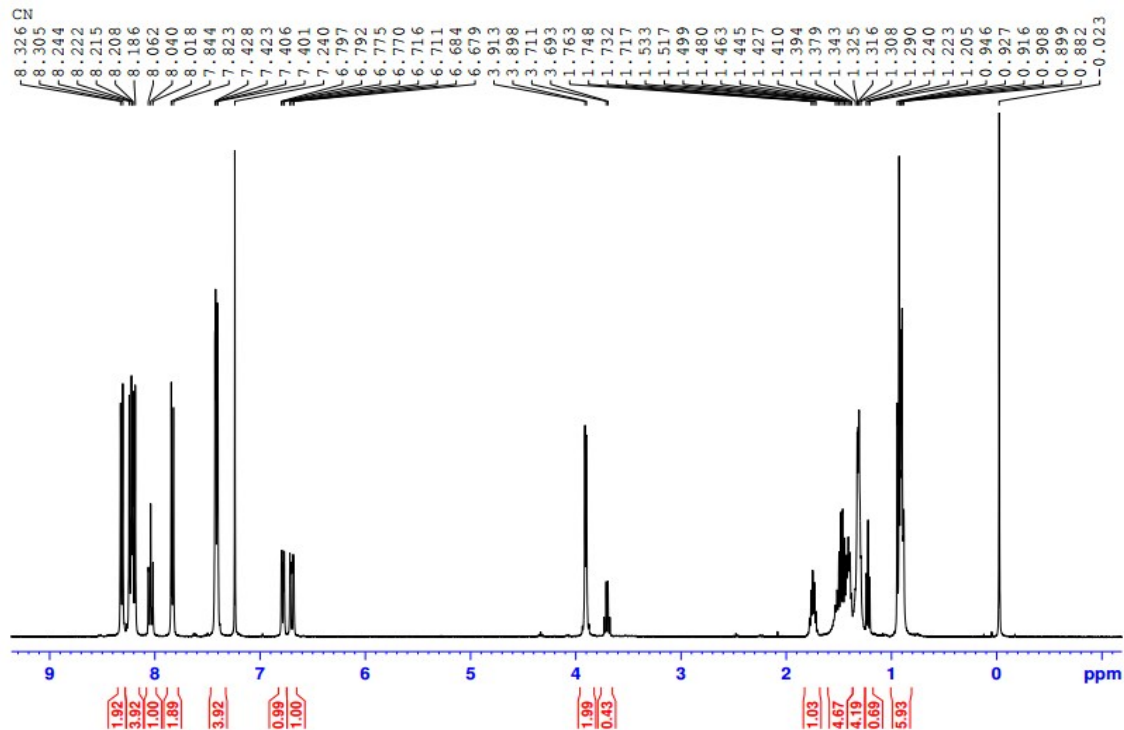


Figure S9. The spectrum of ^1H NMR of CN-OXD-C6HF

Figure S10 is the Mass Spectrometry of CN-OXD-C6HF.

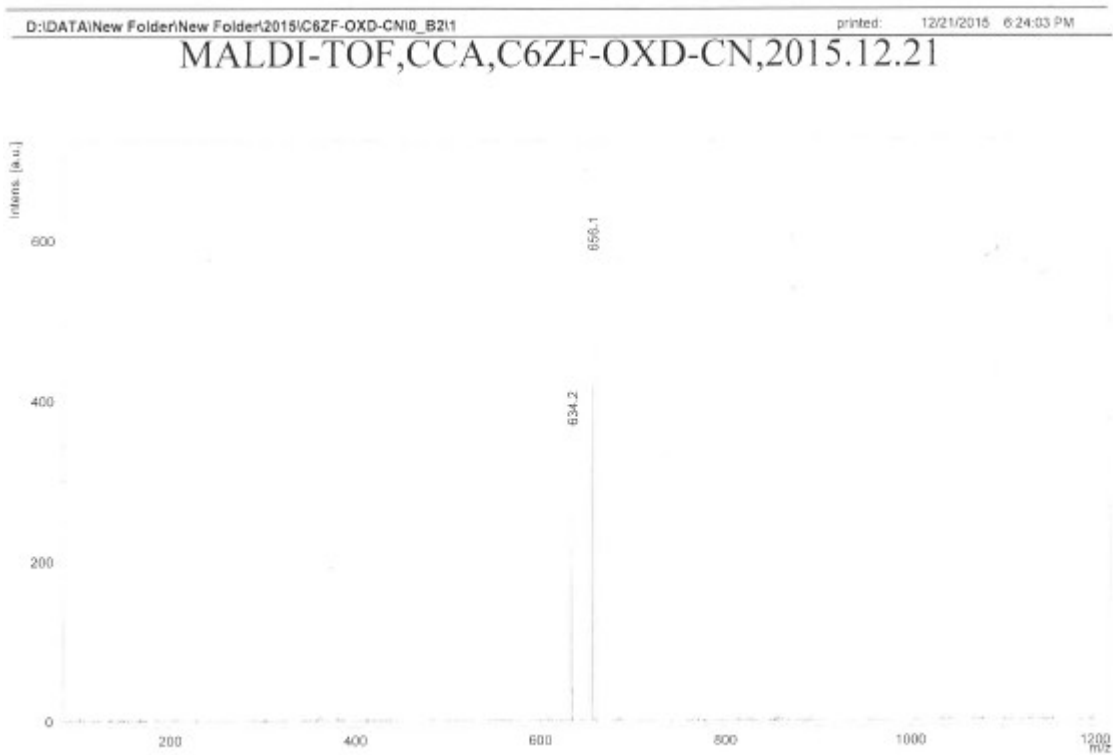


Figure S10. The Mass Spectrometry of CN-OXD-C6HF

Figure S11 is the ^1H NMR of C6HF-OXD-C6HF.

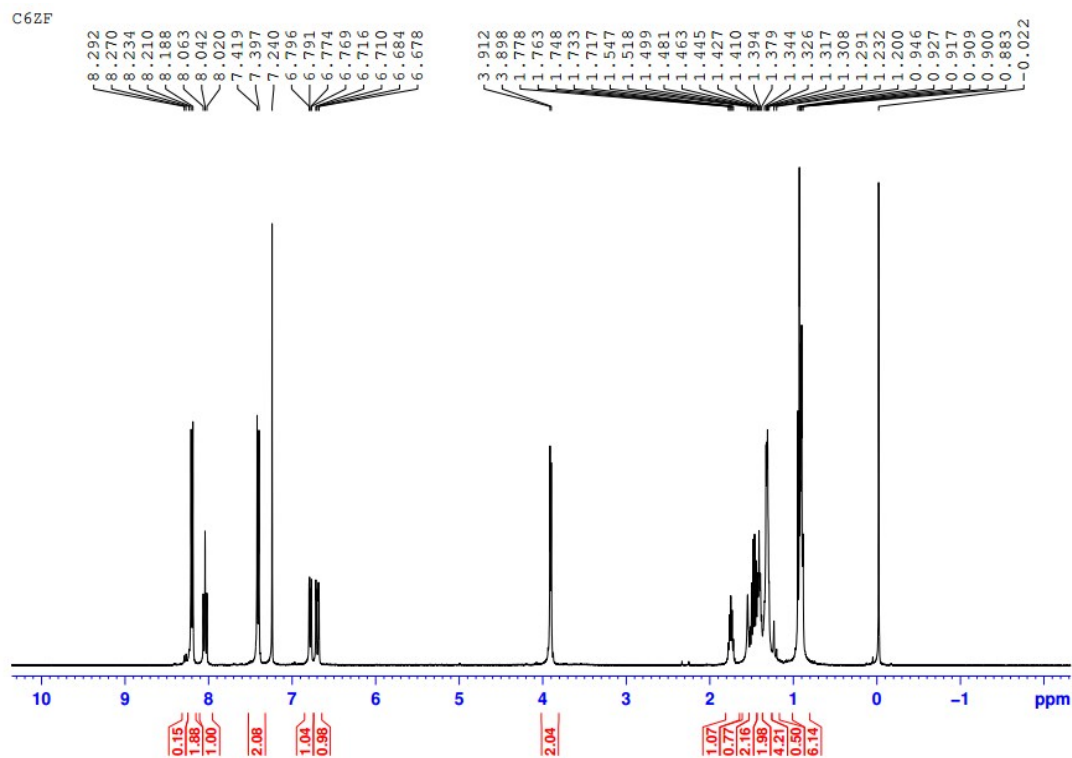


Figure S11. The spectrum of ^1H NMR of C6HF-OXD-C6HF

Figure S12 is the Mass Spectrometry of C6HF-OXD-C6HF.



Figure S12. The Mass Spectrometry of C6HF-OXD-C6HF

Figure S13 is the ^1H NMR of CN-Th-C6H.

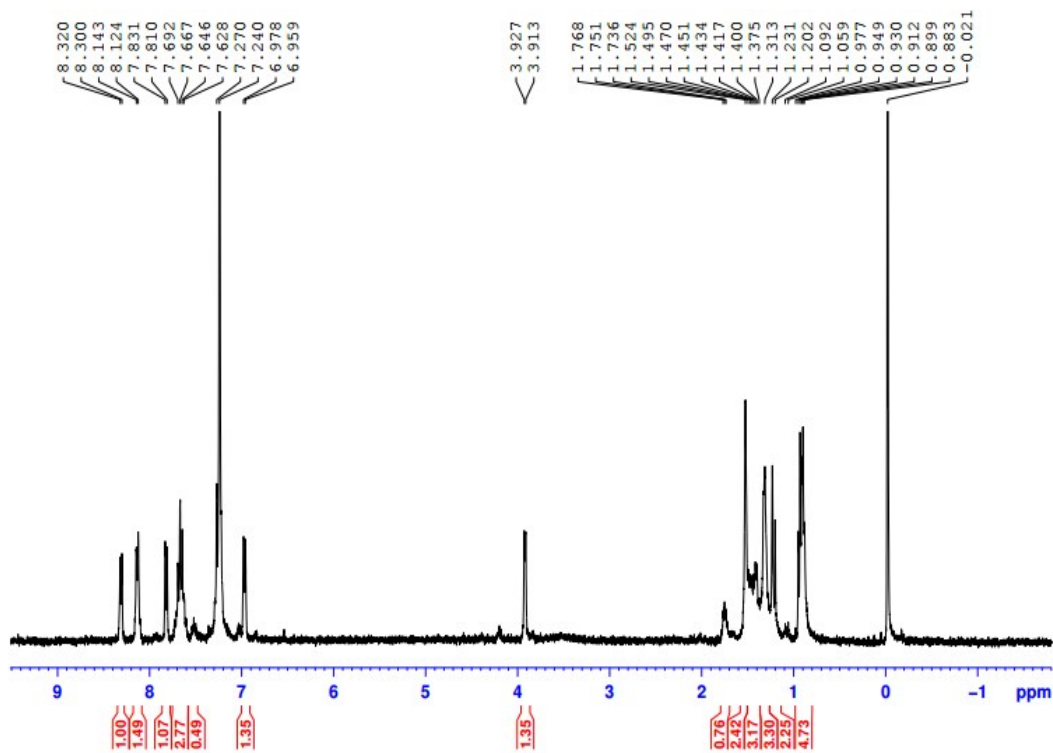


Figure S13. The spectrum of ^1H NMR of CN-Th-C6H

Figure S14 is the Mass Spectrometry of CN-OXD-C6H.

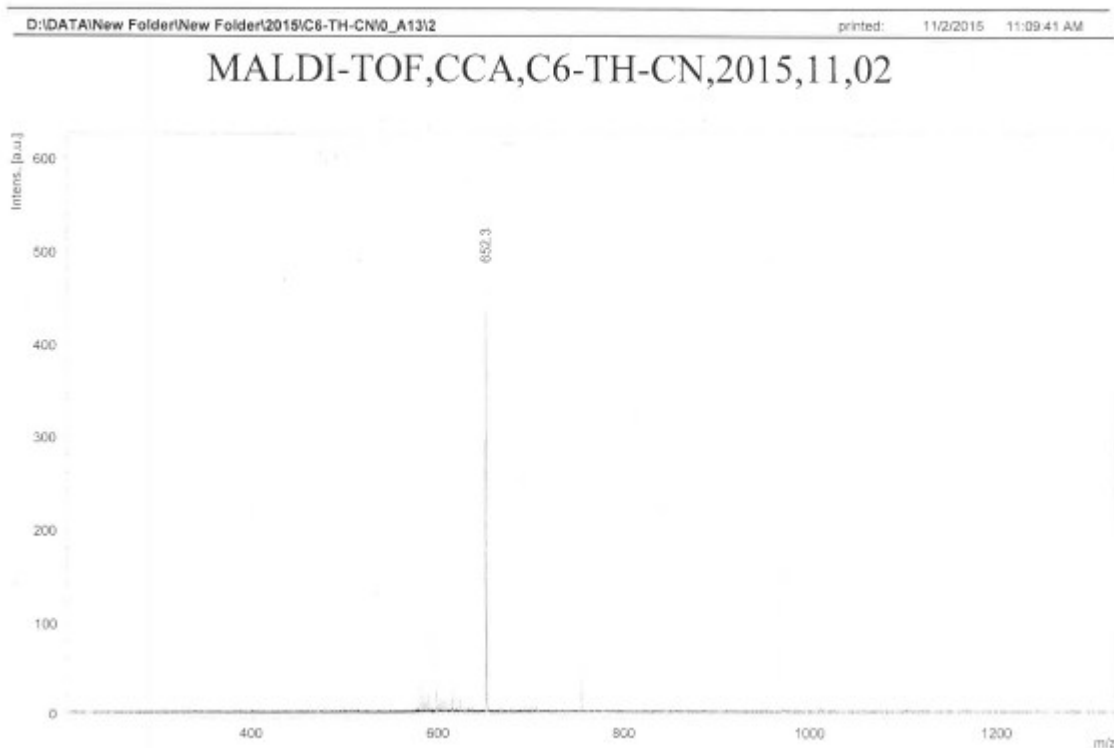


Figure S14. The Mass Spectrometry of CN-Th-C6H

Figure S15 is the ^1H NMR of C6H-Th-C6H.

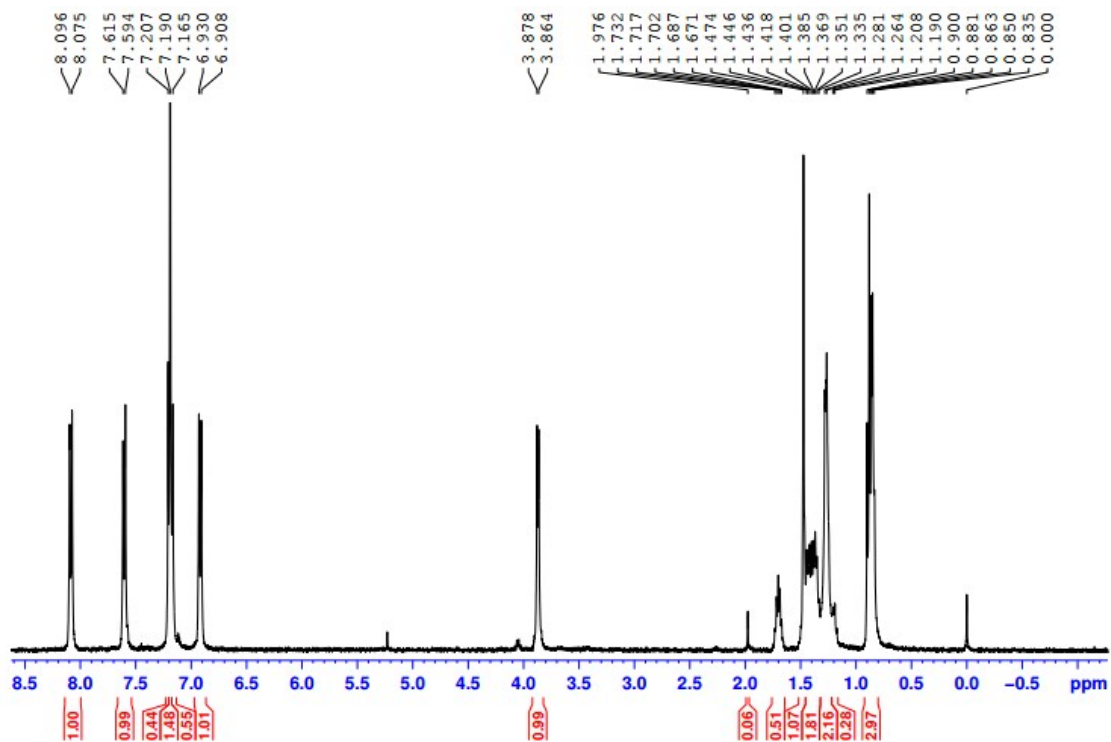
Figure S15. The spectrum of ^1H NMR of C6H-Th-C6H

Figure S2 is the Mass Spectrometry of C6H-Th-C6H.

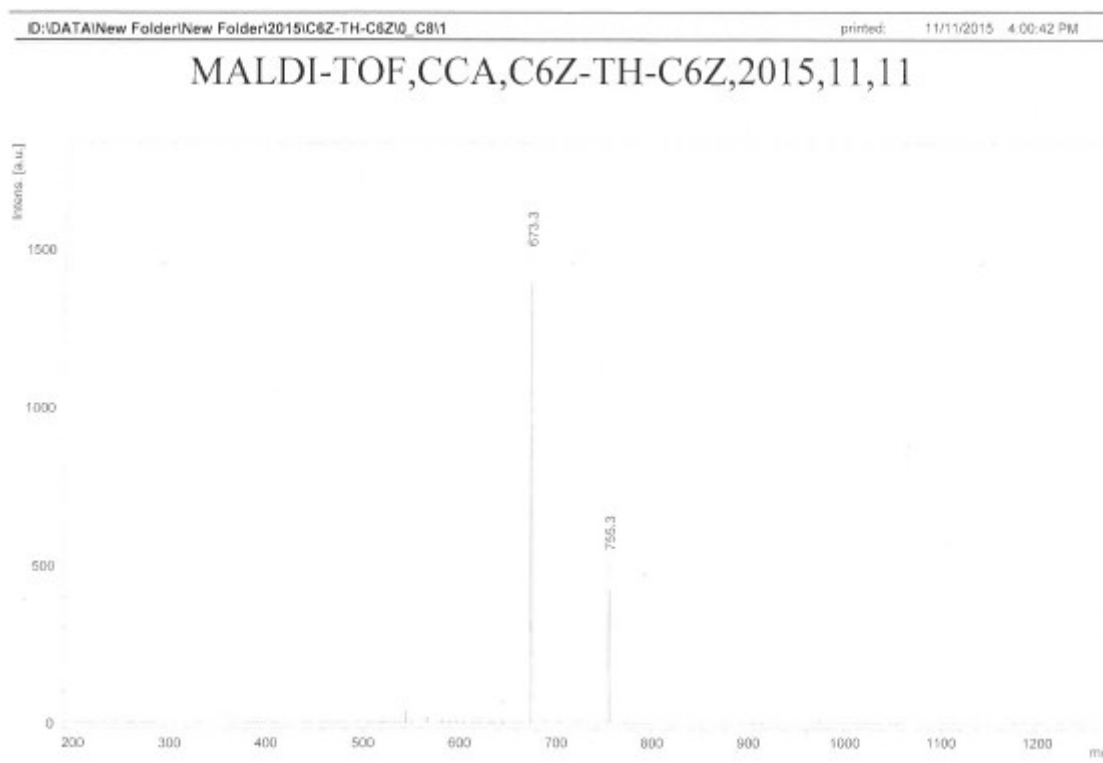


Figure S16. The Mass Spectrometry of C6H-Th-C6H

Figure S17 is the normalized voltage-transmittance curve of BPI in the N*LC doped with different bent-shaped compounds, and all the concentration is 15%.

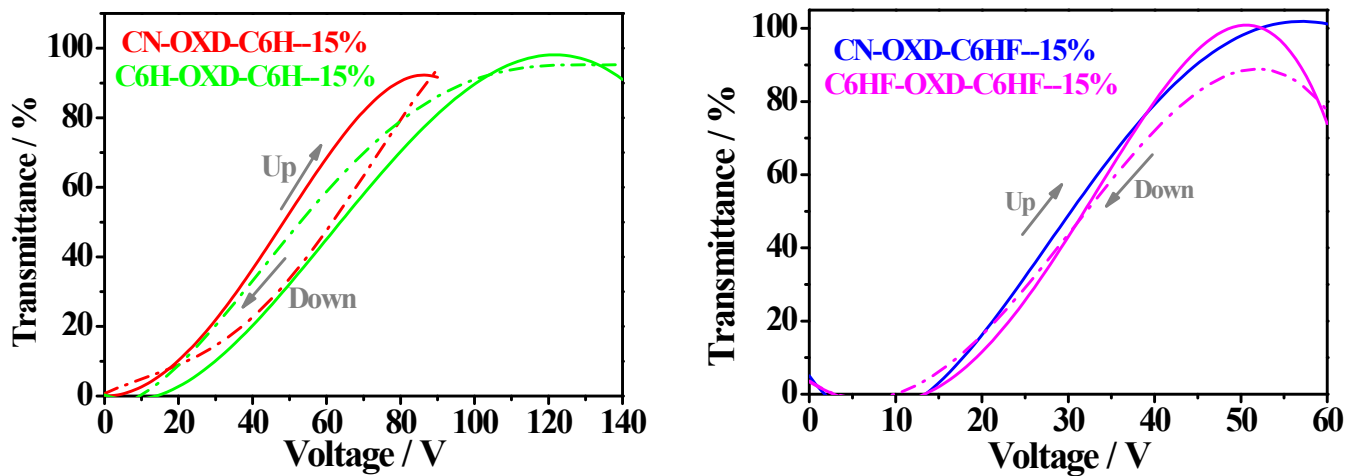


Figure S17. Normalized voltage-transmittance curve of BPI in the N*LC doped with different bent-shaped compounds and all the concentration is 15%.