Electronic Supplementary Material (ESI) for New Journal of Chemistry. This journal is © The Royal Society of Chemistry and the Centre National de la Recherche Scientifique 2019

## **ELECTRONIC SUPPLEMENTARY INFORMATION**

## Synthesis and Thermotropic Properties of New Green Electrochromic Ionic Liquid Crystals

Lucia Veltri, \*<sup>a</sup> Gabriella Cavallo,<sup>b</sup> Amerigo Beneduci, \*<sup>a</sup> Pierangelo Metrangolo,<sup>b,c</sup> Giuseppina Anna Corrente,<sup>a</sup> Maurizio Ursini,<sup>b</sup> Roberto Romeo,<sup>d</sup> Giancarlo Terraneo,<sup>b</sup> and Bartolo Gabriele<sup>\*a</sup>

**Table of Contents** 

Copies of DSC and TGA thermograms

Figure S-15

9

2-8



**Copies of DSC and TGA thermograms** 





Figure S2: Thermogravimetric curve of 14-Cl.



Figure S3: DSC thermogram of compound 14- PF<sub>6</sub>.



Figure S4: Thermogravimetric curve of 14-PF<sub>6</sub>.



Figure S5: DSC thermogram of compound 14- OTf.



Figure S6: Thermogravimetric curve of 14-OTf.



Figure S7: DSC thermogram of compound 14- OTs.



Figure S8: Thermogravimetric curve of 14-OTs.



Figure S9: DSC thermogram of compound 14- NTf<sub>2</sub>.



Figure S10: Thermogravimetric curve of 14-NTf<sub>2</sub>.



Figure S11: DSC thermogram of compound 10- NTf<sub>2</sub>.



Figure S12: Thermogravimetric curve of 10 -NTf<sub>2</sub>.



Figure S13: DSC thermogram of compound 8- NTf<sub>2</sub>.



Figure S14: Thermogravimetric curve of 8 -NTf<sub>2</sub>.



**Figure S15**: Spectroelectrochemistry of the compounds (a) **8-NTf**<sub>2</sub> and (b) **10-NTf**<sub>2</sub> with potential referred to Ag/AgCl. The insets highlight the typical viologen absorbtion bands hermogravimetric curve of **8 -NTf**<sub>2</sub>.