Chiral ionic liquid crystals with a bulky rigid core from renewable camphorsulfonic acid

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1. TGA results

![TGA curve of L-C18ACS measured in the N2 atmosphere.](image)

**Figure S1.** TGA curve of L-C18ACS measured in the N2 atmosphere.

2. FTIR spectra of D-CnACSs

![FTIR spectra of D-CnACSs](image)

**Figure S2.** FTIR spectra of D-CnACSs.
Figure S2. FTIR spectra of (a) D-C\textsubscript{12}ACS, (b) D-C\textsubscript{14}ACS, (c) D-C\textsubscript{16}ACS and (d) D-C\textsubscript{18}ACS at different temperatures.

3. X-Ray diffraction patterns of D-C\textsubscript{n}ACSs
In situ: 90 ºC

RT

b: D-C14ACS

34.22 Å

31.98 Å

2 proph 0

Intensity

Intensity

20/degree

20/degree

2: D-C16ACS

36.78 Å

40.12 Å
Figure S3. X-Ray diffraction patterns of (a) D-C$_{12}$ACS, (b) D-C$_{14}$ACS, (c) D-C$_{16}$ACS and (d) D-C$_{18}$ACS at room temperature and 90 °C.