**Supporting information**

Biosourced analogs of elastomer modified bitumen through hydrothermal liquefaction of *Spirulina Sp.* microalgae residues

**Figure S1**: Experimental and simulated $^{31}$P MAS spectra of the *Spirulina sp.* HTL fraction (240 °C, LF = 0.60) insoluble in both water and dichloromethane ($\delta_{iso}$=1.1 ppm, CSA=30 ppm)
Figure S2: $^{1}H$-$^{13}C$ CP-MAS spectrum of the *Spirulina sp.* HTL fraction (240 °C, LF = 0.60) insoluble in both water and dichloromethane, after HCl treatment.
Figure S3: FT-IR spectrum of the *Spirulina sp.* HTL fraction (240 °C, LF = 0.65) insoluble in both water and dichloromethane, after HCl treatment.
Figure S4: 2D-GC chromatogram of the *Spirulina sp.* HTL fraction (240 °C, LF = 0.60) soluble in THF.