ANALYSIS OF PRODUCTS OBTAINED FROM SLOW PYROLYSIS OF POLYETHYLENE TEREPHTHALATE BY FOURIER TRANSFORM ION CYCLOTRON RESONANCE MASS SPECTROMETRY COUPLED TO ELECTROSPRAY IONIZATION (ESI) AND LASER DESORPTION IONIZATION (LDI)

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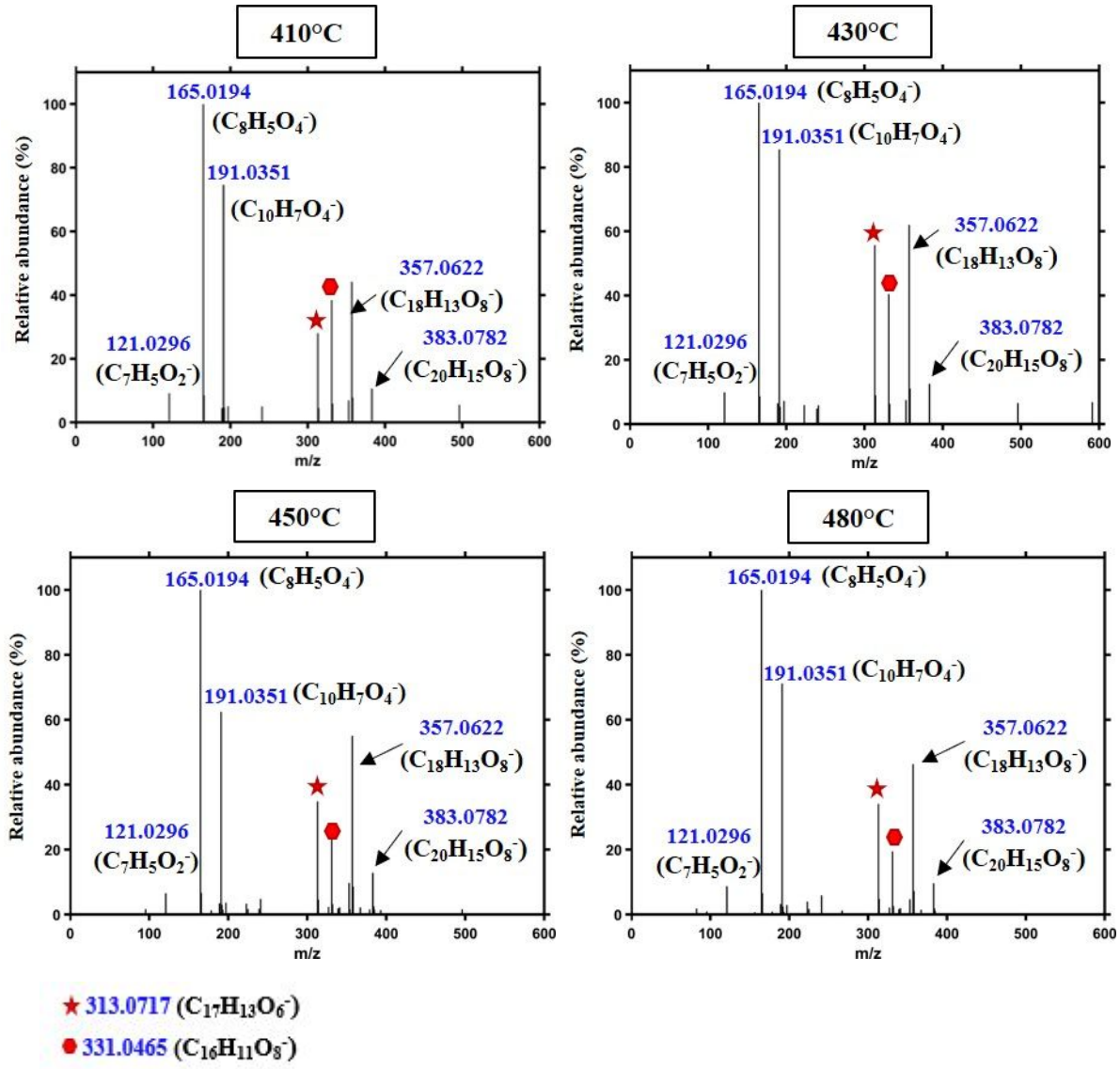

Figure S-1: Mass spectrum of the waxy products (m/z < 400) obtained by (–) ESI FT–ICR MS in respect with the final pyrolysis temperature. The detected ions are relative to the deprotanated $[M–H]^-$ of $C_xH_yO_z$ PET pyrolysis products.

Note: *After the ionization, the ions passed through a hexapole Q1 (to focus the ions) and the quadrupole Q2 (to select a given mass range). The ions are then transferred to the ICR cell by an ion guide (hexapole). For higher values of RF (radiofrequency), we favor mass ranges over higher m / z values. So:*

Q1 / Q2 = 60.5 V means that they are both at the same amplitude of RF and this is favoring the high masses.

Q1/Q2= 26.6 V for lower masses.

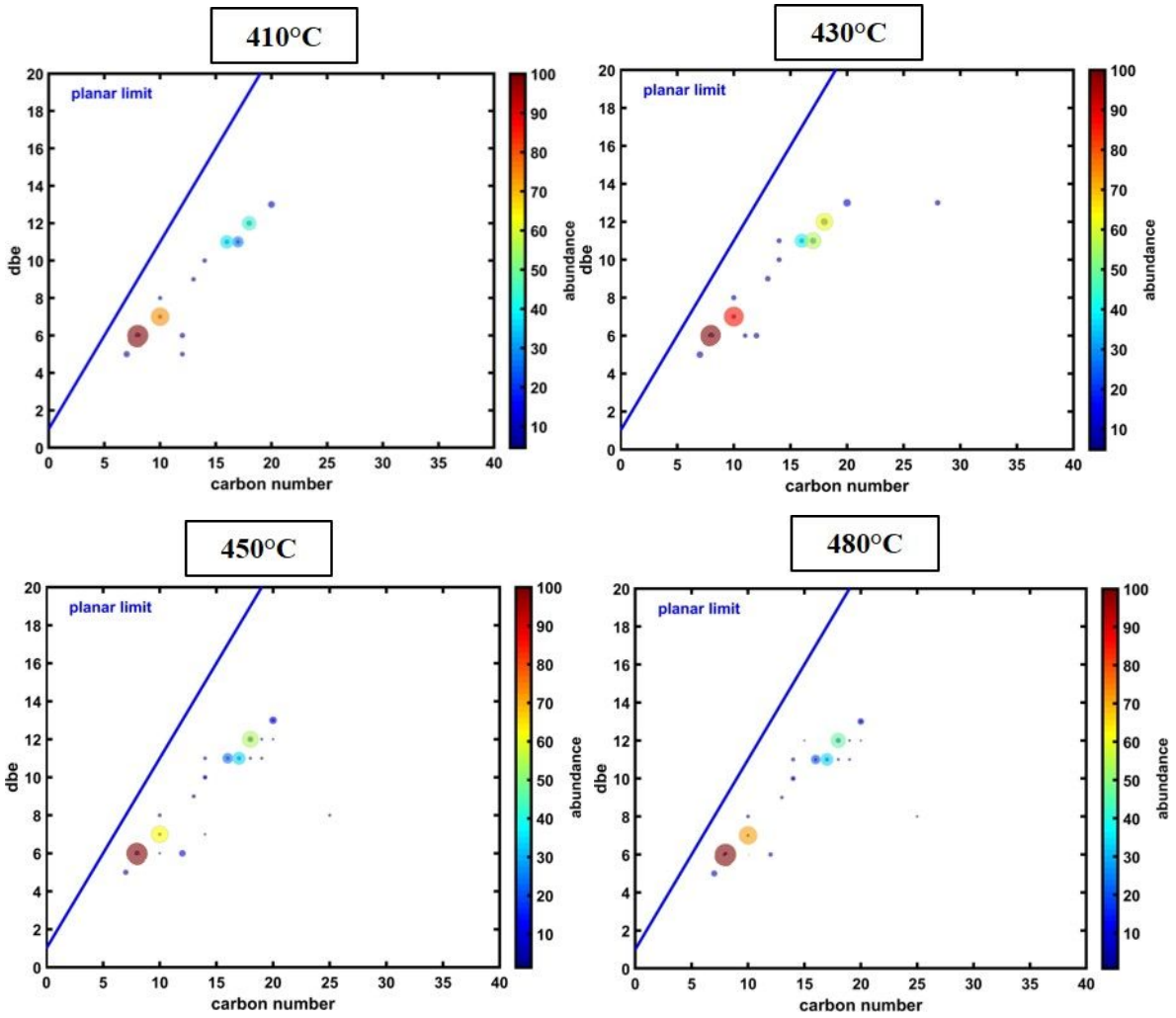

Figure S-2: DBE vs carbon number plots obtained by (–) ESI FT–ICR MS for the different final pyrolysis temperature, for m/z <400. The size of the dots and the color (from dark blue to dark red) are proportional to the relative abundance of the considered compound.

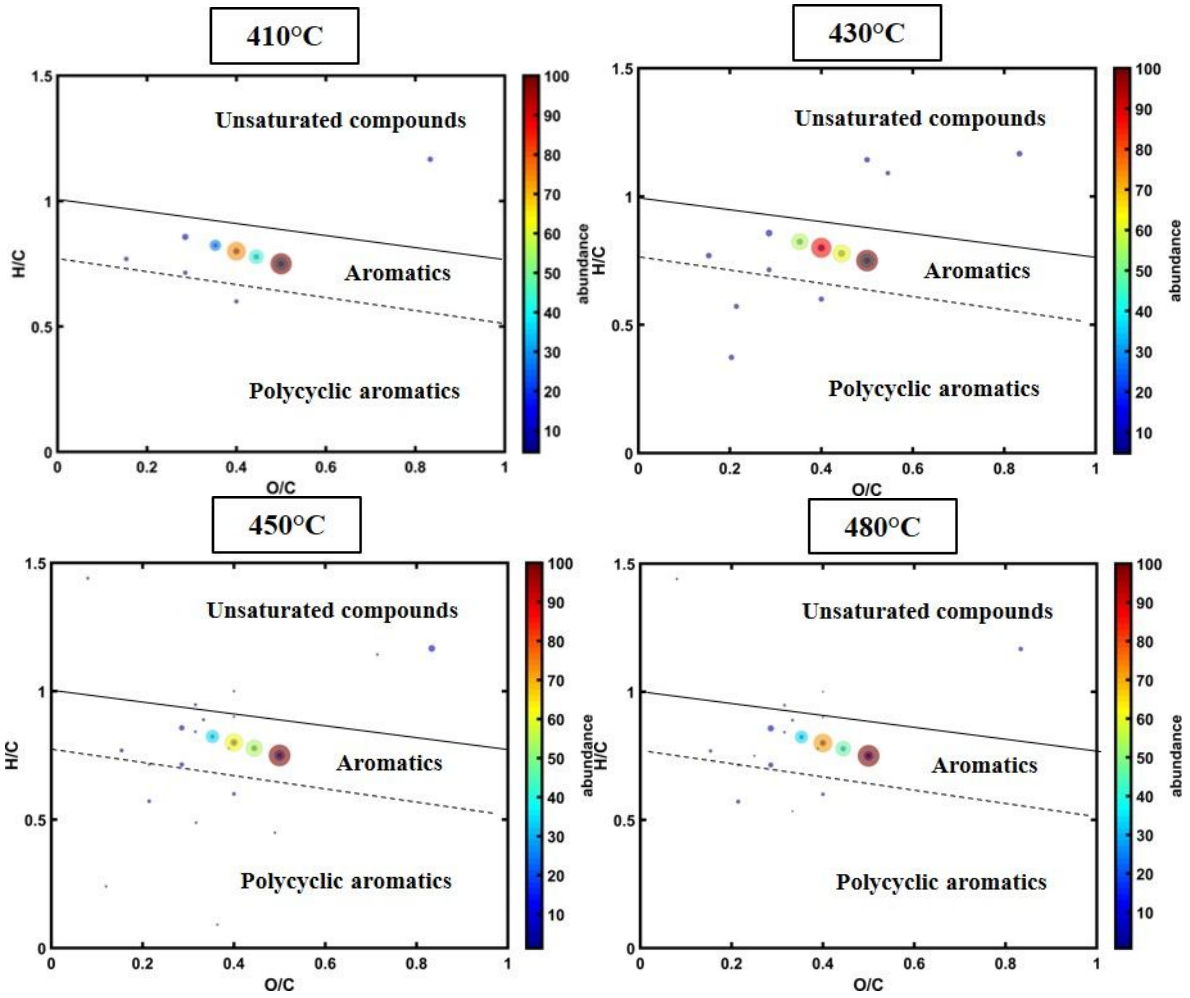

Figure S-3: H/C vs O/C Van-Krevelen plots obtained by (–) ESI FT–ICR MS of waxy products (m/z < 400) formed at different PET pyrolysis final temperature. The size of the dots and the color (from dark blue to dark red) are proportional to the relative abundance of the considered compound.

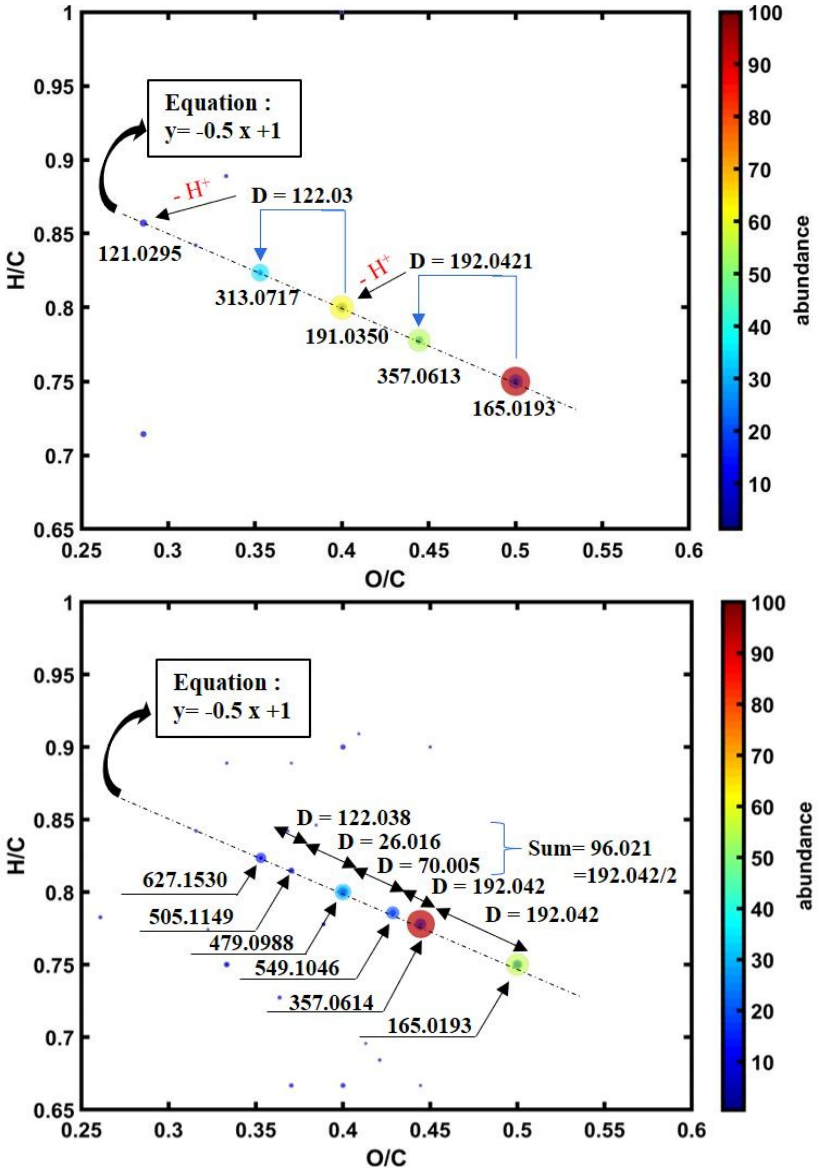

Figure S-4: H/C vs O/C Van-Krevelen plots at 450 °C, for m/z <400 (up) and m/z < 900 (down).