

## Supporting Information

# Renewable (semi)aromatic polyesters from symmetrical vanillin-based dimers

Audrey Llevot<sup>†,‡</sup>, Etienne Grau<sup>†,‡</sup>, Stéphane Carlotti<sup>†,‡</sup>, Stéphane Grelier<sup>†,‡</sup>, and Henri Cramail<sup>†,‡\*</sup>

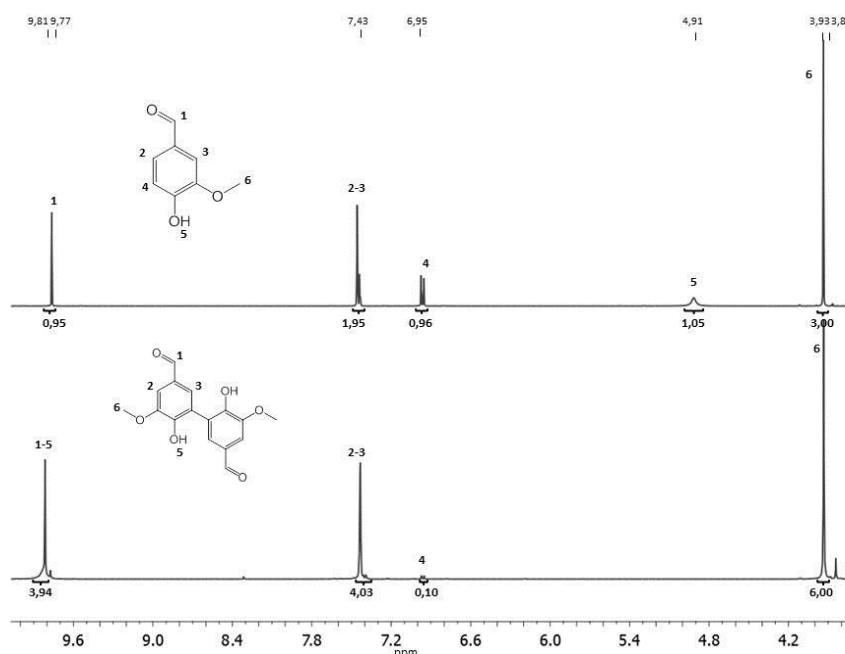
<sup>†</sup>*Univ. Bordeaux, Laboratoire de Chimie des Polymères Organiques, UMR 5629, F-33600, Pessac Cedex, France*

<sup>‡</sup>*Centre National de la Recherche Scientifique, Laboratoire de Chimie des Polymères Organiques, UMR 5629, F-33600, Pessac cedex, France*

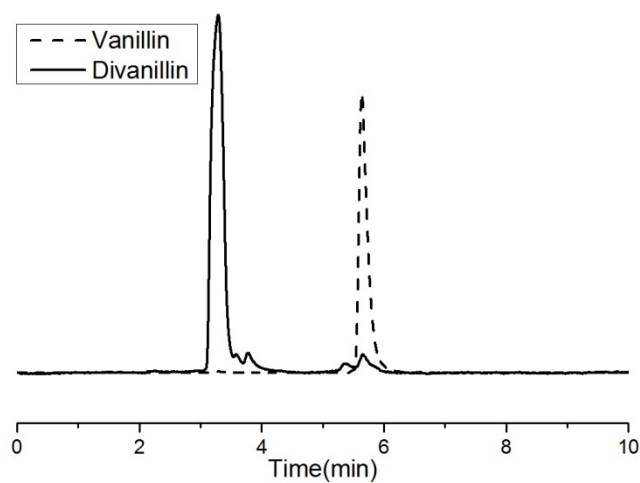
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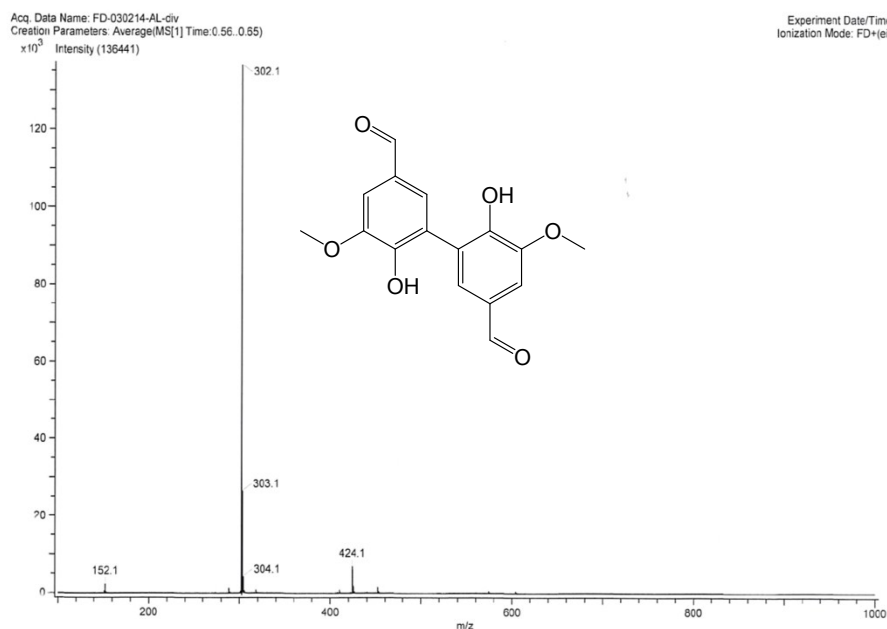
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**Figure S 1:  $^1\text{H}$  NMR spectra of vanillin 1 (top) and divanillin 2 (bottom) in DMSO at room temperature**



**Figure S 2: HPLC profile of Vanillin 1 (dashed line) and Divanillin 2 (straight line), using a C18 grafted silica column in acetonitrile with a UV detector**



**Figure S 3: Mass spectrum of divanillin 2 ionized by electronic impact, direct introduction**

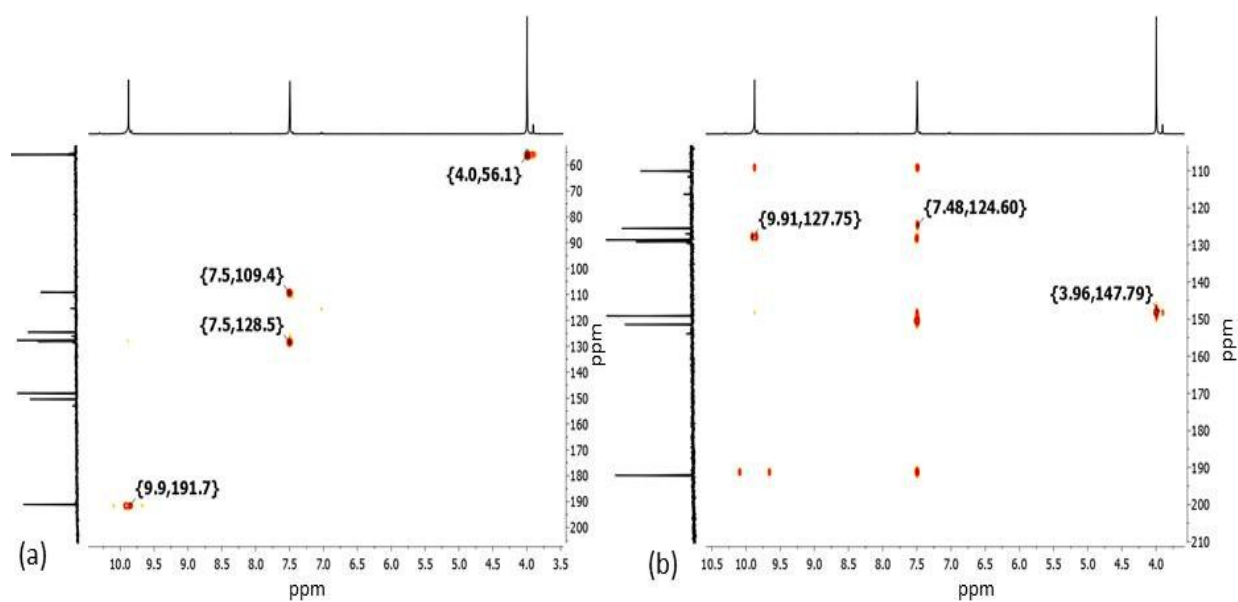


Figure S 4: HSQC (a) and HMBC (b) spectra of divanillin in DMSO, at room temperature.

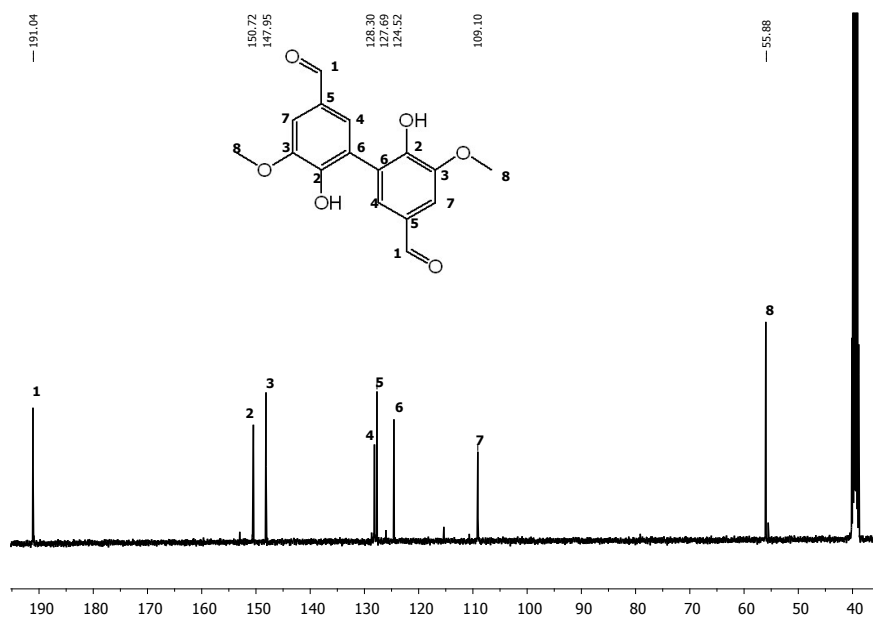


Figure S 5:  $^{13}\text{C}$  NMR spectrum of Divanillin 2 in DMSO

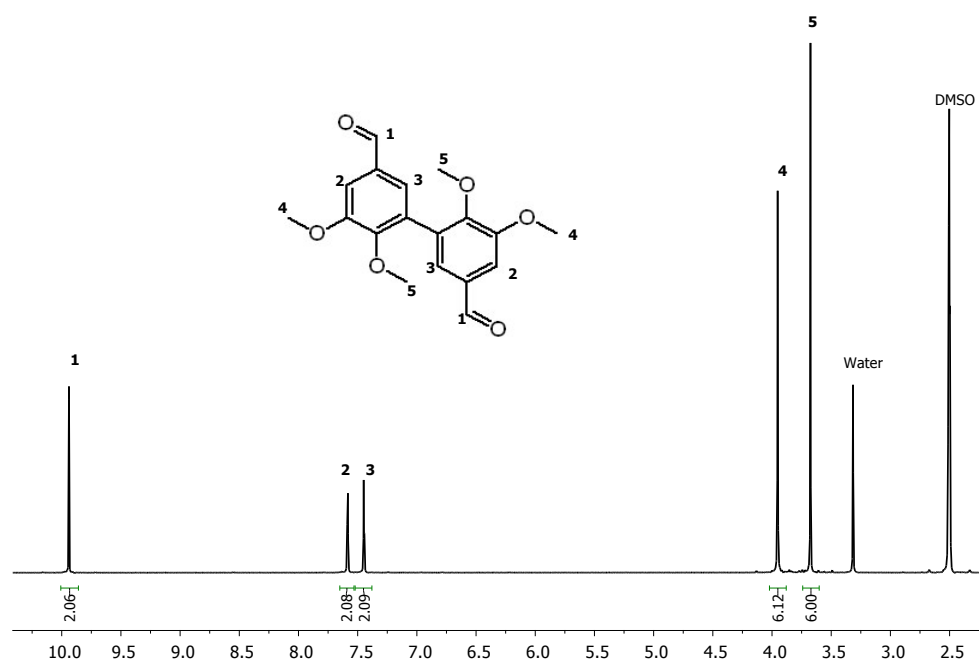


Figure S 6:  $^1\text{H}$  NMR spectrum of methylated divanillin 3 in DMSO

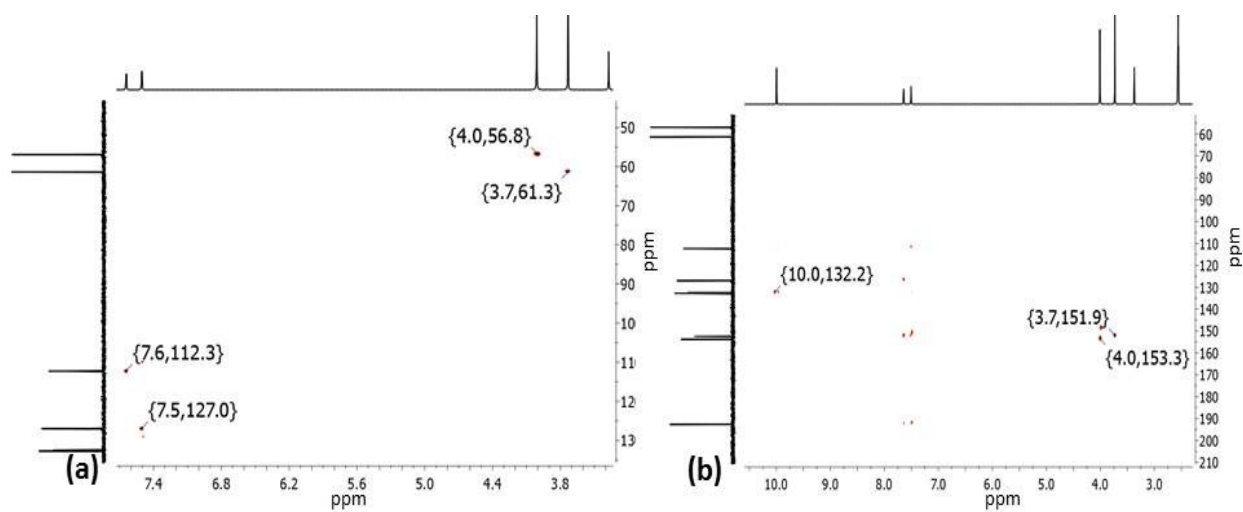


Figure S 7: HSQC (a) and HMBC (b) spectra of methylated divanillin 3 in DMSO, at room temperature.

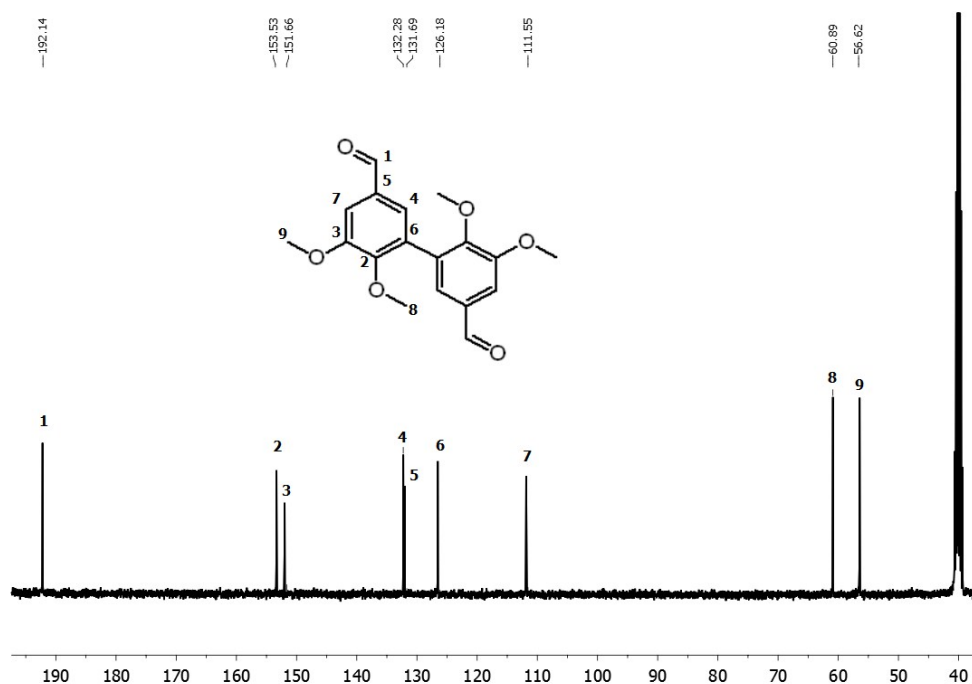


Figure S 8:  $^{13}\text{C}$  NMR spectrum of methylated divanillin 3 in DMSO

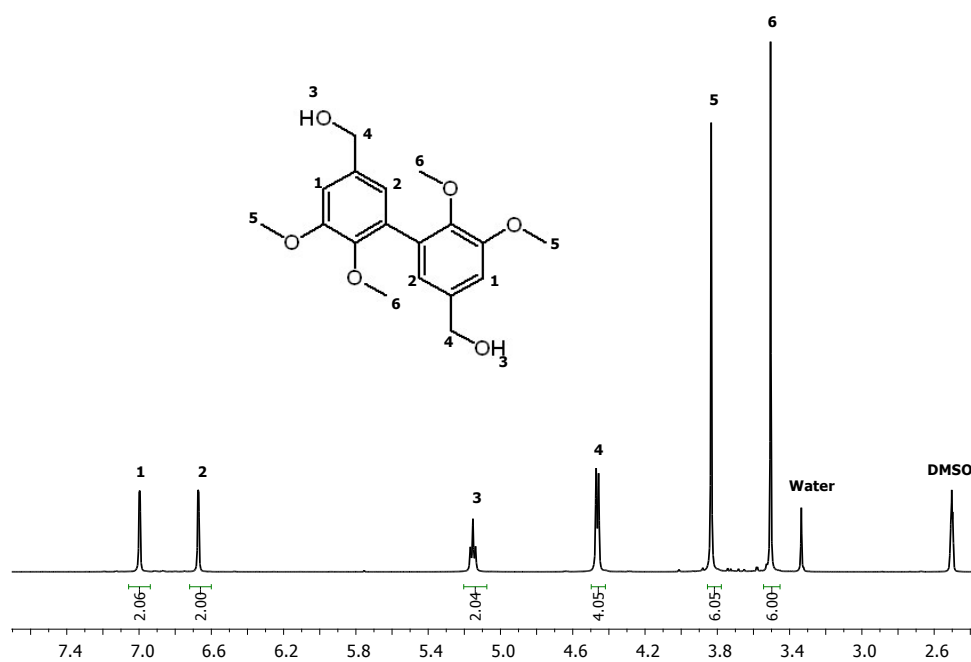


Figure S 9:  $^1\text{H}$  NMR spectrum of methylated divanillyl diol 4 in DMSO

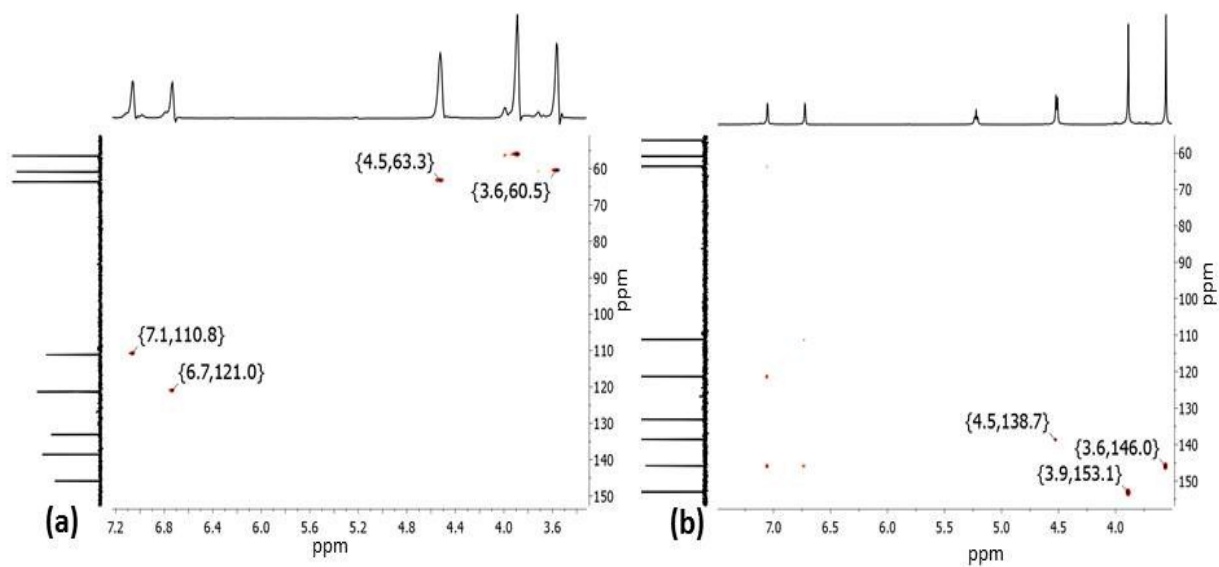


Figure S 10: HSQC (a) and HMBC (b) spectra of methylated diol 4 in DMSO.

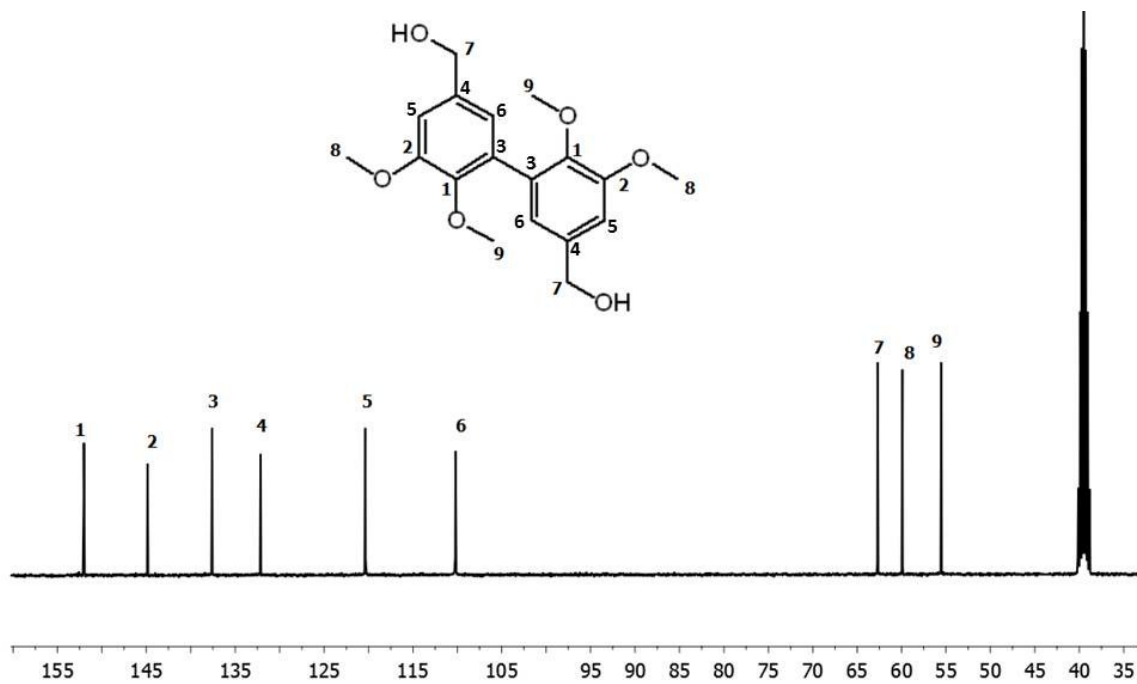


Figure S 11:  $^{13}\text{C}$  NMR spectrum of methylated divanillyl diol 4 in DMSO

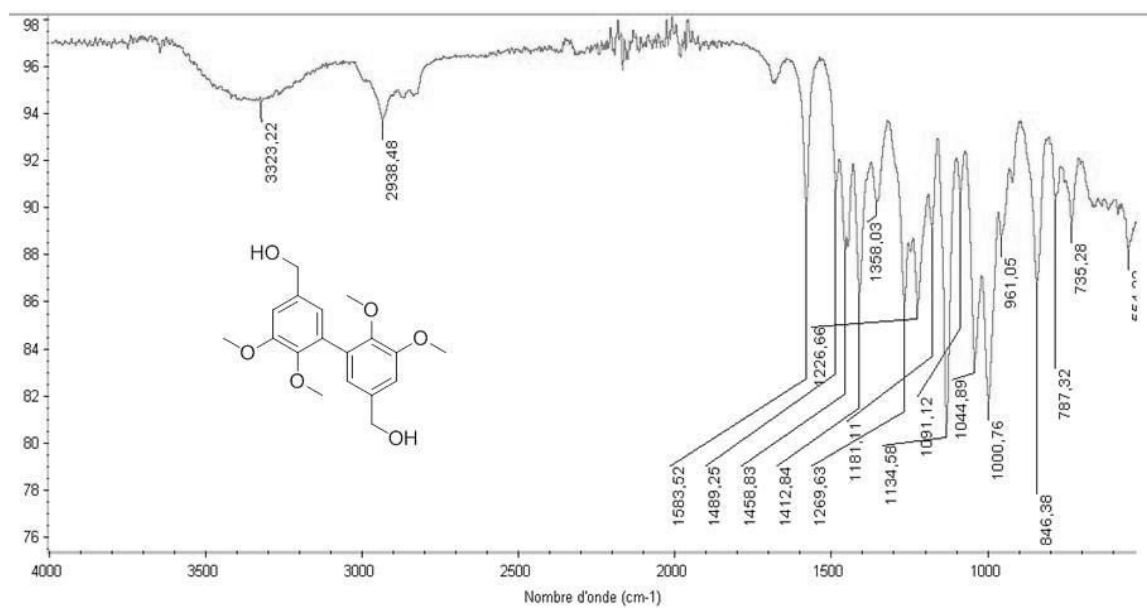


Figure S 12: FTIR spectrum of methylated divanillyl diol 4

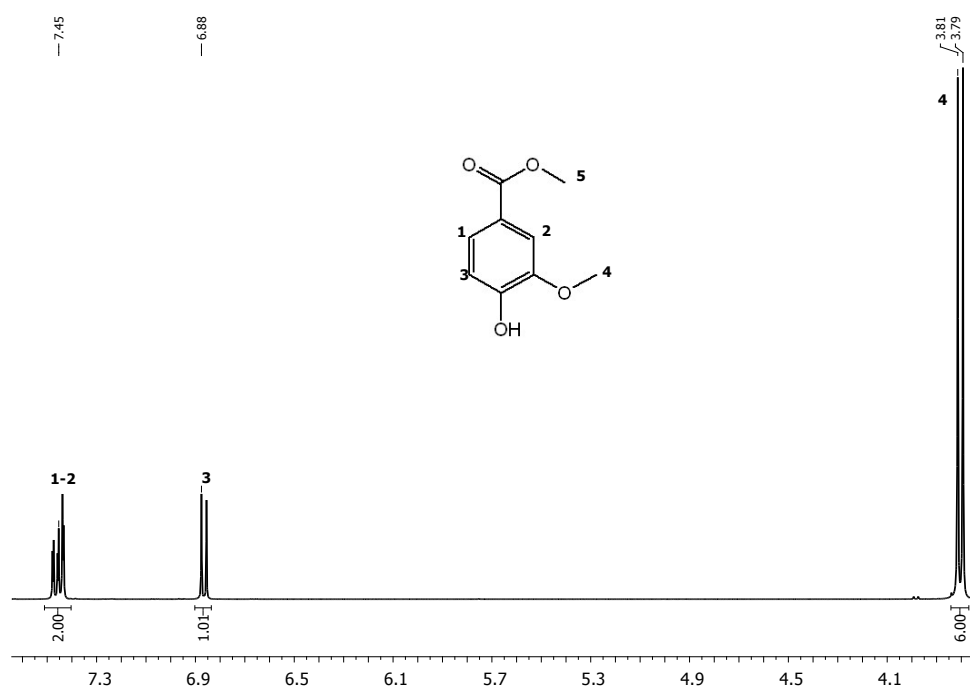


Figure S 13:  $^1\text{H}$  NMR spectrum of methyl vanillate 6 in DMSO, at room temperature.

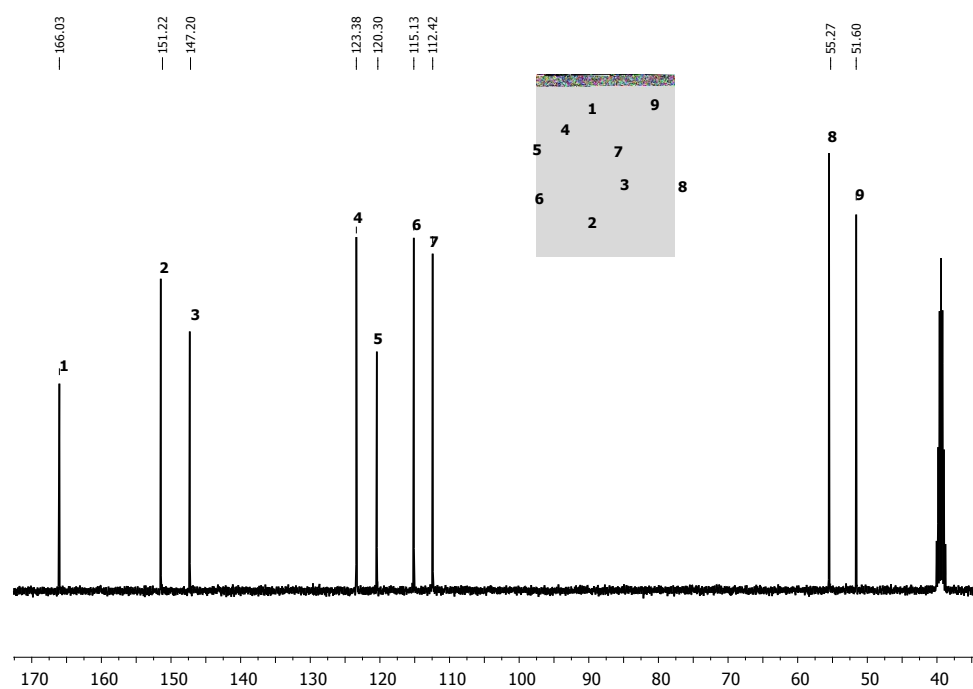


Figure S 14:  $^{13}\text{C}$  NMR spectrum of methyl vanillate 6 in DMSO, at room temperature.

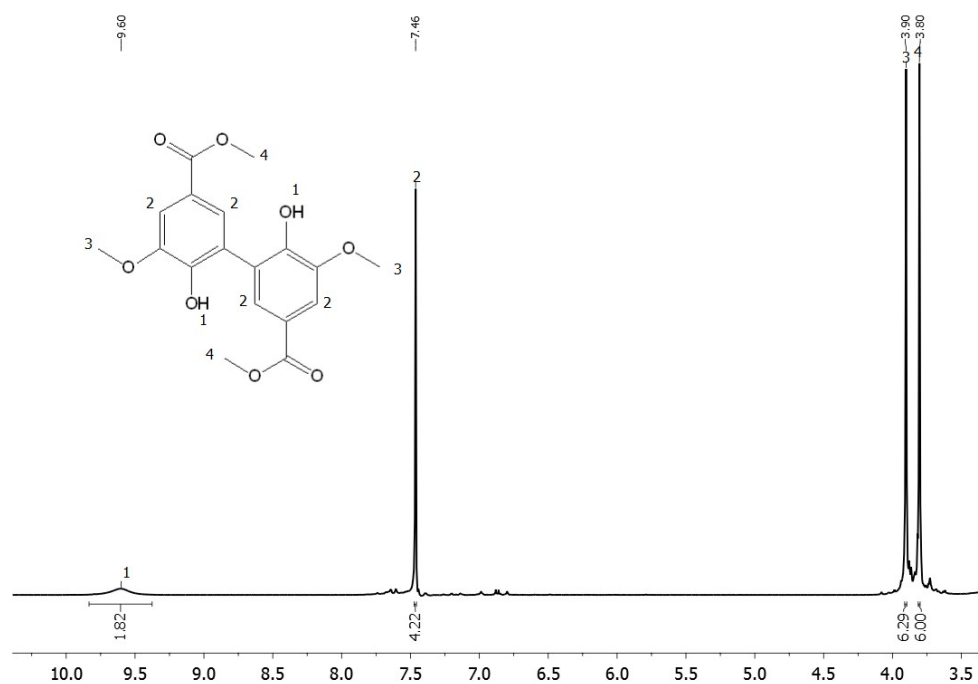


Figure S 15:  $^1\text{H}$  NMR spectrum of dimethyl divanillate 7 in DMSO

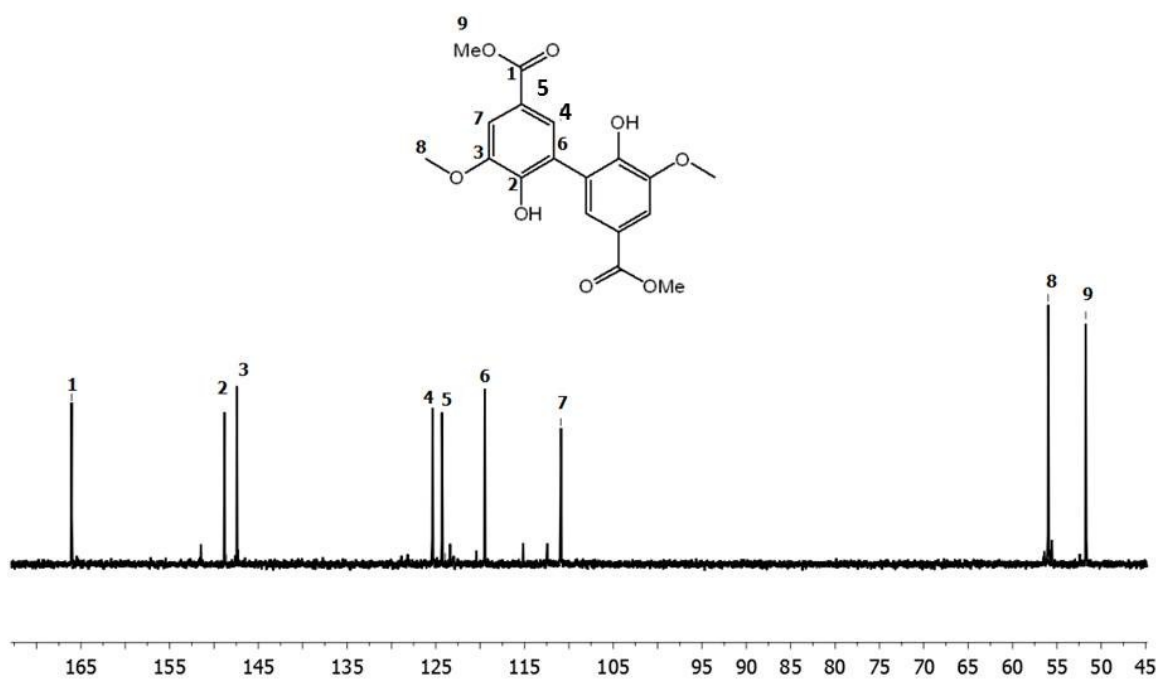


Figure S 16:  $^{13}\text{C}$  NMR spectrum of dimethyl divanillate 7 in DMSO

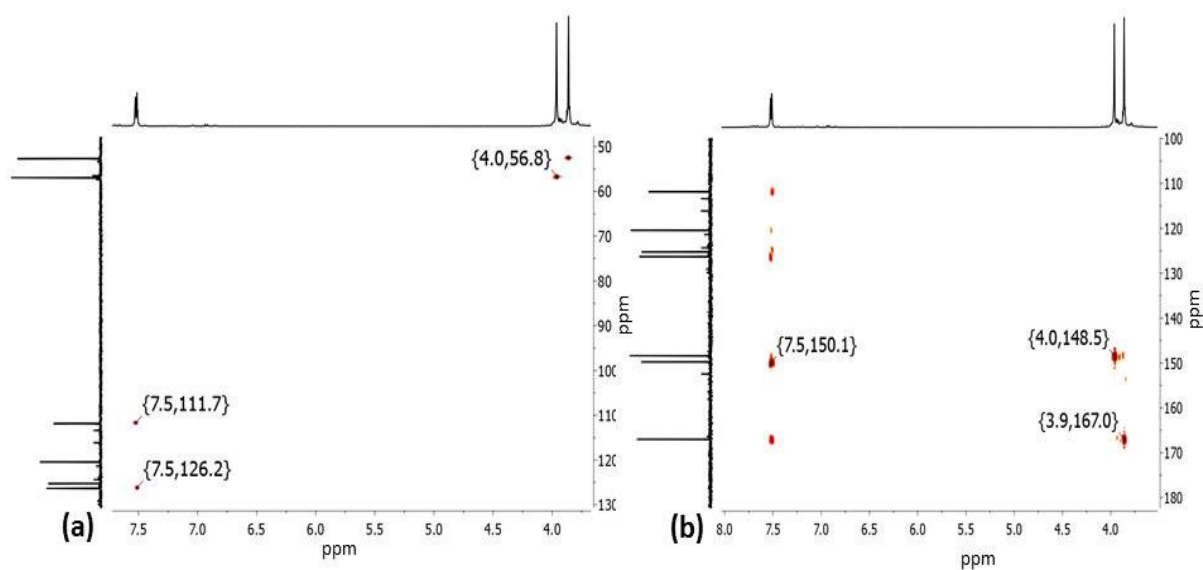


Figure S 17: HSQC (a) and HMBC (b) spectra of methyl vanillate dimer 7 in DMSO, at room temperature.

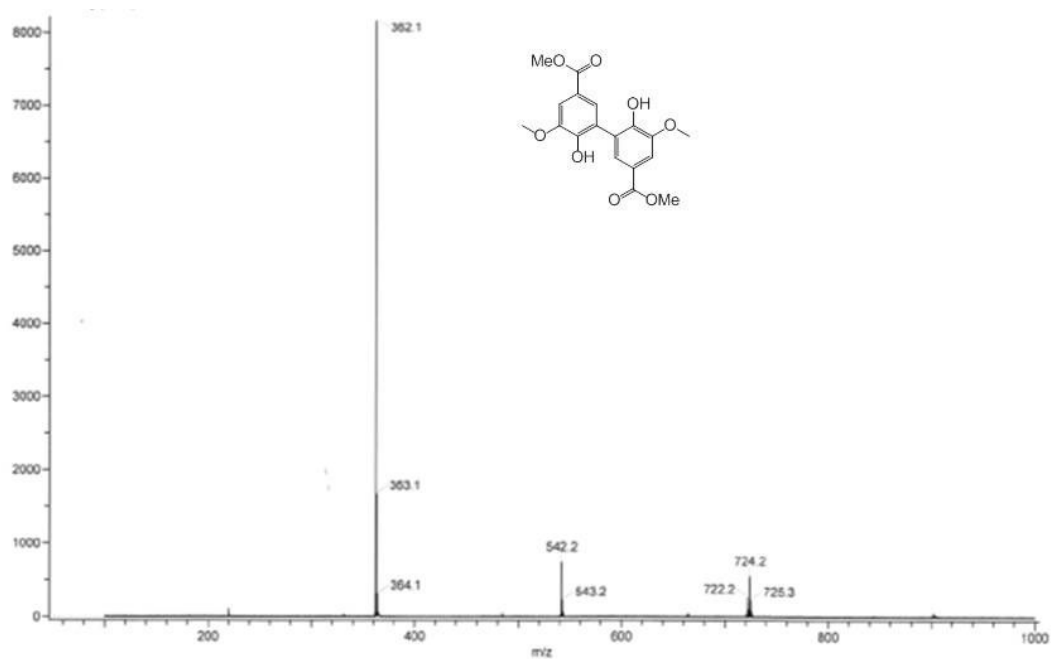


Figure S 18: Mass spectrum of dimethyl divanillate 7 ionized by electronic impact, direct introduction

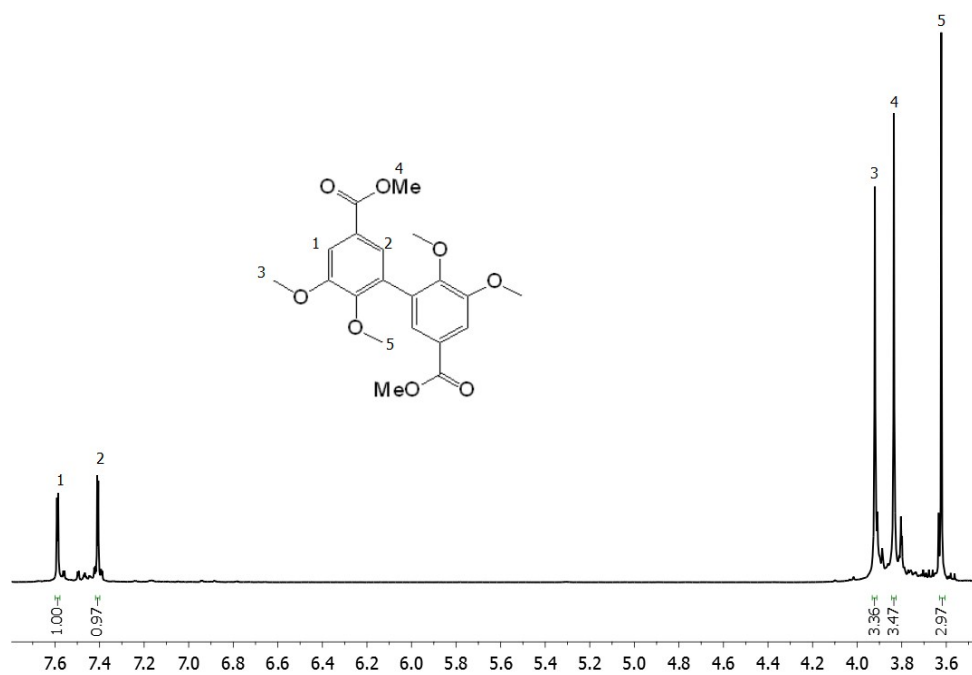


Figure S 19:  $^1\text{H}$  NMR spectrum of methylated dimethyl divanillate 8 in DMSO

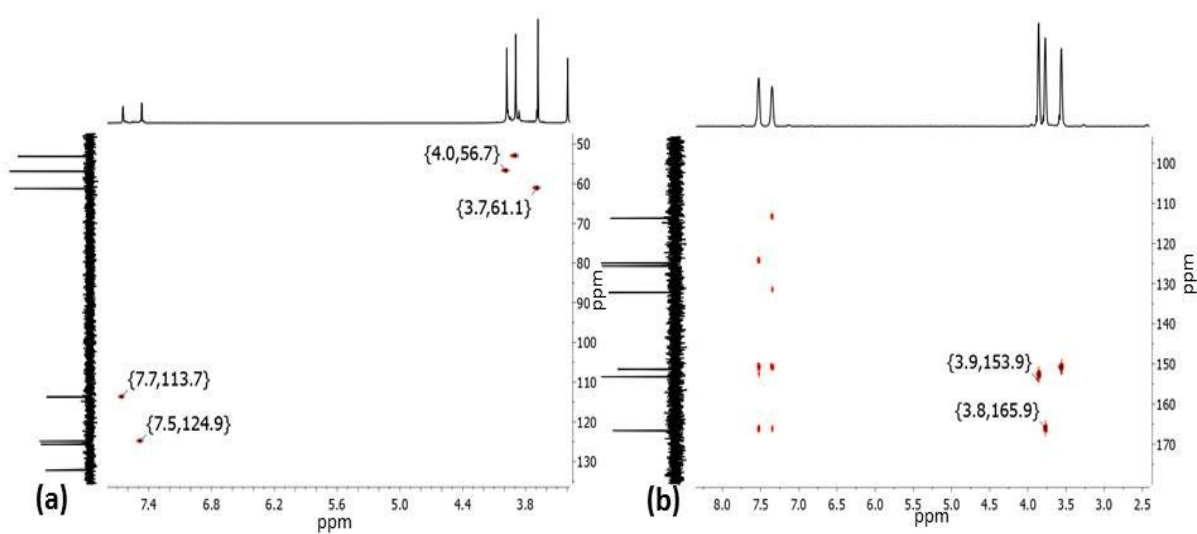


Figure S 20: HSQC (a) and HMBC (b) spectra of methylated diester 8 in DMSO.

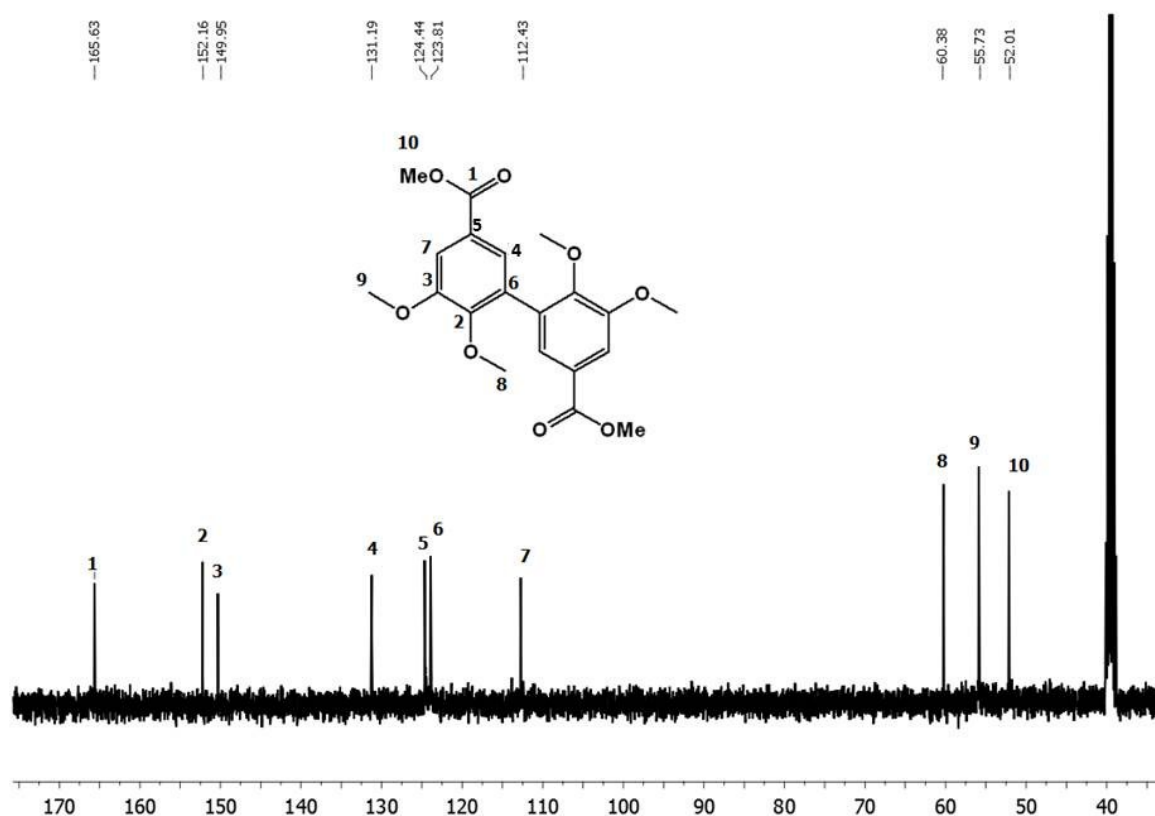


Figure S 21: <sup>13</sup>C NMR spectrum of methylated dimethyl divanillate 8 in DMSO

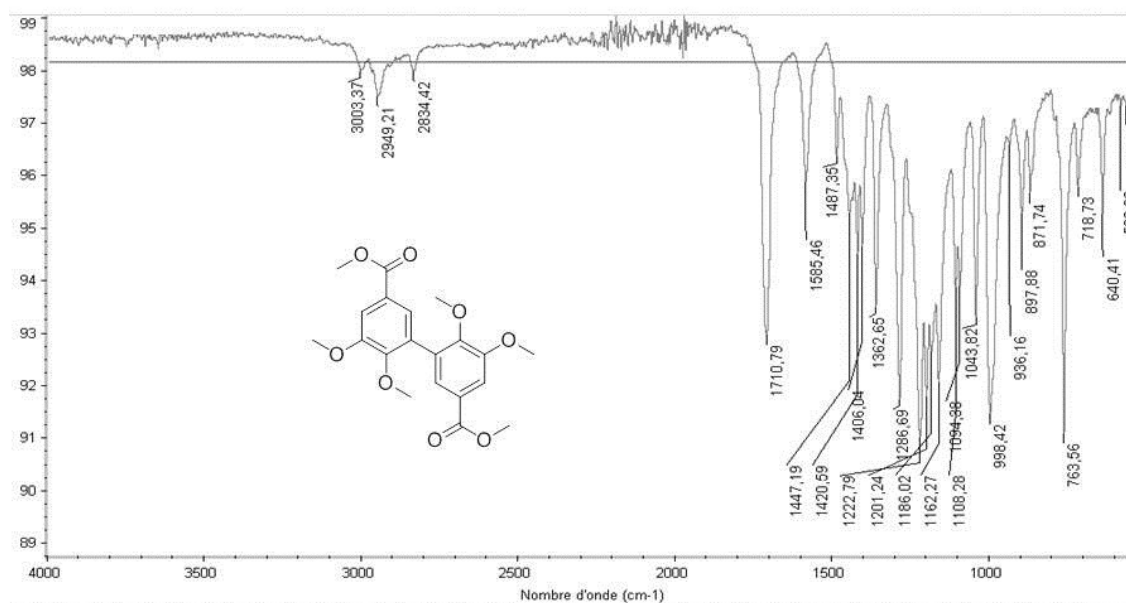


Figure S 22: FTIR spectrum of methylated dimethyl divanillate 8

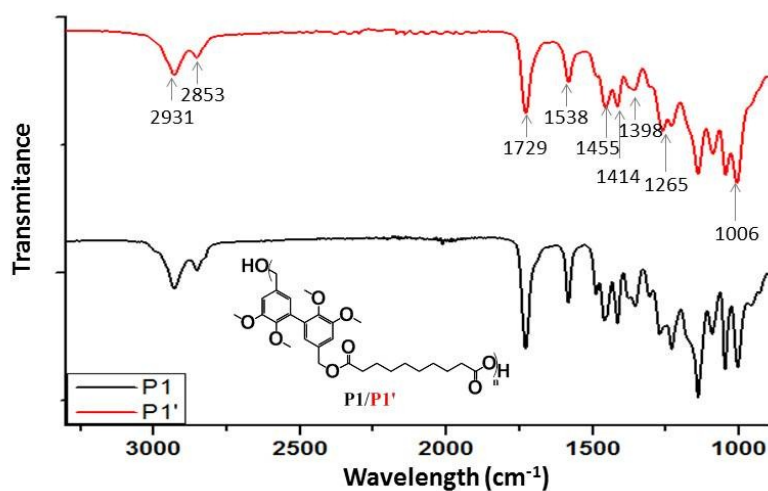


Figure S 23: FTIR spectra of methylated divanillyl diol/dimethylsebacate polyester, P1, and of divanillyl diol/sebacid acid polyester, P1'

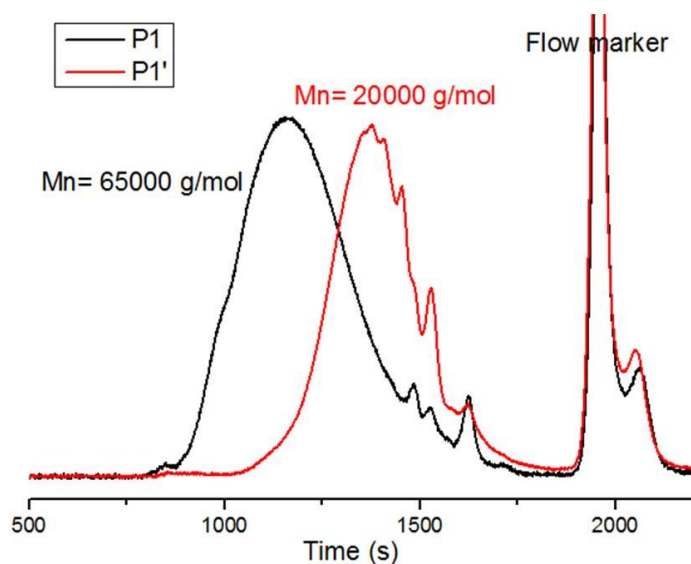
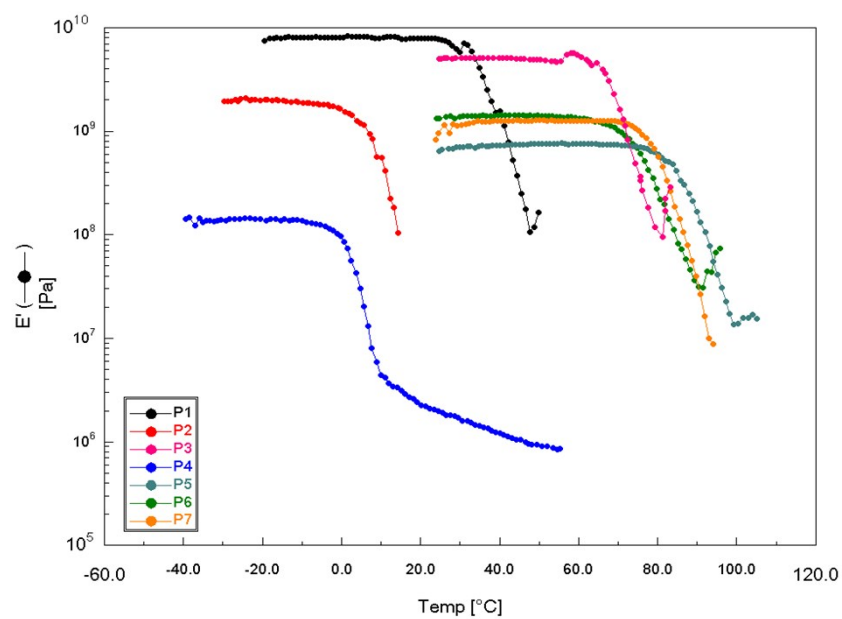


Figure S 24: SEC traces of methylated divanillyl diol/dimethylsebacate polymer P1 and divanillyl diol/sebacid acid polymer P1' in DMSO/DMF 20/80.



**Figure S 25: DMA analysis of the copolymers synthesized from divanillyl diol 4, using 3-point bending test at 1 Hz from -40 to 120 °C at 10 K/min.**