

Table. S1 Pre-exponential factors for the pyrolysis of the six model compounds.

Formula	$\ln(A)$ (s^{-1})	A (s^{-1})
Phenol	8.61	5.50×10^3
Anisole	6.57	7.18×10^2
Guaiacol	6.36	5.80×10^2
Syringol	5.49	2.42×10^2
4-Methylsyringol	5.15	1.72×10^2
4-Propenylsyringol	6.86	9.57×10^2