

Supporting information

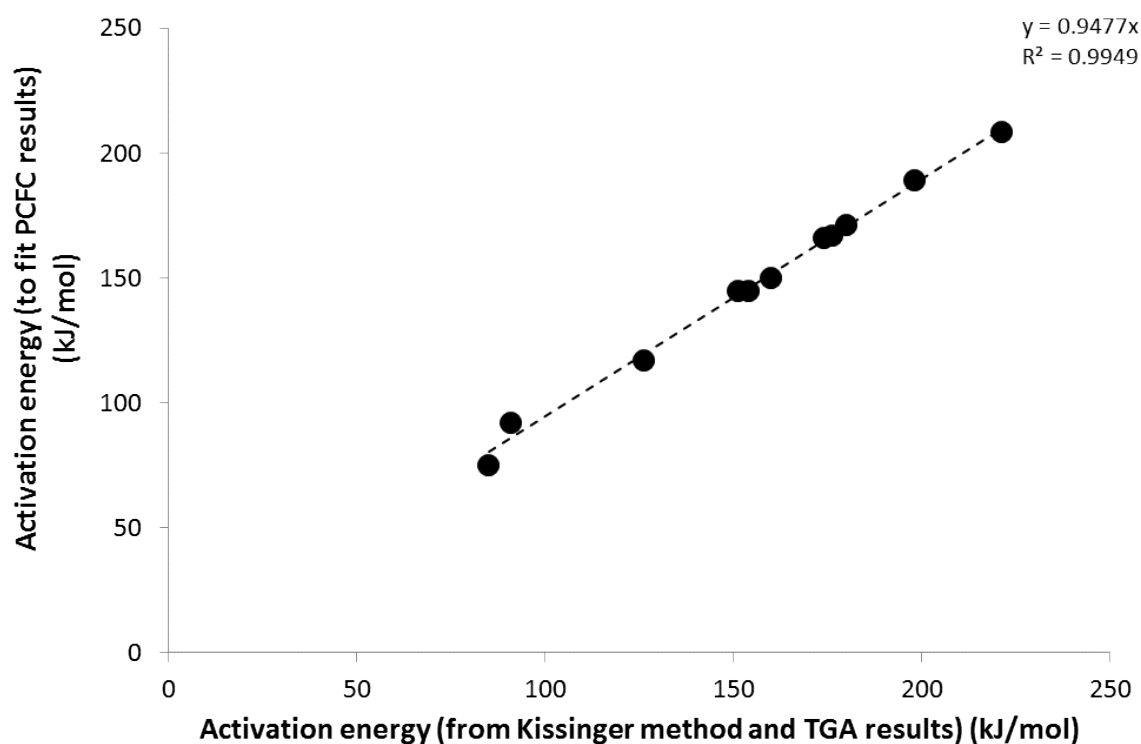


Figure S1 – Comparison between activation energies calculated from TGA data using Kissinger's method and activation energies used to fit PCFC results

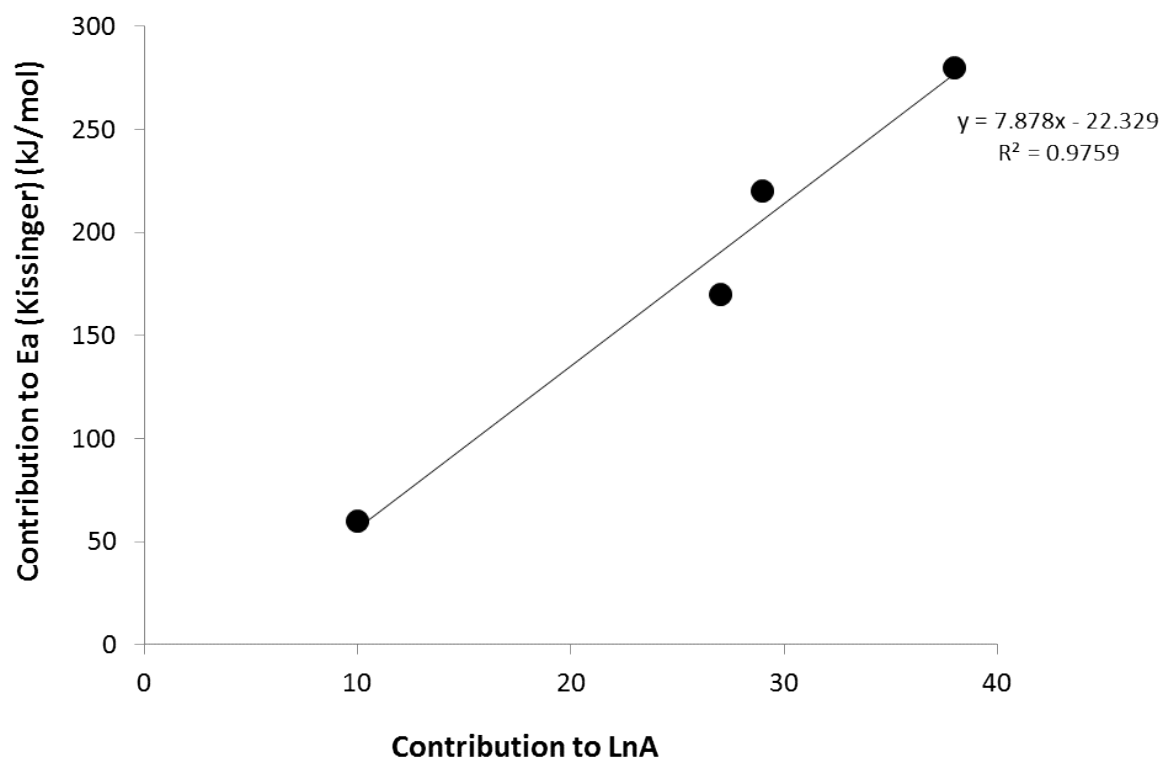


Figure S2 – Correlation between the contributions to activation energy and frequency factor

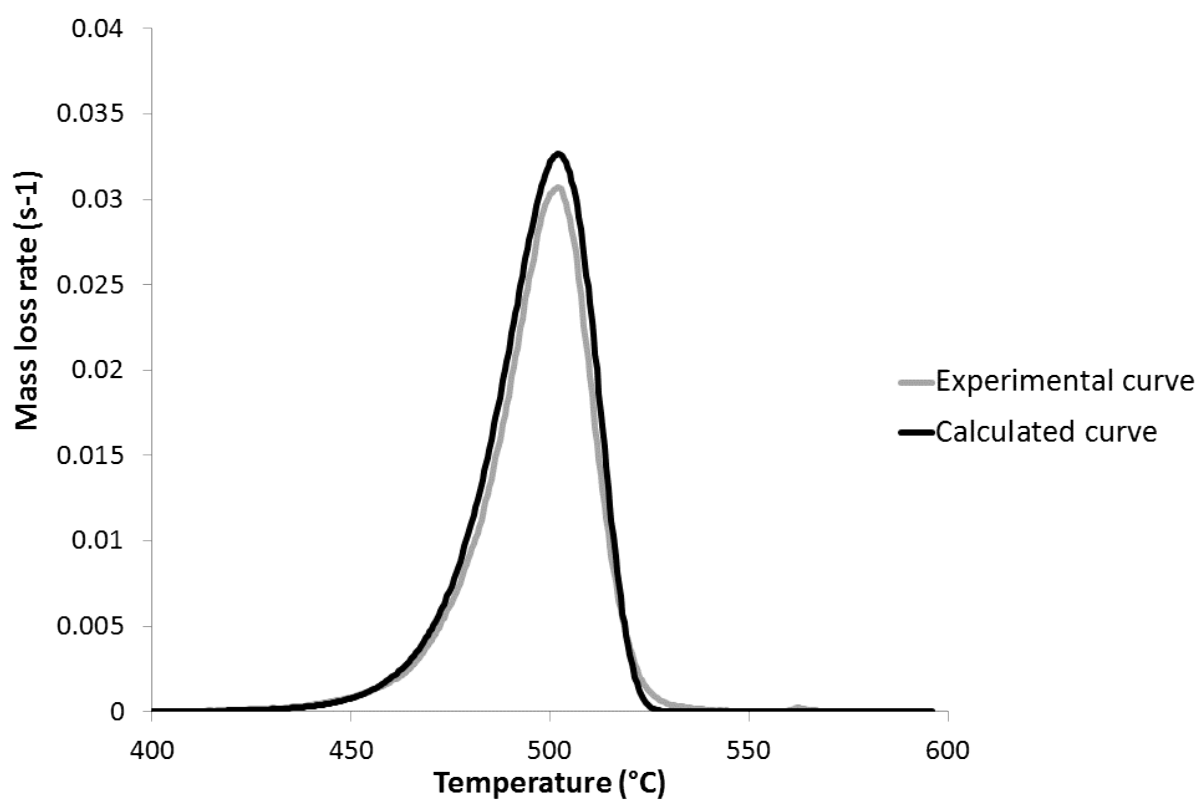


Figure S3 – Experimental versus calculated mass loss rate curves for PE at 1 K/s

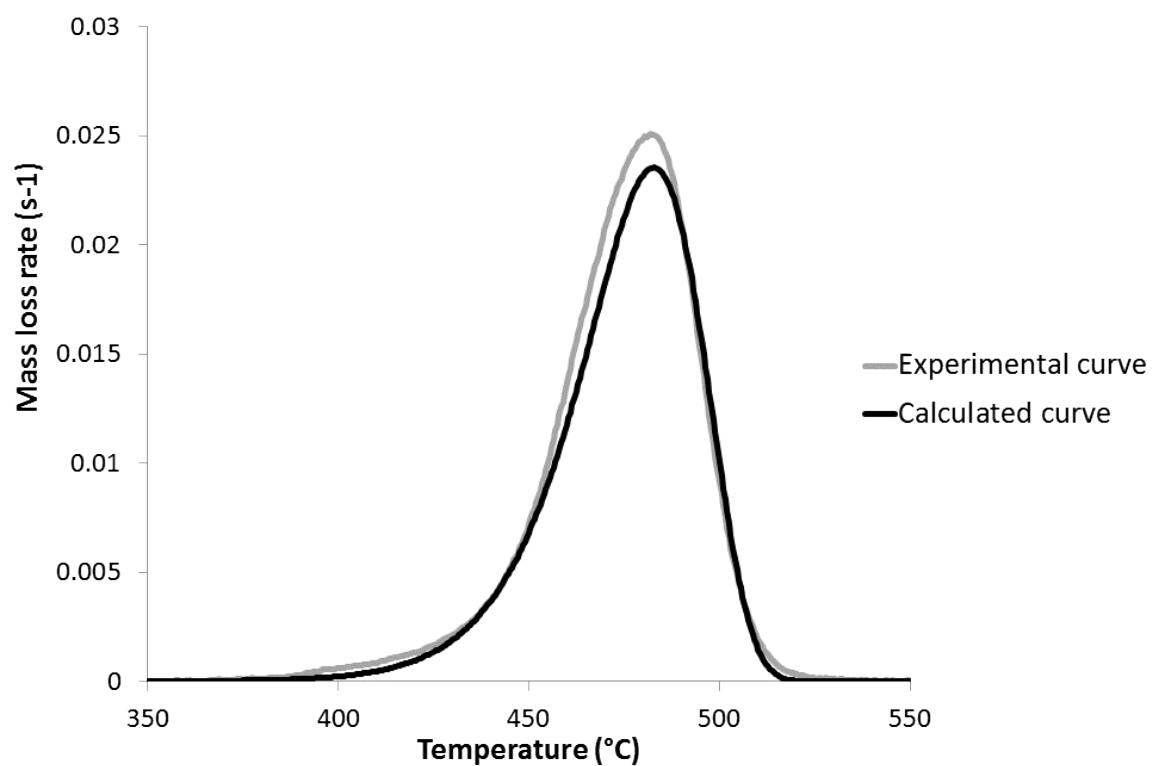


Figure S4 – Experimental versus calculated mass loss rate curves for PP at 1 K/s

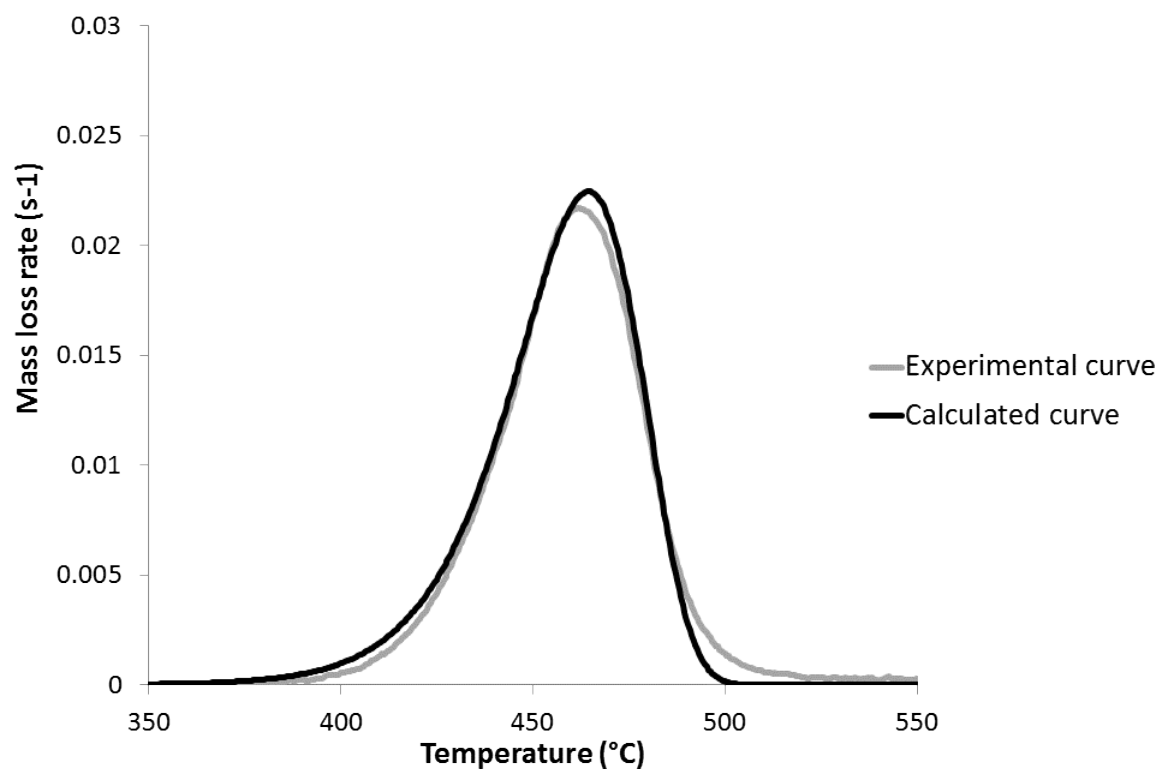


Figure S5 – Experimental versus calculated mass loss rate curves for PET at 1 K/s

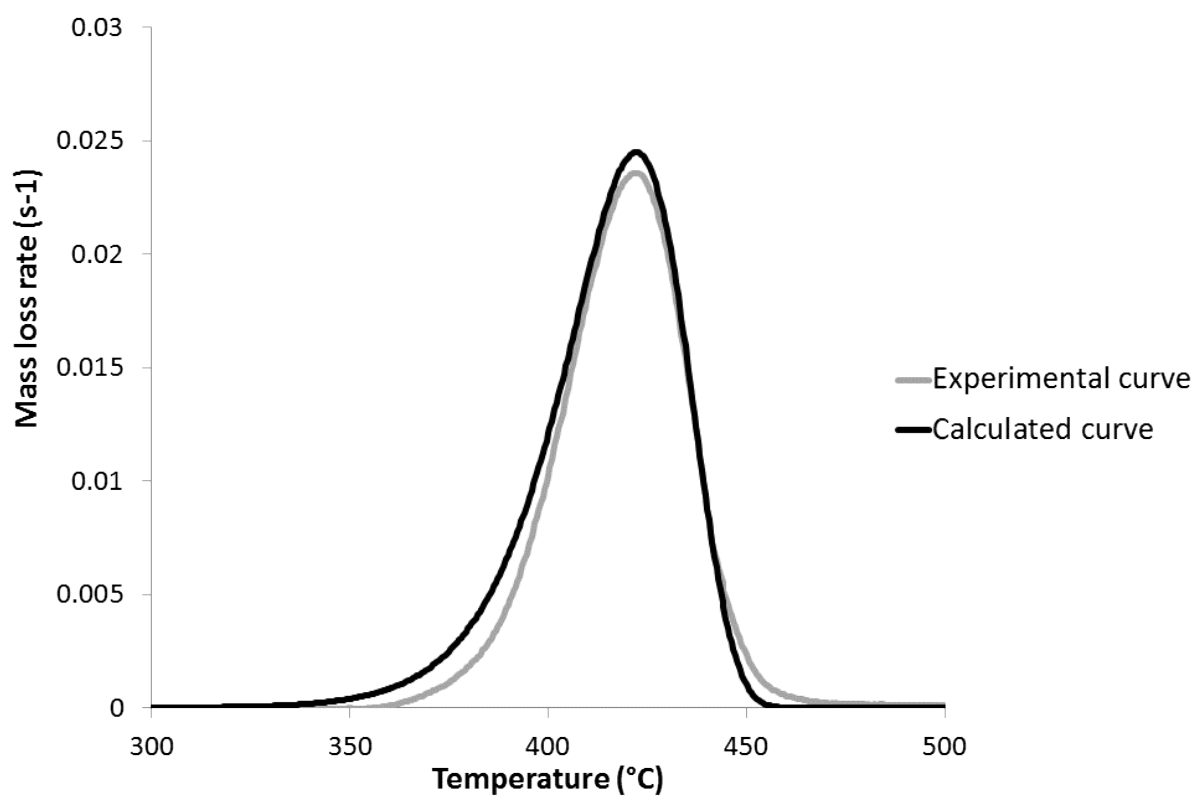


Figure S6 – Experimental versus calculated mass loss rate curves for PBT at 1 K/s

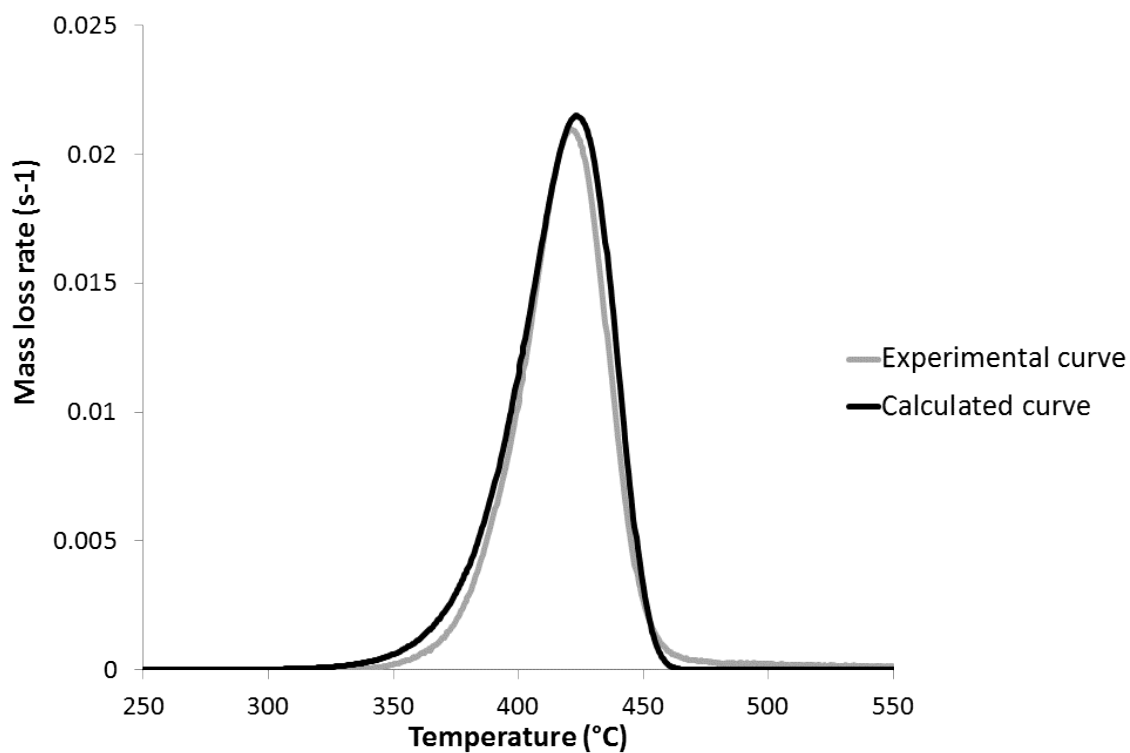


Figure S7 – Experimental versus calculated mass loss rate curves for PBS at 1 K/s

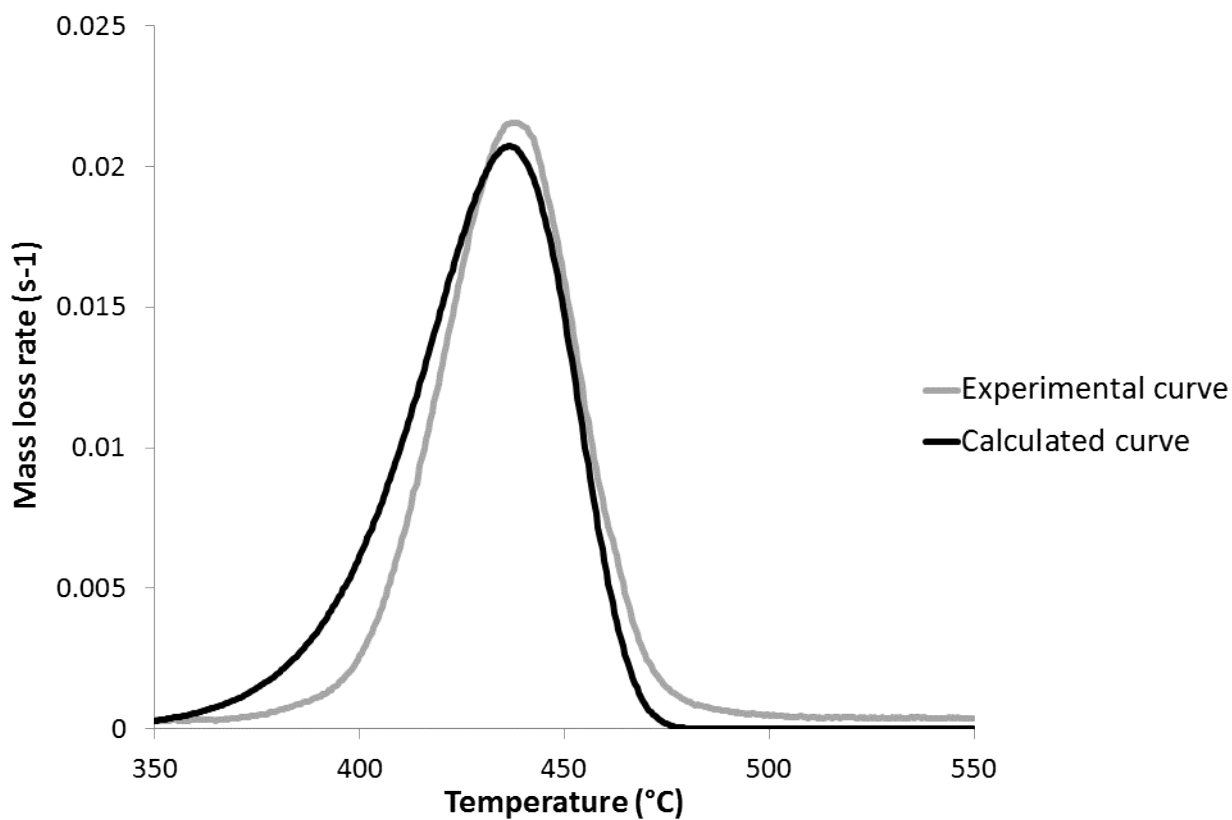


Figure S8 – Experimental versus calculated mass loss rate curves for PCL at 1 K/s

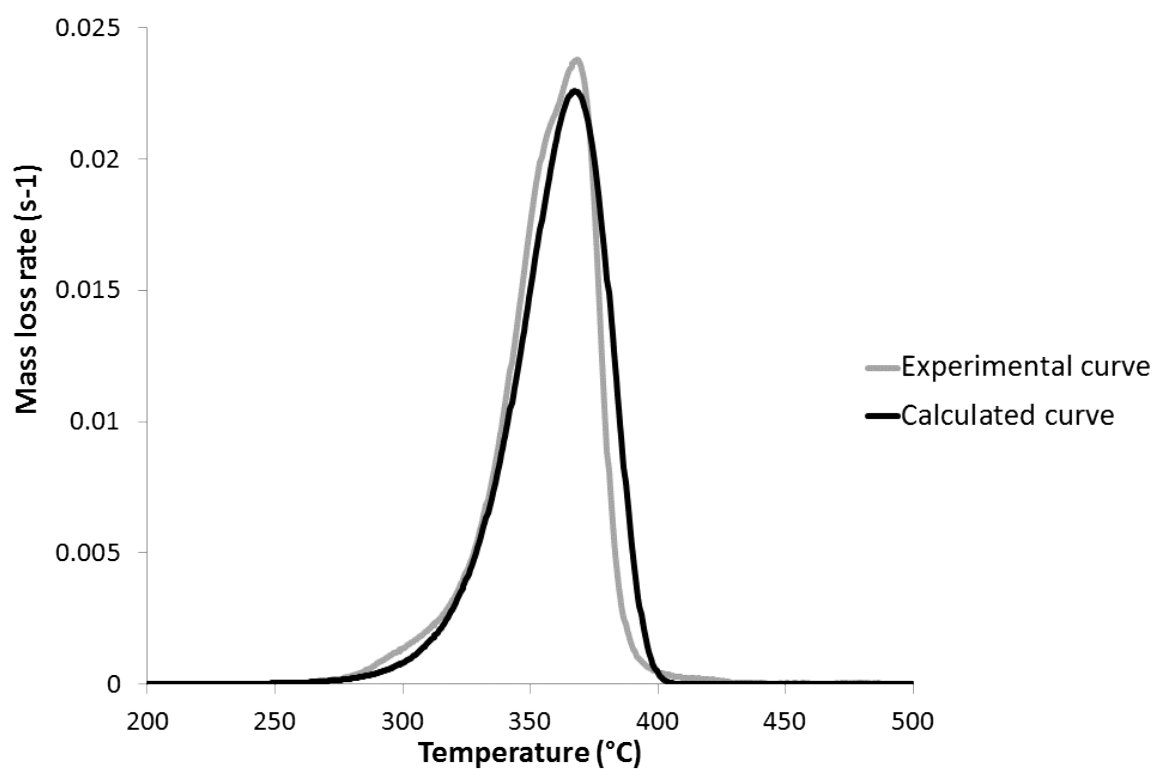


Figure S9 – Experimental versus calculated mass loss rate curves for PG at 1 K/s

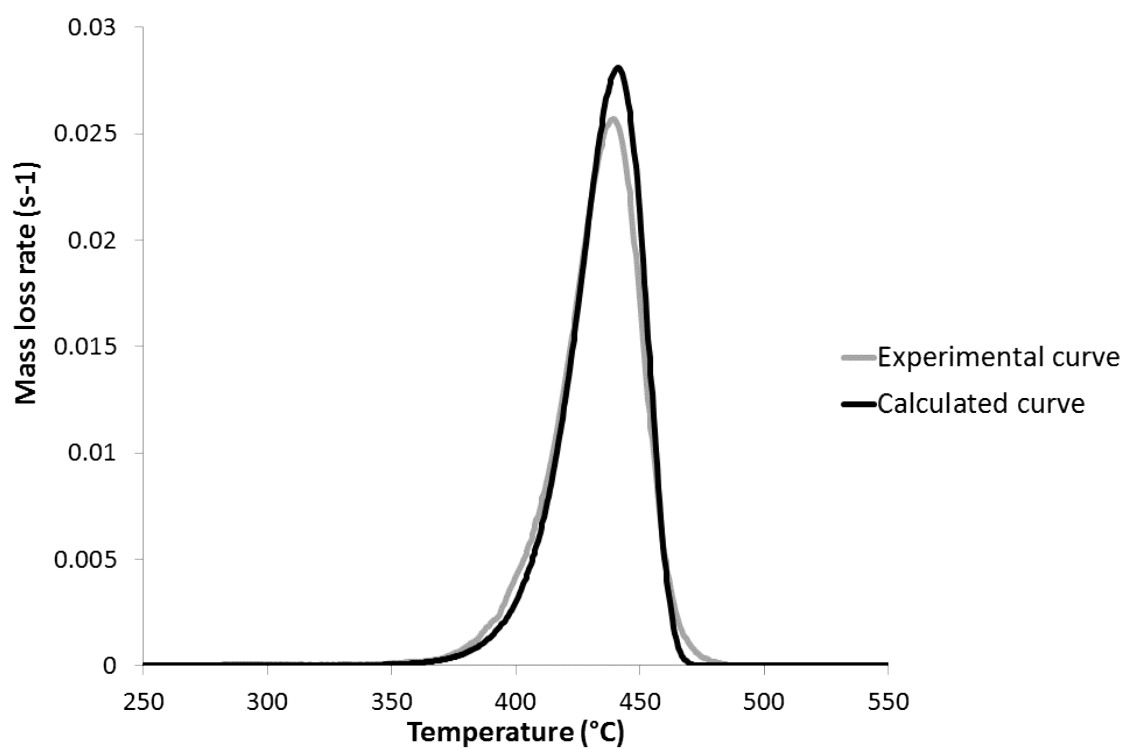


Figure S10 – Experimental versus calculated mass loss rate curves for PS at 1 K/s

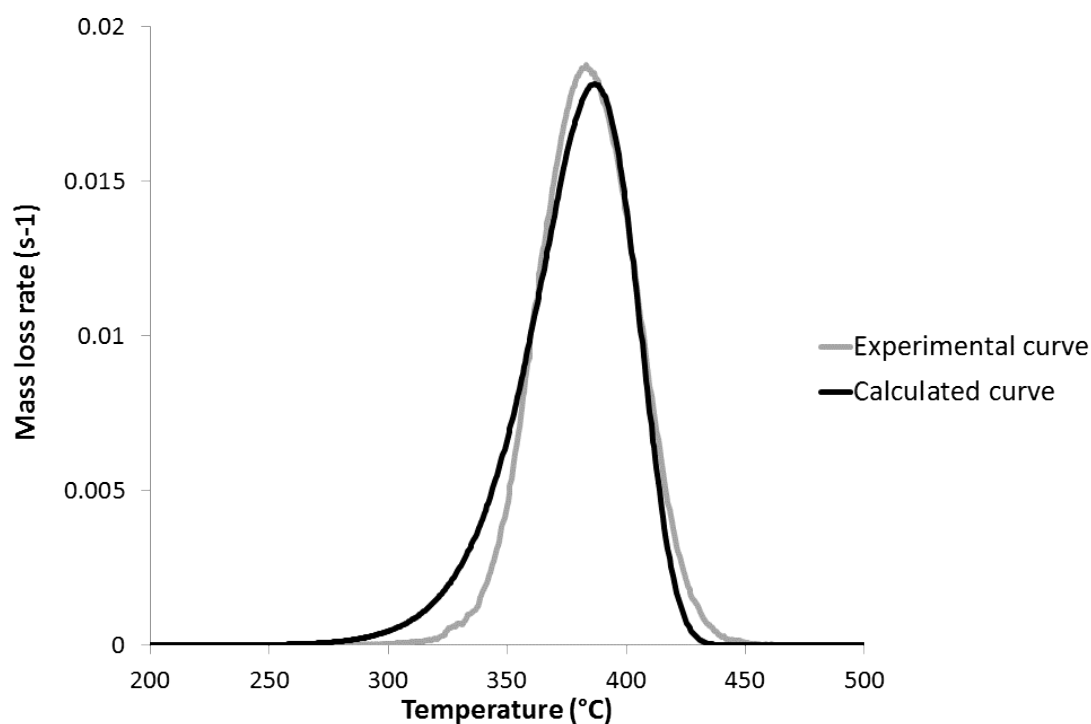


Figure S11 – Experimental versus calculated mass loss rate curves for PMMA at 1 K/s

Table S1 – Activation energies from literature for studied polymers

Polymère	Flynn-Wall-Ozawa method				Kissinger method	Reference
	E _a (kJ/mol)				E _a (kJ/mol)	
	α=0.2	α=0.4	α=0.6	α=0.8		
HDPE	236	248	252	250		3
PP	170	182	192	194		3
PP	176	195	202	207		8
PP					69	9
PLA	161	177	182	184		2
PLA					171	5
PLA					105	6
PCL	144	179	187	191		1
PCL					196	1
PBS	118	139	155	164		1
PBS					176	1
PHB	133	136	136	135		4
PHB					131	4
PHB					99	7

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- 3 - A. Aboulkas, K. El harfi, A. El Bouadili, Thermal degradation behaviors of polyethylene and polypropylene. Part I: Pyrolysis kinetics and mechanisms, *Energy Conversion and Management* 51 (2010) 1363–1369
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