

Extra Supporting Information for Manuscript “EXEMPLIFICATION OF CATALYST DESIGN FOR MICROWAVE SELECTIVE HEATING and its APPLICATION TO EFFICIENT *IN SITU* CATALYST SYNTHESIS”

Kaiyang Wang, Georgios Dimitrakis* and Derek J. Irvine*

*Department of Chemical and Environmental Engineering, Faculty of Engineering,
University of Nottingham, Nottingham, NG7 2RD, UK;*

*Corresponding authors email: georgios.dimitrakis@nottingham.ac.uk and derek.irvine@nottingham.ac.uk

Table S1. Penetration depth (PD) data for the organically liganded catalysts and MMA and cyclohexanone at 20°C, 80 °C and 110°C.

Entry	Material	PD		
		20°C (cm)	80°C (cm)	110°C (cm)
1	methyl methacrylate	9.87	30.51	N/A
2	cyclohexanone	4.16	12.10	19.97
3	MMA Dimer	2.52	5.35	7.78
4	MMA Trimer	12.80	3.81	3.70
5	MMA Tetramer	68.05	9.71	5.80
6	MMA Pentamer	150.23	29.32	15.05
7	Initiated Dimer radical	N/A	4.32	4.30
8	CoBr ₂ DPG ₂	4.05	9.59	9.37
9	PhCoBF	3.74	9.13	11.37

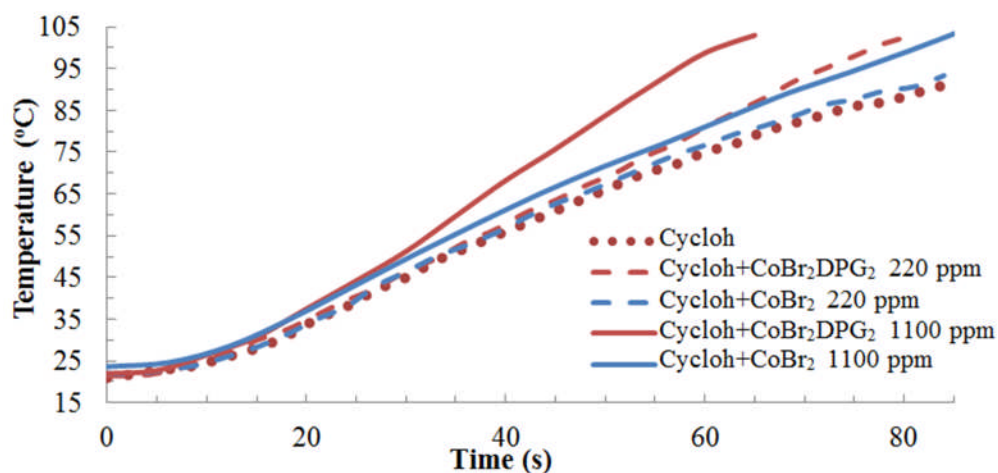


Figure S1. Comparison of the plots of temperature increase with time for cyclohexanone (cyclohex) solutions containing 200 and 1100 ppm of organically liganded catalysts