Synthesis of three crystalline forms of the Al_2O_3 featuring rod-like fibers and their effect to gas degradation of 1-chloronaphthalene

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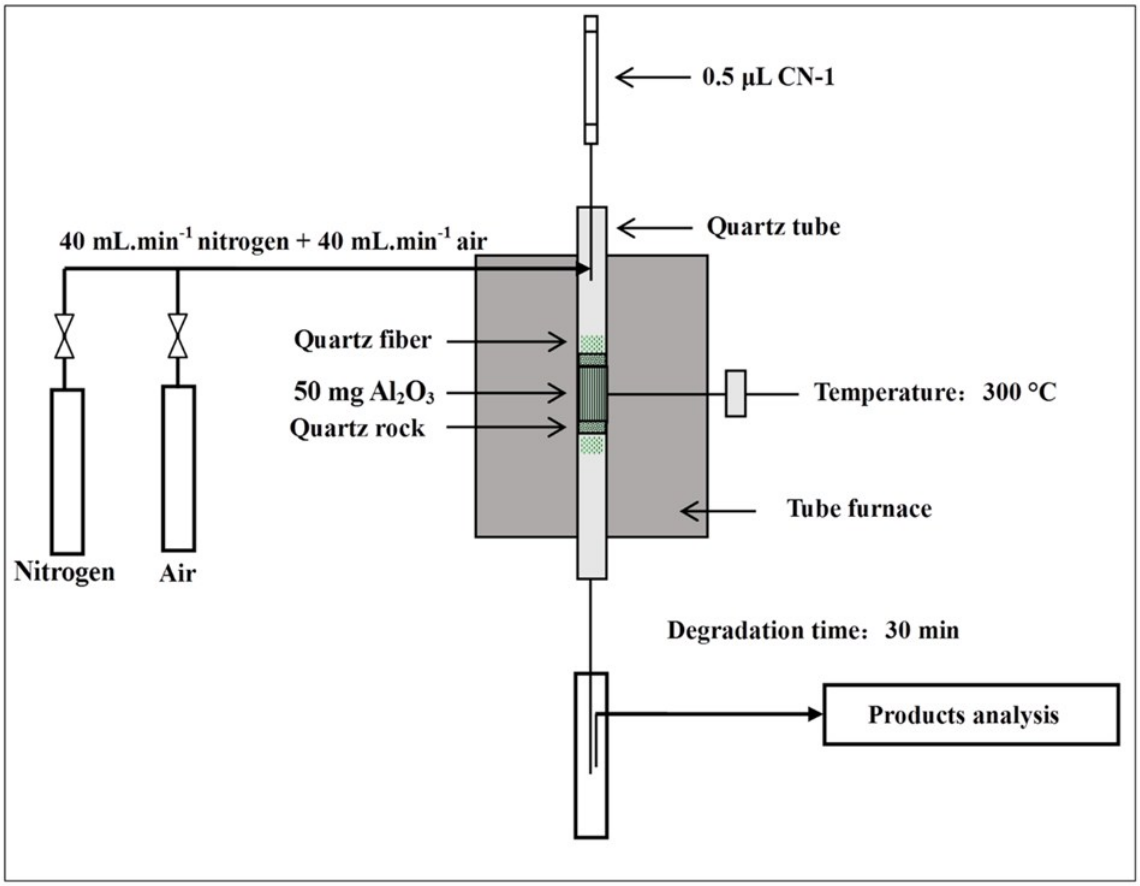

Fig. S1 Schematic of the pulsed flow microreactor used in the present study.

PCN Congeners	m/z	Type of m/z
Naphthalene	128	M
	102	M-C_2H_2
MoCN	162	M
	164	M+2
DiCN	196	M
	198	M+2

Table S1 The mass-to-charge ratios (m/z) of PCNs.

Materials	S_{BET} (m^2/g)	Total pore volume (cm^3/g)	Average pore diameter (nm)	O_α (%)
α-Al_2O_3	5.2	0.025	3.39	14.0
η-Al_2O_3	34.9	0.063	3.84	10.5
γ-Al_2O_3	135.0	0.199	3.83	31.3

Table S2 Physical properties of the prepared Al_2O_3 materials.

Al_2O_3 samples	Vibrational feature (cm^{-1})						
	Lewis acid sites			Brønsted acid sites			
α-Al_2O_3		1587					
η-Al_2O_3	1625	1587	1255	1172		1480	1453
γ-Al_2O_3	1625	1587	1255	1172	1682	1480	1453

Table S3 Acid site assignments of the IR bands (cm^{-1}) observed upon adsorption of NH_3 on the three crystalline Al_2O_3 samples.