Supplementary Materials

Pyrolysis of Polyethylene Terephthalate over Carbon-supported Pd Catalyst

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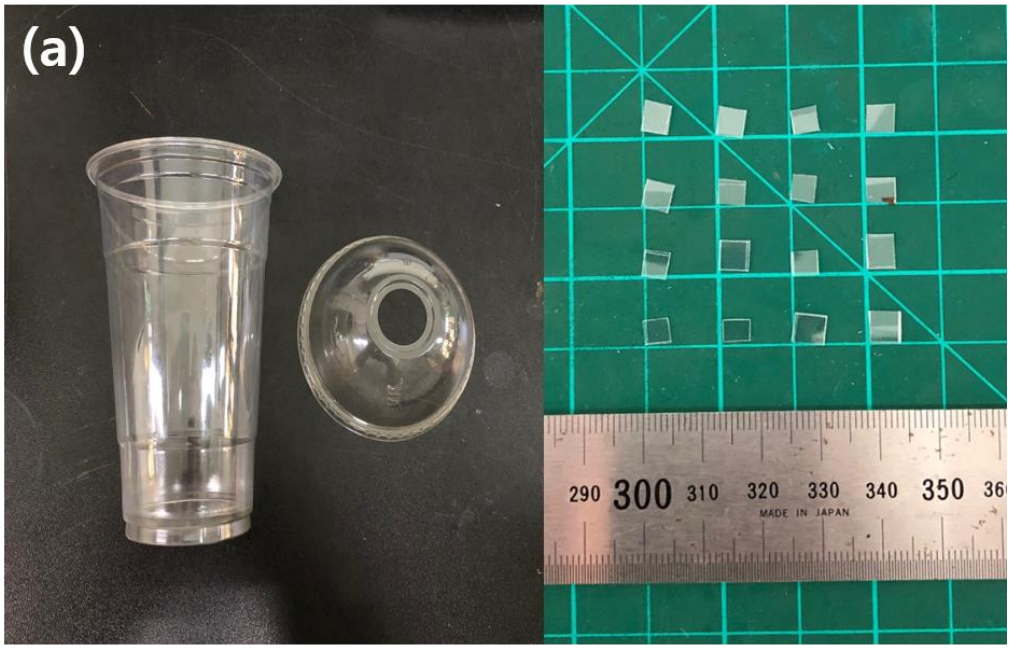


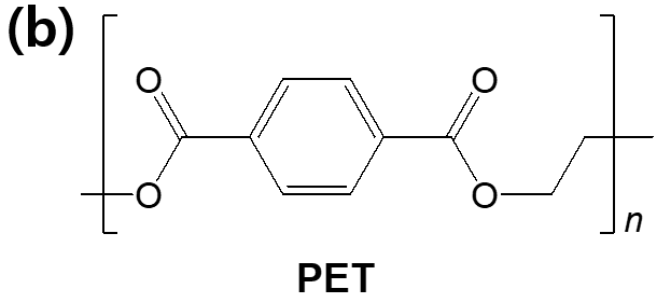


Figure S1. (a) Picture of PET sample (left) and slab which is cut into squares (right); (b) Chemical structure of PET

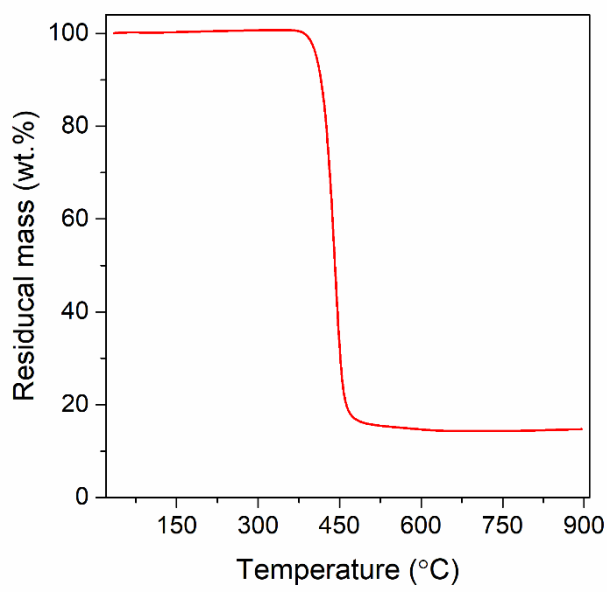
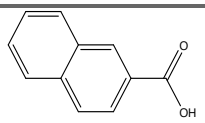
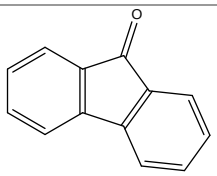
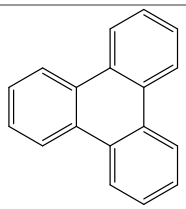
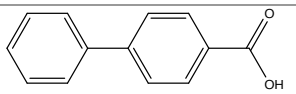
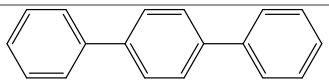
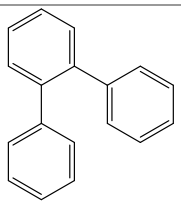
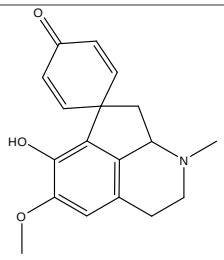


Figure S2. Change in PET weight during TGA

Table S1. The component of polycyclic hydrocarbons, biphenyl derivatives and amine species obtained from pyrolysis of PET

	Name	Chemical formula	MW	Structure
Polycyclic hydrocarbon	2-Naphthalenecarboxylic acid	$C_{11}H_8O_2$	172.2	
	Fluorenone	$C_{13}H_8O$	180.2	
	Triphenylene	$C_{18}H_{12}$	228.3	
Biphenyl derivatives	Biphenyl-4-carboxylic acid	$C_{13}H_{10}O_2$	198.2	
	p-Terphenyl	$C_{18}H_{14}$	230.3	
	o-Terphenyl	$C_{18}H_{14}$	230.3	
Amine	6'-Hydroxy-5'-methoxy-1'-methyl-2',3',8',8a'-tetrahydro-1'Hspiro[cyclohexa[2,5]die	$C_{18}H_{19}NO_3$	297.4	

	ne-1,7'-cyclopenta[ij]isoquinolin]-4-one			
	2,3,7,8-tetramethoxy-12-methyl-4b,5,11,12-tetrahydrobenzo[c]phenanthridine	$C_{22}H_{25}NO_4$	367.4