

Supporting Information

Nitrogen regulation on polyester-based carbons and adsorption towards gaseous benzene and ethyl acetate

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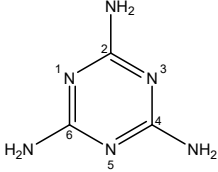
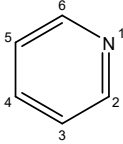
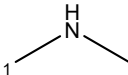
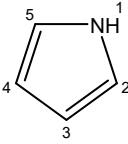
Table S1. Physical and chemical properties of various nitrogen sources.

Fig. S1. The thermogravimetric (TG) and derivative of the thermogravimetric (DTG)
curve of activated carbon.

Fig. S2. XPS spectra of C-P, C-D and C-Y.

Fig. S3. Relationship between the adsorbed amounts of ethyl acetate and the structural
parameters as well as the element compositions.

Table S1. Physical and chemical properties of various nitrogen sources¹.

Chemical Name	Melamine	Pyridine	Dimethylamine	Pyrrole
Chemical Structure				
Chemical Formula	$C_3H_6N_6$	C_5H_5N	C_2H_7N	C_4H_5N
Molecular Weight	126.1	79.1	45.1	67.1
Melting Point/ $^{\circ}C$	345	-41.6	-93	-24
Boiling Point/ $^{\circ}C$	Sublimes	115.3	7.3	129.7

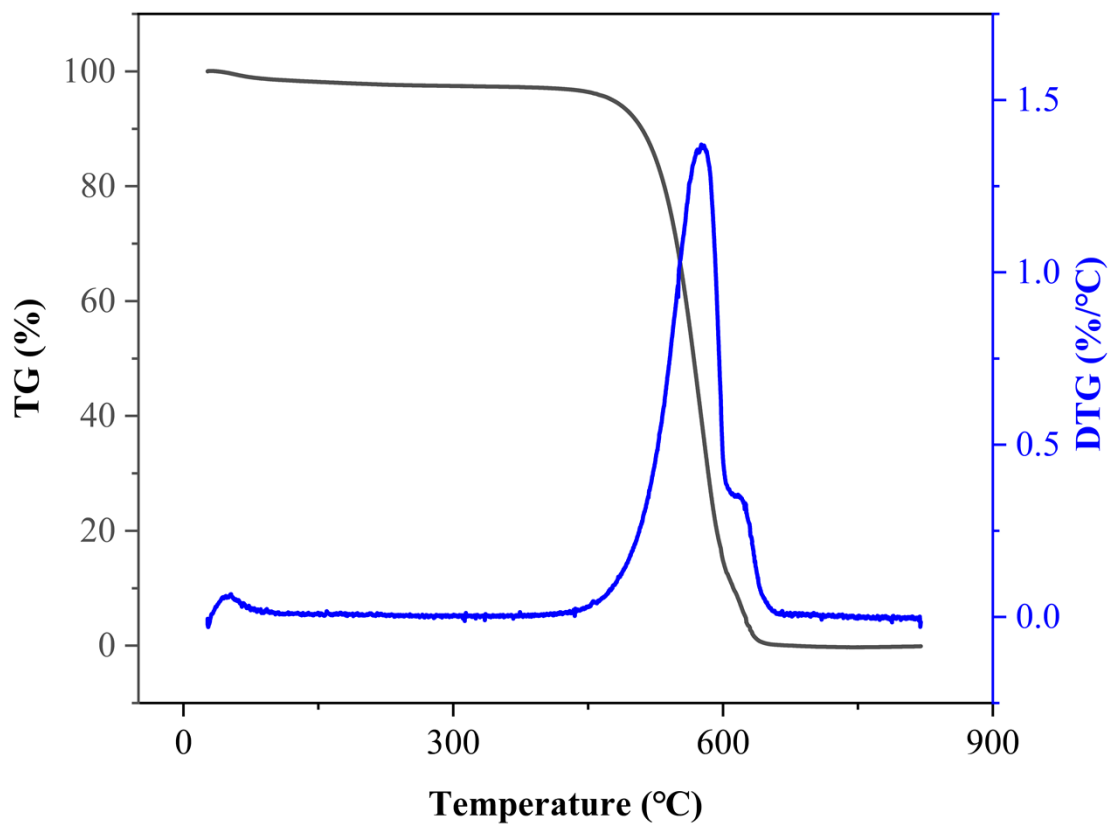


Fig. S1. The thermogravimetric (TG) and derivative of the thermogravimetric (DTG) curve of activated carbon.

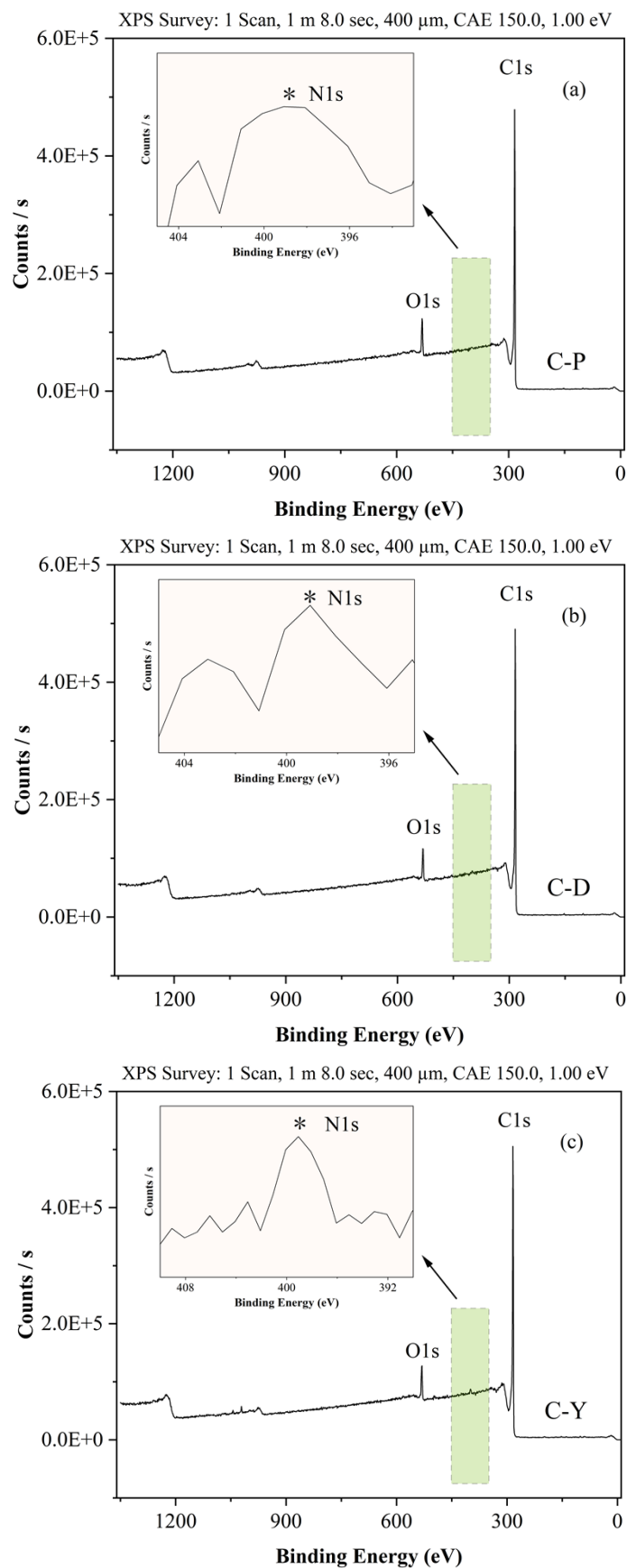


Fig. S2. XPS spectra of C-P, C-D and C-Y.

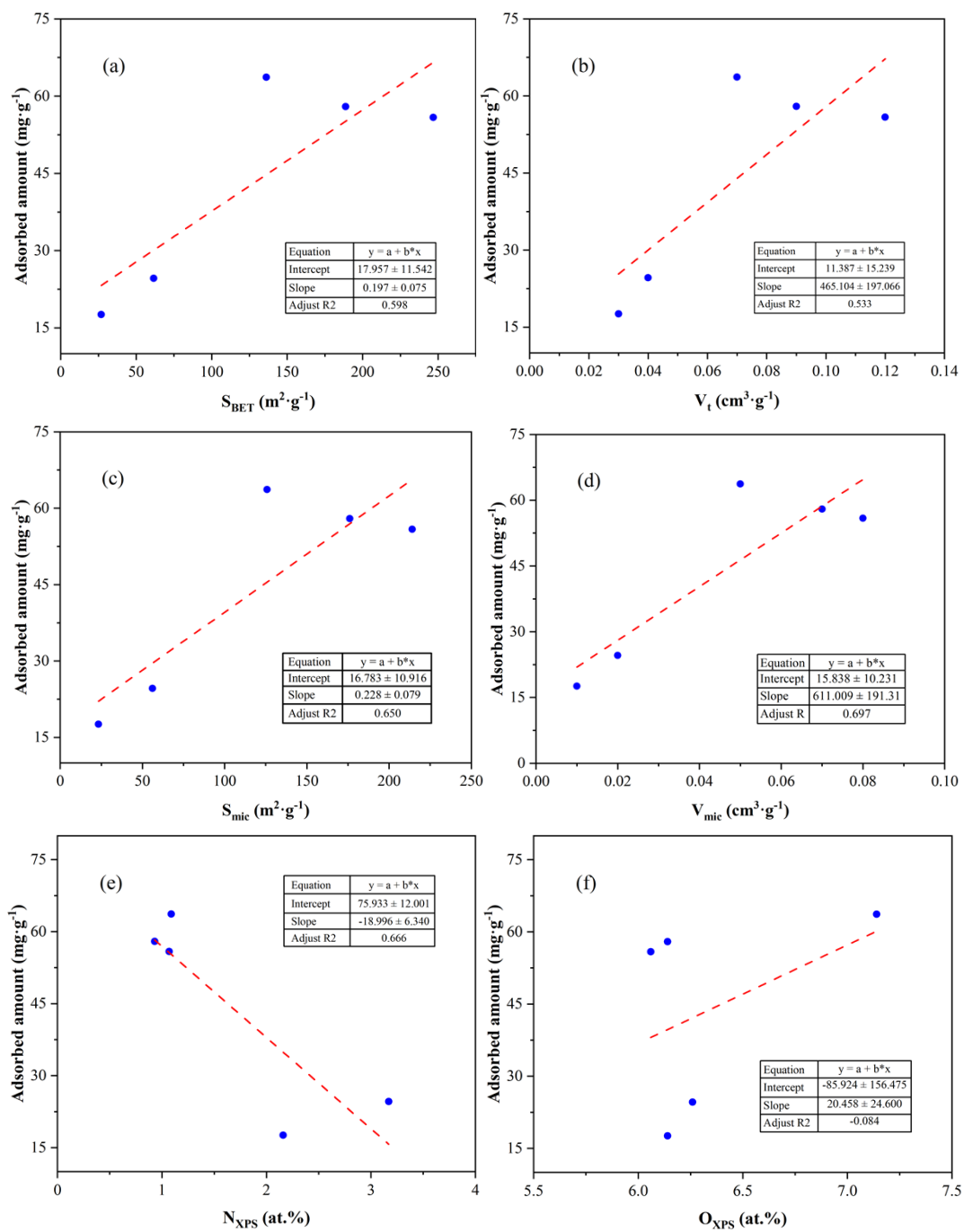


Fig. S3. Relationship between the adsorbed amounts of ethyl acetate and the structural parameters as well as the element compositions.

Reference

1. National Library of Medicine. Pubchem. <https://pubchem.ncbi.nlm.nih.gov> (accessed 2024-7-20).