Catalytic Performance of Nitrogen-Doped Activated Carbon Supported Pd Catalyst for Hydrodechlorination of 2,4-Dichlorophenol or Chloropentafluoroethane

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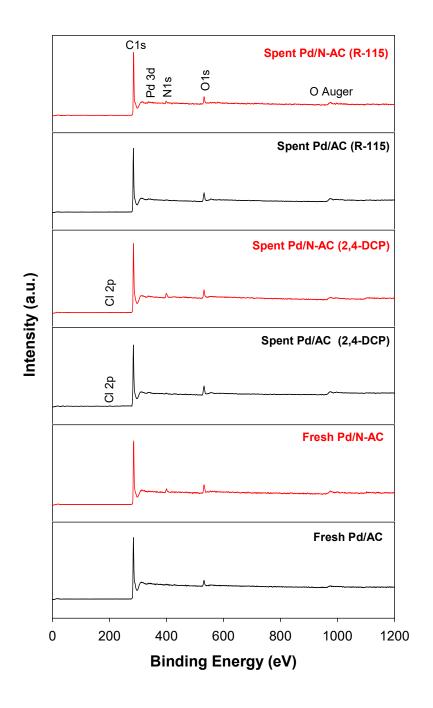


Fig. 1S Wide-scan XPS spectra of fresh and spent catalysts.

Table 1S The concentration of O and Cl on the surface of catalysts before and after reaction determined by the wide-scan XPS spectra *

Sample	Content of O/%	Content of CI/%
fresh Pd/AC-	4.3	-
fresh Pd/N-AC	5.9	-
spent Pd/AC (2,4-DCP)	7.3	0.4
spent Pd/N-AC (2,4-DCP)	6.9	0.5
spent Pd/AC (R-115)	6.8	-
spent Pd/N-AC (R-115)	5.0	-

^{*} The observed O mainly comes from the support (namely AC) and adsorbed O-containing materials. The CI observed on the surface of the catalysts after hydrodechlorination of 2,4-DCP can be attributed to the adsorption of the product HCl by the catalysts.