Electronic Supplementary Material (ESI) for RSC Advances.

The study on continuous denitrification, desulfurization of pyrolusite/activated coke hybrid catalyst

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Supporting information:

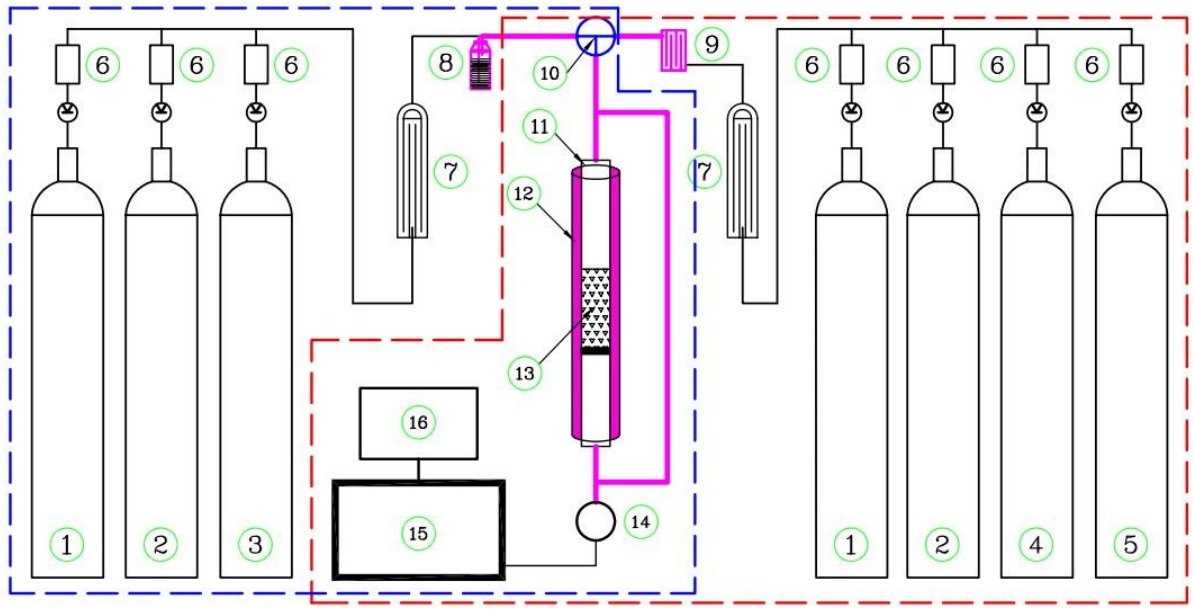

Figure S1 the diagram of the denitrification (blue line) and desulfurization (red line) system. ((1) N_2，(2) O_2, (3) SO_2, (4) NO, (5) NH_3, (6) mass flowmeter (7) mixer (8) humidifier, (9) preheater, (10) three-way valve, (11) reactor, (12) tube furnace, (13) activated cokes, (14) condenser, (15) flue gas analyzer, (16) computer)

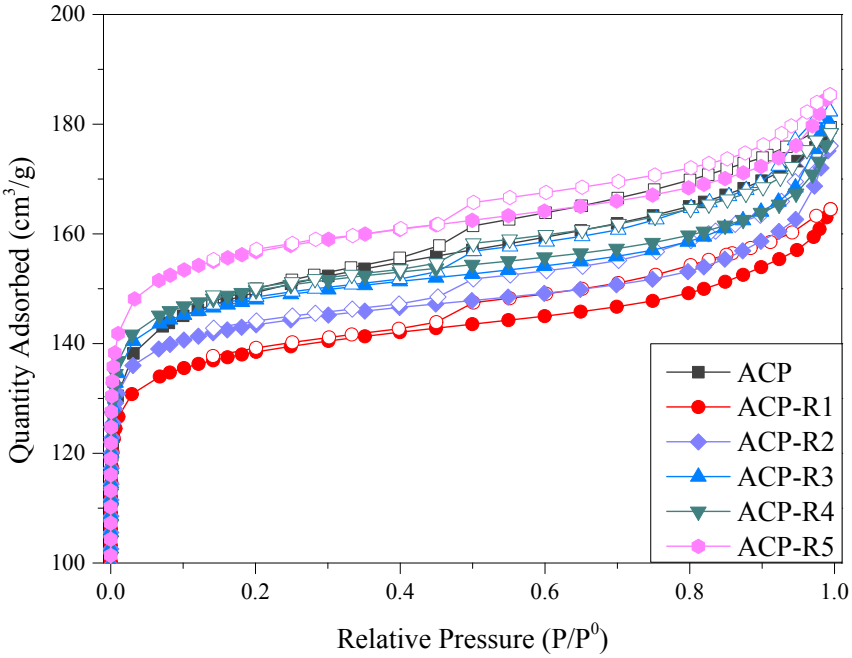

Figure S2 the N2 adsorption-desorption curves of the ACP and ACP-Rn

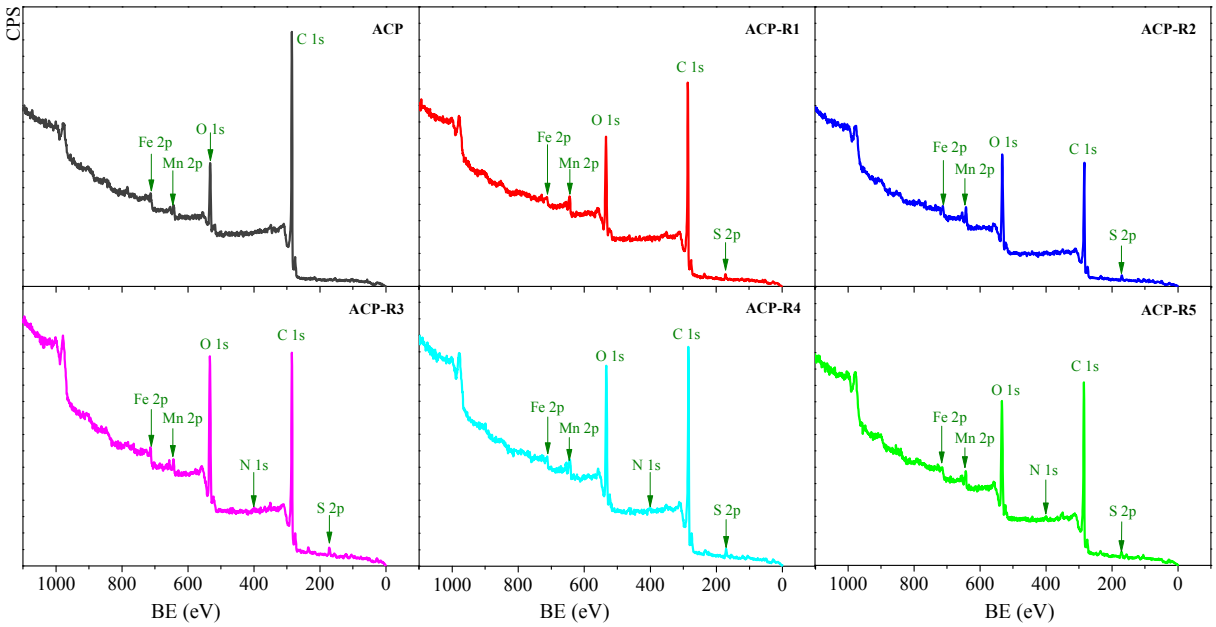

Figure S3 the wide-scan XPS spectrums of the ACP-Rn.

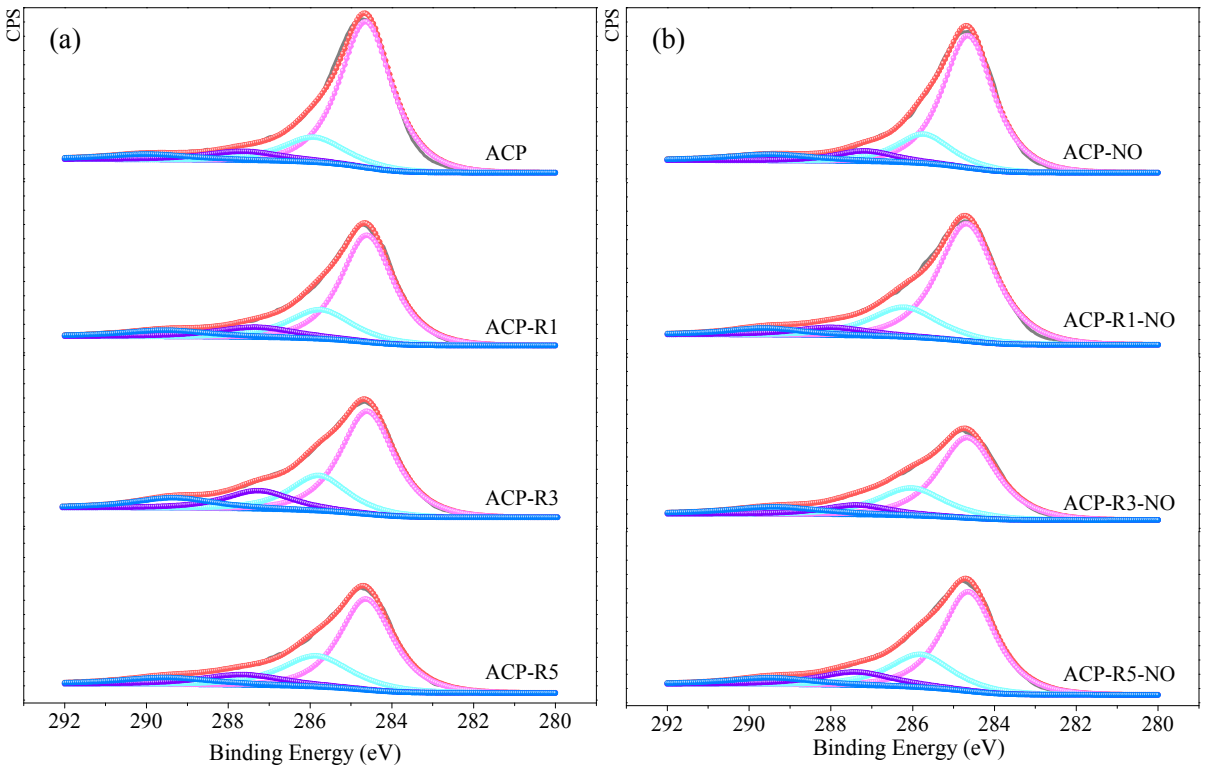

Figure S4 the C1s curves deconvolution of the fresh and regenerated ACPs before (a) and after (b) NO removal

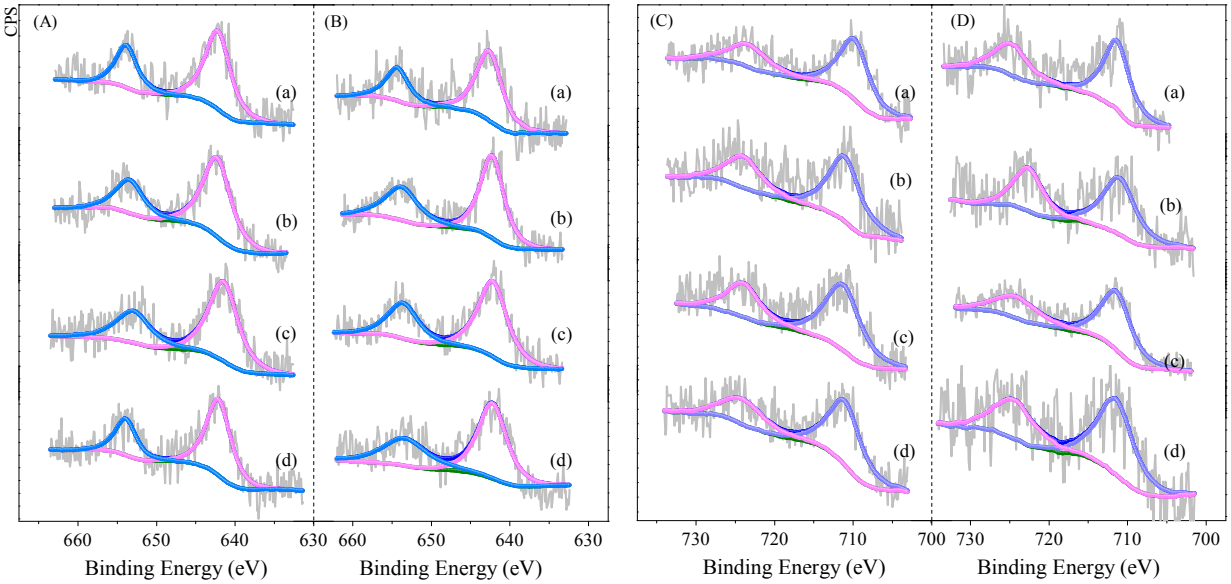

Figure S5 the Mn 2P (A and B) and Fe 2p (C and D) curves deconvolution of the ACP and regenerated ACP before (A and C) and after denitrification (B and D). (a) ACP, (b) ACP-R1, (c) ACP-R3, (d) ACP-R5.

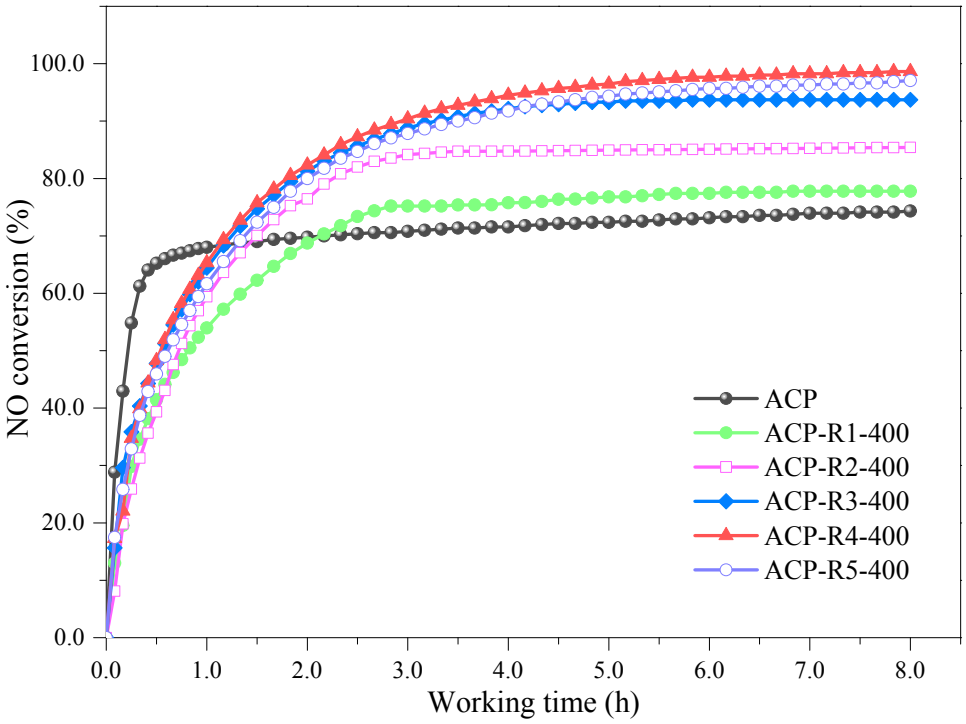

Figure S6 the NO removal curves of the ACP-400-Rn