

1 **The Effect of V₂O₅ Additive on the SO₂ Resistance of Fe₂O₃/AC**
2 **Catalyst for NH₃-SCR of NO_x at Low Temperatures**

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Table S1. ICP-OES of catalysts

Loadings (%)	3% Fe	3% Fe-0.3% V	3% Fe-0.5% V	3% Fe-0.7% V
Fe ₂ O ₃	3.16	3.07	3.40	3.37
V ₂ O ₅	—	0.30	0.52	0.68

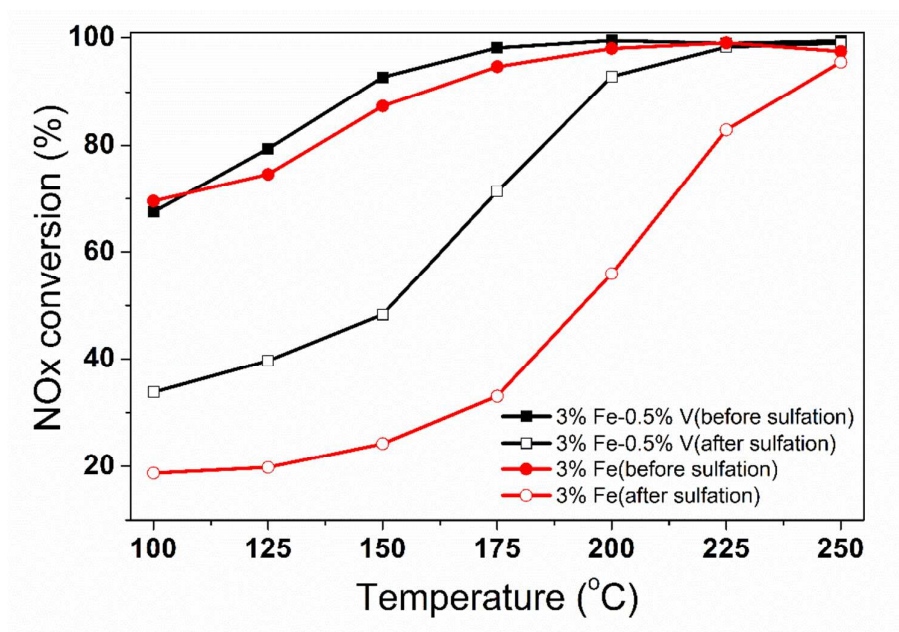


Figure S1. NH₃-SCR activity over 3% Fe/AC and 3% Fe -0.5%V/AC catalysts before and after sulfation by 100 ppm SO₂. Reaction conditions: 500 ppm NO, 500 ppm NH₃, 5% O₂, N₂ balance, GHSV, 20000 h⁻¹.

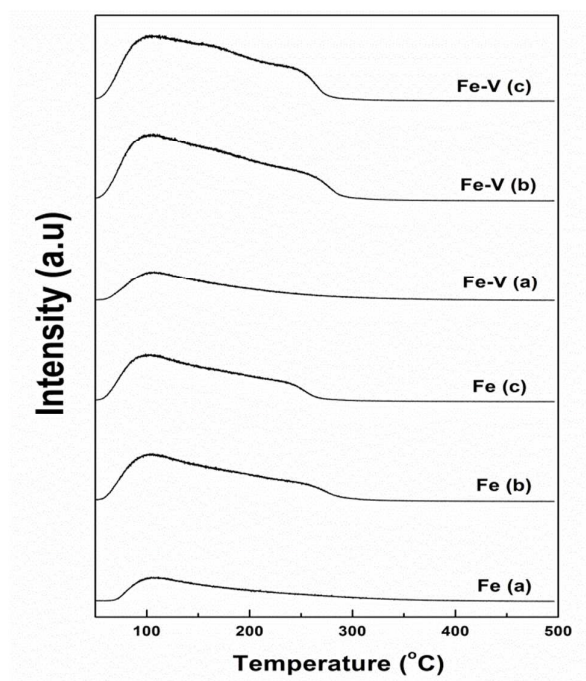


Figure S2. NH₃-TPD patterns for fresh and sulfated 3% Fe and 3% Fe-0.5% V. (a), (b), (c) represent fresh catalyst and catalyst after SCR reaction in the presence of SO₂ and in the presence of SO₂ + H₂O, respectively, as shown in Fig. 3.

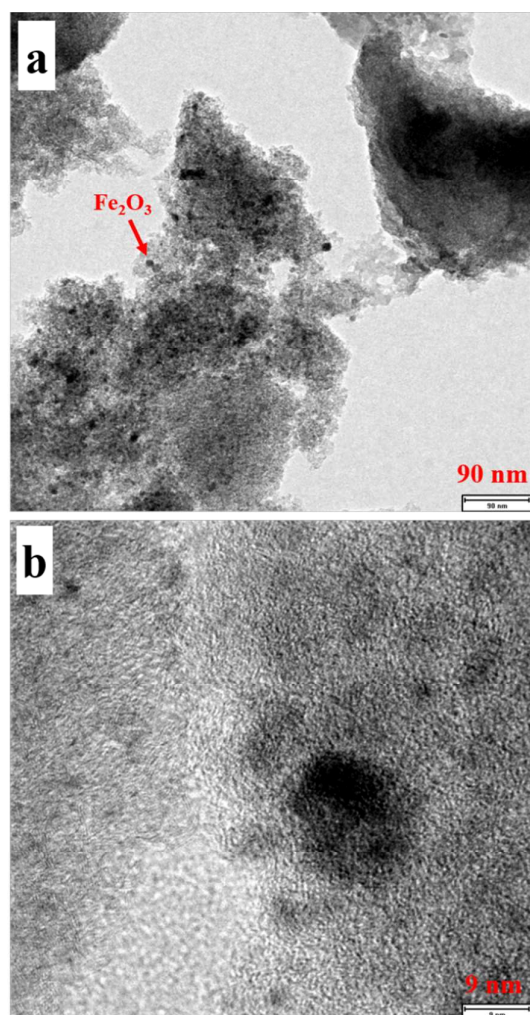


Figure S3. TEM images of 3% Fe-0.5%V catalyst: a and b are different magnifications of the same sample.