Heterogeneous Reactions of Carbonyl Sulfide on Mineral Oxides: Mechanism and Kinetics Study

Yongchun Liu, Jinzhu Ma, Hong He

State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, 100085, China

Supplement:

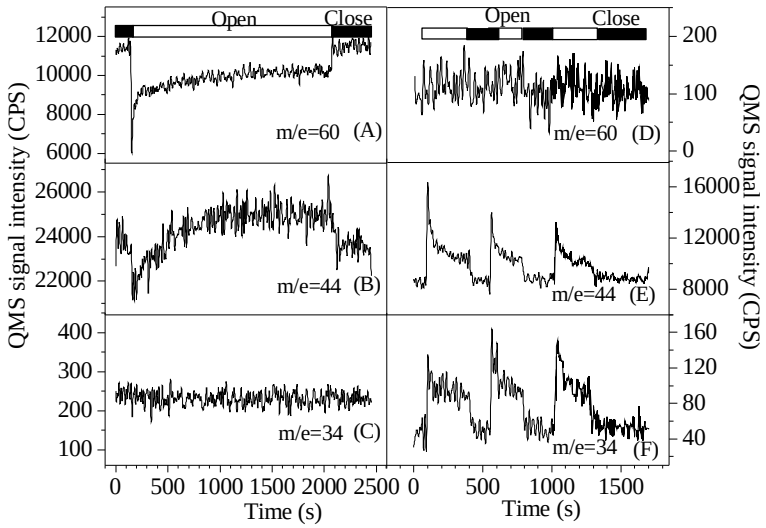

Fig. 1S. The heterogeneous reaction of OCS on 50.2 mg of α-Al_2O_3 at 300 K (left side) and the *in situ* desorption of surface species in the end of uptake (right side).

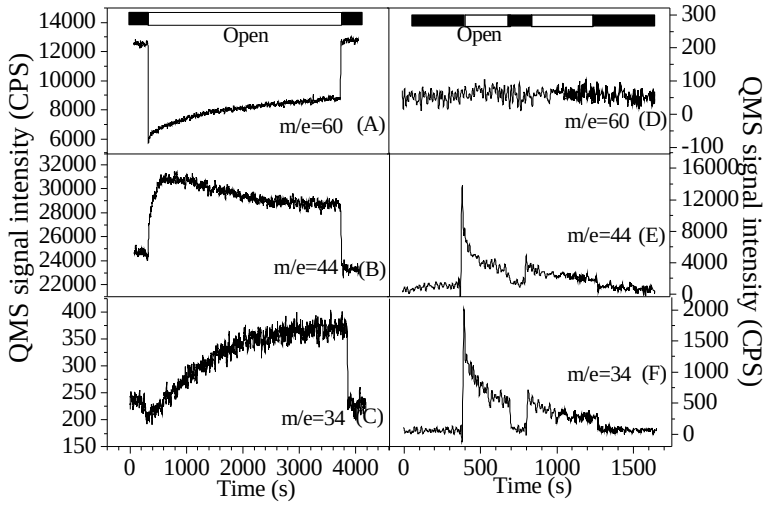

Fig. 2S. The heterogeneous reaction of OCS on 100.0 mg of MgO at 300 K (left side) and the *in situ* desorption of surface species in the end of uptake (right side).

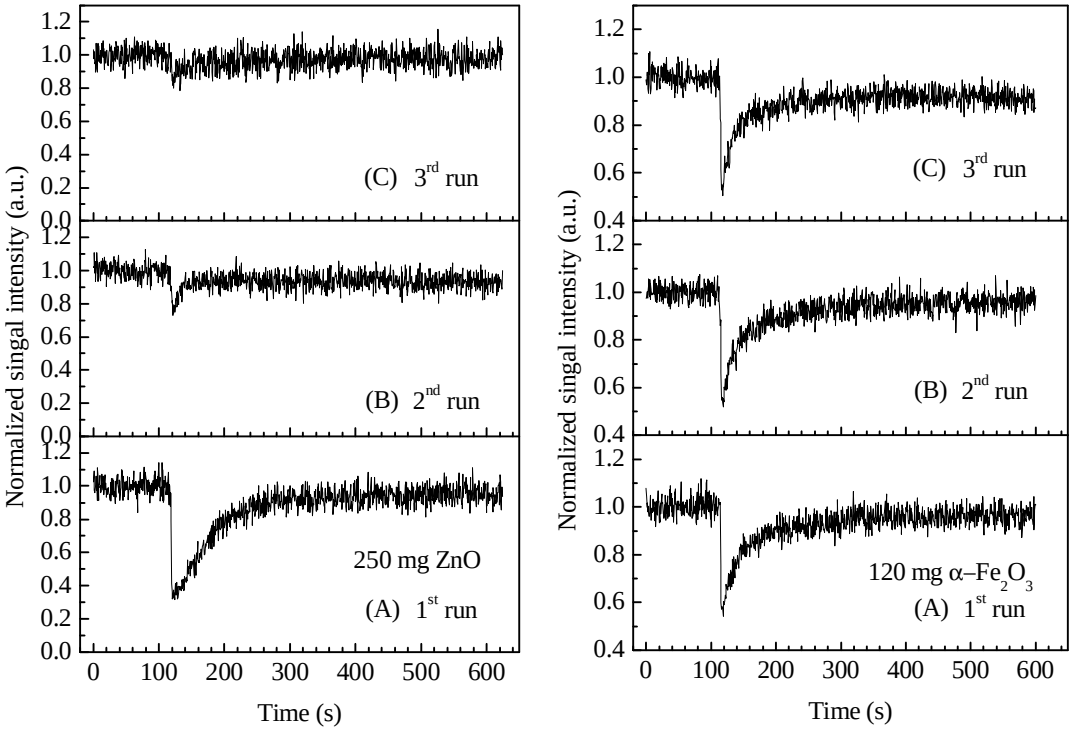

Fig. 3S. Repeated uptake experiments of OCS on ZnO and α-Fe_2O_3. Uptake experiments were performed at 300 K. After the uptake experiment finished, the sample were out-gassed at $3.0\pm1.0\times10^{-7}$ Torr and at 300 K for 18 h.