Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2020

## **Supplementary:**

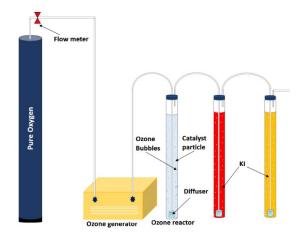


Fig. S1 -Catalytic ozonation process schematic diagram for pesticide destruction

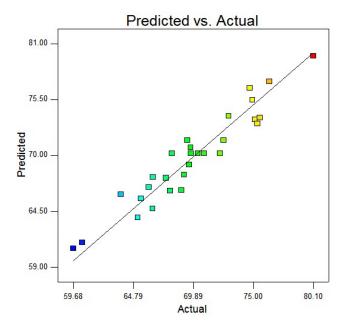


Fig. S2. Actual and predicted diazinon removal efficiency correlation

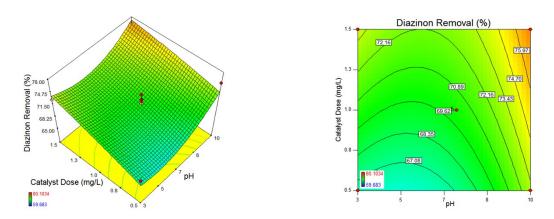


Fig. S3. The effect of pH and Catalyst loading on diazinon removal (time: 10 min and diazinon concentration: 10mg/L)

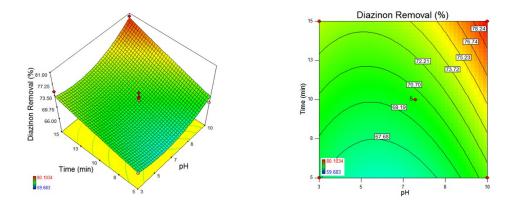


Fig. S4. The impact of pH and time on diazinon removal (catalyste loading: 1 mg/L and diazinon concentration: 10 mg/L)

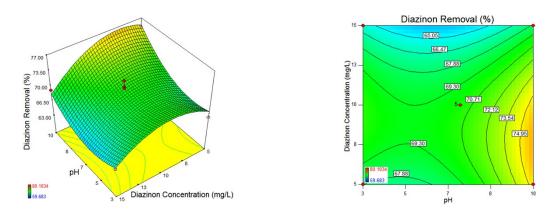


Fig. S5. The impact of pH and diazinon concentration on diazinon removal (catalyste loading: 1 mg/L and time: 10 min)

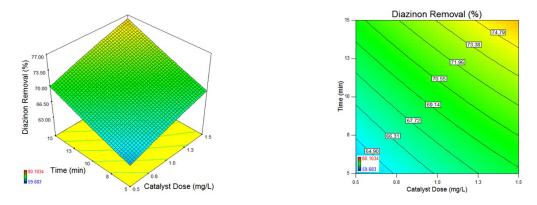


Fig.S6. The impact of catalyste loading and time on diazinon removal (pH: 7 and diazinon concentration: 10 mg/L)

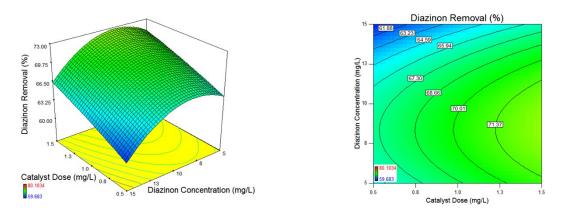


Fig. S7. The effect of catalyste loading and diazinon concentration time on diazinon removal (pH: 7 and time: 10 mg/L)

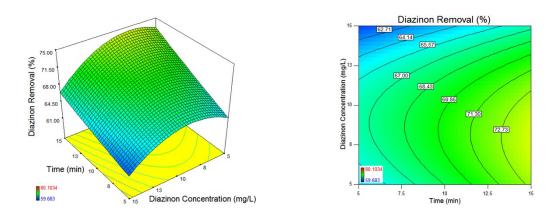


Fig. S8. The impact of time and diazinon concentration on diazinon removal (catalyste loading: 1mg/L and pH: 7)

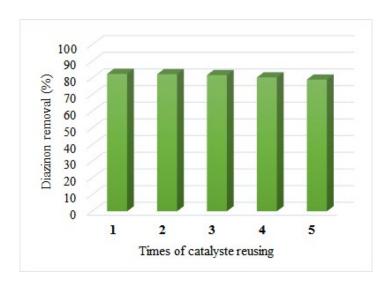


Fig. S9. Diazinon removal efficiency of Nano-MgO@CNT@Gr/O $_3$  throughout 5 runs