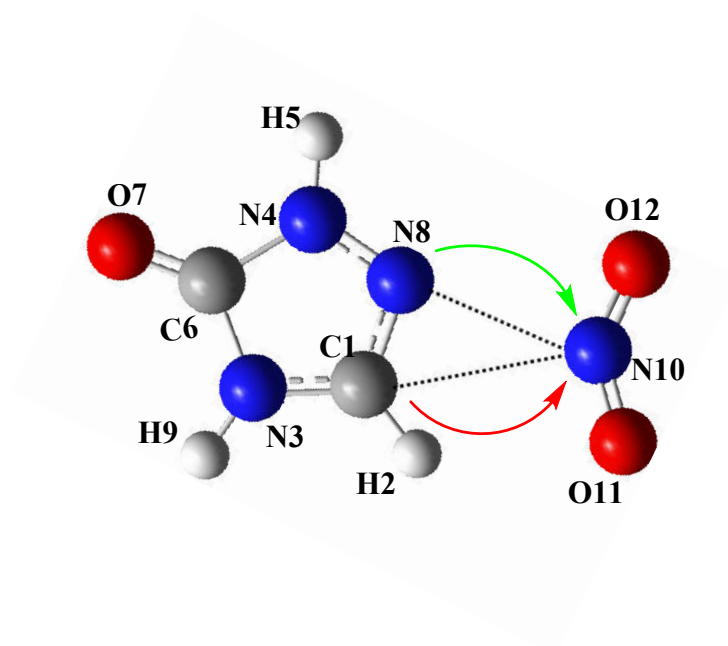


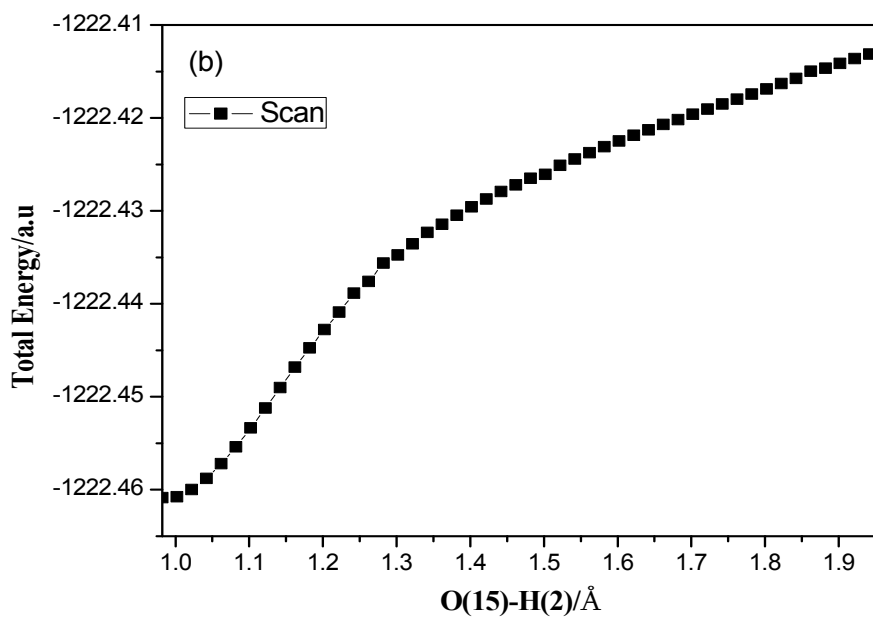
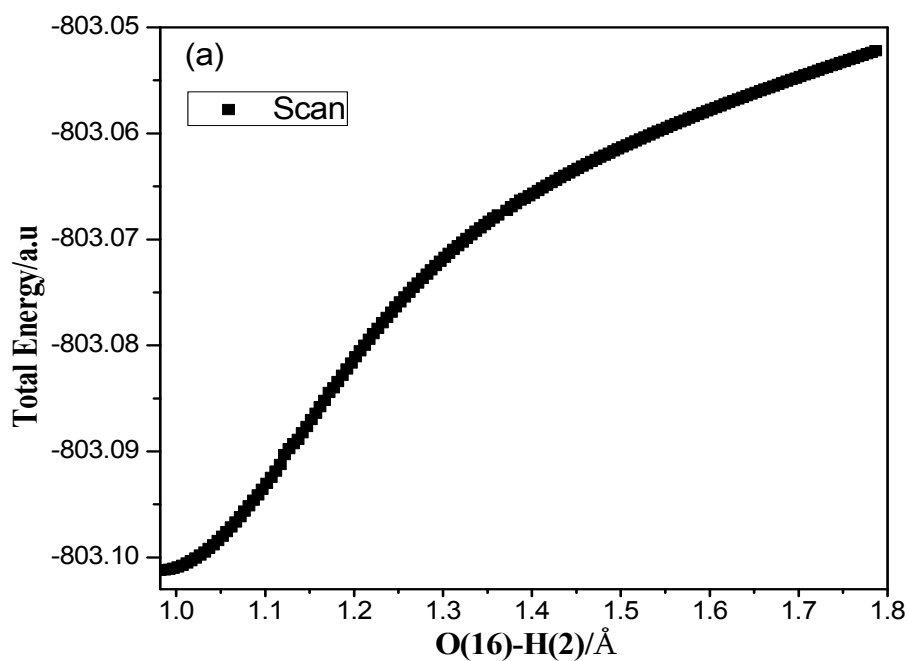
## Electronic Supplementary Information

### Density Functional Theory Study on the Reaction of Triazol-3-one with Nitronium: Direct Nitration versus Acidic Group-Induced Nitration

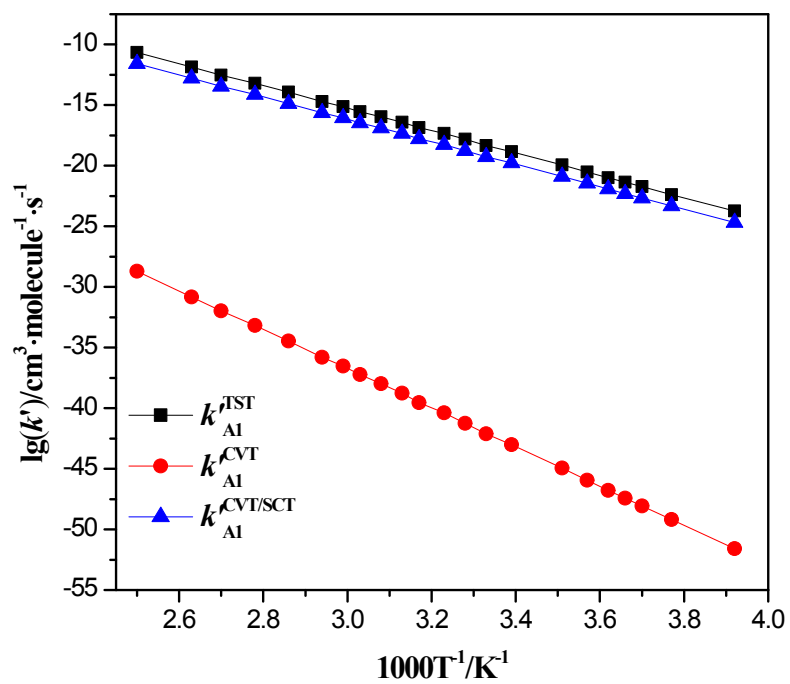
*Kuan Wang,<sup>a</sup> Jian-Gang Chen,<sup>\*a</sup> Bozhou Wang,<sup>c</sup> Fengyi Liu,<sup>a</sup> Zhao-Tie Liu,<sup>a</sup> Zhong-Wen Liu,<sup>a</sup> Wenliang Wang,<sup>a</sup> Jinqiang Jiang,<sup>a</sup> Zhengping Hao<sup>b</sup> and Jian Lu<sup>\*c</sup>*



**Fig. S1** Schematic diagram for the attraction of NO<sub>2</sub><sup>+</sup> by TO molecule during the nitration process.



**Fig. S2** (a) The potential energy surface scan of O(16)-H(2) in An-IM4 calculated at the B3LYP/6-311G(d,p) level. (b) The potential energy surface scan of O(15)-H(2) in As-IM4 calculated at the B3LYP/6-311G(d,p) level.



**Fig. S3** The calculated rate constants of the rate-determining step of path A1 via TST, CVT and CVT/SCT within temperature ranges of 225-400 K.