

Correction

EARTH, ATMOSPHERIC, AND PLANETARY SCIENCES

Correction for “Reassessing the atmospheric oxidation mechanism of toluene,” by Yuemeng Ji, Jun Zhao, Hajime Terazono, Kentaro Misawa, Nicholas P. Levitt, Yixin Li, Yun Lin, Jianfei Peng, Yuan Wang, Lian Duan, Bowen Pan, Fang Zhang, Xidan Feng, Taicheng An, Wilmarie Marrero-Ortiz, Jeremiah Secrest, Annie L. Zhang,

Kazuhiko Shibuya, Mario J. Molina, and Renyi Zhang, which was first published July 17, 2017; 10.1073/pnas.1705463114 (*Proc Natl Acad Sci USA* 114:8169–8174).

The authors note that, due to a printer’s error, Table 2 appeared incorrectly. The corrected table appears below.

Table 2. Summary of activation energy (E_a , kcal·mol⁻¹), reaction energy (ΔE_r , kcal·mol⁻¹), rate constant (k , cm³·molecule⁻¹·s⁻¹), and branching ratio (Γ) of the OH–toluene reactions at 298 K

Reactions	Quantity	Ortho	Para	Meta
Toluene + OH → OH-adduct	E_a	1.2	2.1	2.7
	ΔE_r	-15.5	-14.6	-14.4
	k	2.7×10^{-12}	7.4×10^{-13}	1.2×10^{-13}
	Γ (%)	74, 80.6*, 52 [†] , 59 [‡]	21, 14.3*, 34 [†] , 14 [‡]	3, 5.1*, 11 [†] , 5 [‡]
OH-adduct + O ₂ → Cresol	E_a	4.4, 3.7 [§]	4.1	5.0
	ΔE_r	-26.3, -28.7 [§]	-26.8	-27.0
	k	1.6×10^{-15} , $0.9 \times 10^{-15\ddagger}$, $5.1 \times 10^{-15\ddagger}$	2.4×10^{-15} , $1.7 \times 10^{-15\ddagger}$	1.2×10^{-16}
OH-adduct + O ₂ → RO ₂ [*]	E_a	7.5, 7.1 [§]	0.8	-0.4
	ΔE_r	-8.5, -2.9 [§]	-12.2	-9.5
	k	1.5×10^{-16} , $2.8 \times 10^{-16\ddagger}$, $1.0 \times 10^{-17\ddagger}$, $3 \times 10^{-15\ddagger}$	2.5×10^{-14} , $1.5 \times 10^{-14\ddagger}$	4.5×10^{-15}
o-Cresol + OH → DHMB	E_a	-0.4		
	ΔE_r	-15.6		
	k	4.3×10^{-11} , $4.3 \times 10^{-11\#}$		
DHMD + O ₂ → 1,2-dihydroxy-3-methylbenzene	E_a	2.2		
	ΔE_r	-24.3		
	k	5.4×10^{-12}		

The value is from the present work, except noted otherwise. Γ is calculated by excluding those from the OH *ipso* addition and the H-abstraction pathways.

*From ref. 30.

[†]From ref. 22, including a branching ratio of 3% for OH *ipso* addition.

[‡]From ref. 23, including a branching ratio of 15% for *ipso* position.

[§]From ref. 26.

[¶]From ref. 10.

[#]From ref. 41.

www.pnas.org/cgi/doi/10.1073/pnas.1715304114