

ADDITIONS AND CORRECTIONS

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S. Sekušak, H. Güsten, and A. Sabljic* : An *ab Initio* Study on Reactivity of Fluoroethane with Hydroxyl Radical: Application of G2 Theory

Page 6218. An inadequate correction was used for thermal energy adjustment of barrier heights ($\Delta E_0(298\text{ K})$) in Table 8. The correct table is given below.

TABLE 8

reaction	$\Delta E_0(298\text{ K})$	$\Delta H_r(298\text{ K})$
(R1)	1.95	-18.36
(R2a)	3.26	
(R2b)	4.34	-14.87
expt ^a	1.49–2.44	-23.00 ^b

^a References 7 and 8. ^b Estimated value for reaction R1.

Page 6221. An inadequate correction was used for thermal energy adjustment of barrier heights ($\Delta E_0(298\text{ K})$) in Table 14. The correct table is given below.

TABLE 14

reacting system	PUMP4/6-311+G(2d,p)//UMP2/6-31G(d,p)		PUMP2/6-311+G(2d,p)//UMP2/6-31G(d,p)		expt	
	$\Delta E_0(298\text{ K})$	$\Delta H_r(298\text{ K})$	$\Delta E_0(298\text{ K})$	$\Delta H_r(298\text{ K})$	$E_a(298\text{ K})$	$\Delta H_r(298\text{ K})$
[CH ₃ CHF••H••OH]	3.11	-16.35	2.75	-20.22	1.49–2.44 ^a	-23.0 ^b
[CH ₂ FCH ₂ ••H••OH (rot1)]	5.14	-13.13	4.38	-16.93		
[CH ₂ FCH ₂ ••H••OH (rot2)]	3.85	-13.13	2.94	-16.93		
[CH ₃ CHCl••H••OH]		-17.85	2.06	-21.44	0.75–2.04 ^c	
[CH ₂ ClCH ₂ ••H••OH (rot1)]		-14.42	3.52	-18.25		
[CH ₂ ClCH ₂ ••H••OH (rot2)]		-14.42	2.57	-18.25		
[CH ₃ CH ₂ ••H••OH]	3.62	-14.93	3.02	-18.76	2.11–2.28 ^d	-18.96 ^e

^a References 7 and 8. ^b Estimated value. ^c Reference 37. ^d Reference 3b. ^e Reference 9.

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M. F. Mesleh, J. M. Hunter, A. A. Shvartsburg, G. C. Schatz,* and M. F. Jarrold*: Structural Information from Ion Mobility Measurements: Effects of the Long-Range Potential

Page 16082. By fitting the temperature dependence of the mobility of C_{60}^+ fullerene in helium by an additive pairwise Lennard-Jones potential for C–He interactions plus an ion induced dipole term, we obtained Lennard-Jones parameters of $\epsilon = 1.34$ meV and $\sigma = 3.068$ Å. Here ϵ is the well depth and σ is the distance where the potential becomes positive. When comparing this potential with the Lennard-Jones potential between C and He atoms introduced by Amos et al.,¹ and adopted in studies of helium incorporation into fullerene cages,^{2–5} we erroneously stated that the latter has $\sigma = 3.33$ Å. In fact, the parameters for that potential are $\epsilon = 1.61$ meV or 1.63 meV and $\sigma = 2.97$ Å. Mobilities calculated with the parameters $\epsilon = 1.62$ meV and $\sigma = 3.33$ Å deviate from our measured mobilities, over an 80–400 K temperature range, by 15–20%. However, mobilities calculated with $\epsilon = 1.62$ meV and $\sigma = 2.97$ Å differ from the experimental values by only a few percent.

References and Notes

- (1) Amos, A.; Palmer, T. F.; Walters, A.; Burrows, B. L. *Chem. Phys. Lett.* **1990**, *172*, 503.
- (2) Pang, L.; Brisse, F. J. *J. Chem. Phys.* **1993**, *97*, 8562.
- (3) Son, M. S.; Sung, Y. K. *Chem. Phys. Lett.* **1995**, *245*, 113.
- (4) DiCamillo, B. A.; Hettich, R. L.; Guiochon, G.; Compton, R. N.; Saunders, M.; Jimenez-Vasquez, H. A.; Khong, A.; Cross, R. J. *J. Phys. Chem.* **1996**, *100*, 9197.
- (5) Jimenez-Vasquez, H. A.; Cross, R. J. *J. Chem. Phys.* **1996**, *104*, 5589.