

Correction to "Ab Initio Coupled Cluster Determination of the Heats of Formation of C₂H₂F₂, C₂F₂, and C₂F₄" [The Journal of Physical Chemistry A **2011**, 115, 1440–1451. DOI: 10.1021/jp111644h]. David Feller,* Kirk A. Peterson, and David A. Dixon

The higher order core/valence corrections to the atomization energies listed in Table 3 as " Δ HO(4) est CCSDT(Q)(CV)/ccpwCVTZ" are incorrect. The correct values are smaller by 0.4–0.5 kcal/mol, which is a significant amount in the present context. In addition, the scaling factor used to scale up the ccpwCVDZ values should have been 2.30. This error affects the heats of formation listed in Table 4 and in the Abstract. Revised values (kcal/mol) are as follows:

best				
system	$\Delta \mathrm{HO}(4)$	composite ΣD_0	$\Delta H(0K)$	$\Delta H(298.15 \text{K})$
$1,1-C_2H_2F_2$	0.04	562.19 ± 0.64	-82.0 ± 0.6	-83.7 ± 0.6
$cis\text{-}1,2\text{-}C_2H_2F_2$	0.04	552.51 ± 0.60	-72.3 ± 0.6	-73.9 ± 0.6
$trans\hbox{-} 1, 2\hbox{-} C_2H_2F_2$	0.04	551.78 ± 0.61	-71.6 ± 0.6	-73.1 ± 0.6
C_2F_4	0.10	573.80 ± 0.79	-160.0 ± 0.8	-160.8 ± 0.8
C_2F_2	0.05	376.21 ± 0.33	0.7 ± 0.3	1.4 ± 0.3

DOI: 10.1021/jp202158j Published on Web 03/22/2011

