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Notes

Erratum to “Infrared absorption cross sections of isobutane with hydrogen and nitrogen as broadening gases” J Quant Spectrosc Radiat Transf 227 (2019) 226–229

D.M. Hewett^a, P.F. Bernath^{a,*}, B.E. Billinghurst^b^a Department of Chemistry and Biochemistry, Old Dominion University, Norfolk, VA 23529, USA^b Canadian Light Source Far-Infrared Beamline, 44 Innovation Blvd, Saskatoon, SK S7N 2V3, Canada

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In our paper [1], we calibrated the infrared absorption cross sections in the C–H stretching region near 3.3 μm using the isobutane cross sections obtained at the Pacific Northwest National Laboratory (PNNL) [2]. The calibration factors ξ (defined in our paper) were unusually large and ranged from 1.264 to 1.509 (average value of 1.400 ± 0.059 for 28 measurements). Some additional spectra in this region were recorded at Old Dominion University (A. Fernando and M. Dulick, personal communication) and a calibration factor of about 1.39 was obtained. These large correction factors from two independent laboratories are unrealistic and we conclude, as we have already stated in a paper on the cross sections in the 1050–1900 cm^{-1} region [3], that the PNNL cross sec-

tions for isobutane are not reliable. Our published cross sections [1] in the 3.3 μm region should therefore be divided by 1.40.

References

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* Corresponding author.

E-mail address: pbernath@odu.edu (P.F. Bernath).