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Errata

Correction to "Development and Characterization of a Fast-Stepping/Scanning Thermodenuder for Chemically-Resolved Aerosol Volatility Measurements"

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Huffman et al. (2008) contains a minor error in Figure 3. This error does not affect any of the conclusions of the paper. Huffman et al. (2008) shows a single modeled curve for particle losses by diffusion at 25°C. However, this curve does not correspond to the precise experimental conditions for our measurements nor to those from Wehner et al. (2002). When calculating the diffusion losses for our experiments, a section of tube used in our experiments was accidentally left out of the calculation, and the lower pressure in Boulder was not taken into account, with both effects leading to too high calculated transmission. The curve has been updated using the appropriate length and pressure, and is shown in Figure 1 below. This curve shows slightly higher transmission than the experimental results, but within the uncertainties of the experiment and calculations. An additional modeled curve was added to Figure 3 for the conditions of Wehner et al. (2002), which compares better to the data from those authors.

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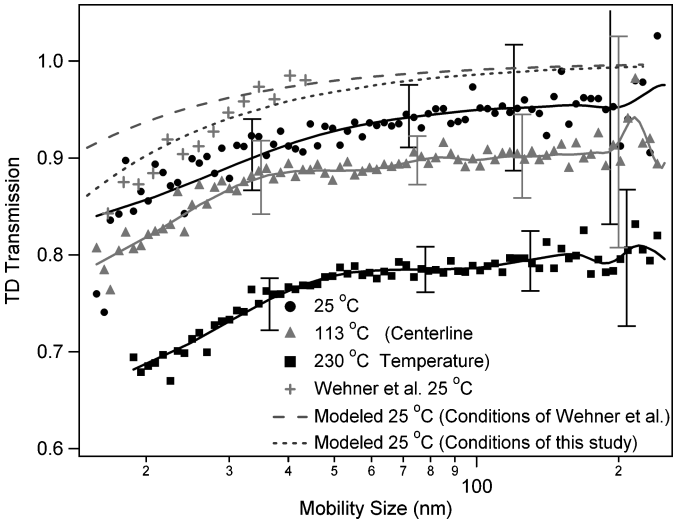

FIG. 1. Particle number loss as a function of size within the TD at three different temperatures, as due to diffusion and thermophoresis. Experimental curves at three different temperatures are shown, as well as comparisons with the theoretical diffusion limit (Cheng 2001; Hinds 1999a) modeled at 25°C for the experimental conditions of this study and those used by Wehner et al. (2002). Published measured losses from Wehner et al. are also shown. Lines are spline fits to guide the eye.