

Response to reviewer comments on “Performance of a new co-axial ion-molecule reaction region for low-pressure chemical ionization mass spectrometry with reduced instrument wall interactions”

Brett B. Palm, Xiaoxi Liu, Jose L. Jimenez, Joel A. Thornton

We thank the reviewers for their comments on our paper. To facilitate the review process, we have copied the reviewer comments in black text. Our responses are in regular blue font. We have responded to all the referee comments and made alterations to our paper (**shown in bold text**).

Anonymous Referee #2

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CIMS has been widely used to measure trace gases. One of the most important artifacts for measuring low volatile gases is the inlet wall effects. The present work designed a low pressure IMR (I- as reagent ion) to reduce the wall impact. Also this study introduces a conceptual framework for considering instrument wall interactions and a measurement protocol to accurately capture the time-dependence of target compound concentrations. The manuscript is well written. I suggest acceptance of this manuscript on AMT.

We thank the reviewer for their comments.