

Interactive comment on “On-line derivatization for hourly measurements of gas- and particle-phase Semi-Volatile oxygenated organic compounds by Thermal desorption Aerosol Gas chromatography (SV-TAG)” by G. Isaacman et al.

Anonymous Referee #2

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Thanks to the authors for their good work and a manuscript which is well written. The paper presents a lot of novelties on the field of aerosol research. The online derivatization is still a more recent development. The combination with measurement of gas-particle-partitioning and online sampling makes the SV-TAG system to a highlight in aerosol analytics. Therefore the presented manuscript is of high interest for the scientific community. The presentation quality is good. It has to be clearly recommended for publication in AMT.

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I have just a few comments and suggestions:

The possibility of gas-particle-partitioning should be mentioned more clearly within the abstract thereby interested readers get quick access to this paper when searching by keywords.

Later the drawbacks of denuder sampling should be mentioned – at least by citation of papers discussing it.

The structure of the methodical part is straight forward but quite difficult to understand and the final details of the working procedure is missing: Due to the separated description of the different parts of the instrument it is hard for the readers to get the working principle of the whole set-up. Therefore it would be helpful to give a first brief overview in section 2.1.1 and not to give a description of the original instrument. I think this would make it much easier for the readers to understand the subsequent descriptions of the different parts.

Final settings of derivatization (fdvz and derivatization time, ...) should be a part of the method section.

Please give a short note about the ongoing GC run (temperatures, flows, ...) after thermal desorption or give a citation.

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 7495, 2014.

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