

## ***Interactive comment on “The interference of tetrachloromethane in the measurement of benzene in air by Gas Chromatography - Photoionization Detector (GC-PID)” by Cristina Romero et al.***

### **Anonymous Referee #3**

Received and published: 11 January 2019

This manuscript discusses possible interferences in the measurements of benzene using a European Standard method. The manuscript fits in AMT topic wise. There are no errors in the manuscript but it is a report rather than a scientific manuscript. The manuscript needs to be substantially restructured and reformatted to even fit the instructions for AMT (See [https://www.atmospheric-measurement-techniques.net/for\\_authors/manuscript\\_preparation.html](https://www.atmospheric-measurement-techniques.net/for_authors/manuscript_preparation.html)) especially in regards to sections. The manuscript preparation also lacks attention to detail and is sloppy. The present webpublished version has randomly underlined sections, which might be track

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changes from previous editing. This is very sloppy and together with numerous typos, one can only hope the authors performed their scientific work more carefully than the preparation of their manuscript.

Some detailed comments (typos/language issues are incomplete and formatting needs to be appropriate for a journal article)

L18 - A PID in English analytical literature is a Photoionization detector not a photometric ionization detector.

L33-34 appropriate for a conclusion/outlook but not for an abstract.

L49 why is the degree underlined? Why is there random underlining of text and references?

L59 excess period

L61 and check rest of the manuscript it is “et al.” not “et. al” overall format references AND in text citations following author instructions.

L63 provide references/citations to the directive document Table1: provide in the table (or table legend) where these values are from (reference?) as this is not from the present work.

L69 Statements like lifetime need to be supported by citations. Overall the whole introduction needs much more citations for the statements made (like L73 VOCs can affect human health.. based on what?).

L76 missing parenthesis.

L78 Why is there a section on introduction and background and objectives. There should only be an introduction. Overall the manuscript is not prepared using AMT instructions

L81-83 and following: provide citations for standards

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L150 please write chemical names correctly.. dimethylpentane (one word)

L153 what is the electric density? Do you mean electron density?

L185 it is typical in a scientific manuscripts to end the intro with 2-3 sentences of what is in the manuscript.

Experimental: info on source/ manufacturer purity of gases, purification material etc is critically missing.. please provide basic info on used reagents and used instrumentation including manufacturer location etc (see standard for the journal), Examples: L225 how were the concentrations obtained? Where are these gases from? Or L245 this is the only place where you give location etc as manufacturer info. This needs to be the case for everything, including the actual analyzers used!

L254 why are bullet points used here? This is not common and not really warranted. Again this is a scientific manuscript not a report.

Figure 5 seems to be used before figure 4. Make sure to use figures in the right order and number accordingly.

L325 what is the meaning of previous experiments. You show some of them here.. so this is not really previous? May be you mean "initial". Also if this is published already, you need full citation.

L413 what is a magma? Did you mean "plasma" which would be the word for a partially ionized gas? Please use correct scientific language or explain what you mean? It is very uncommon to talk about a plasma (or magma) in the context of a PID.

The following discussion is very weak as it is qualitative and not quantitative. What is a "strong electronegativity"? This has no real meaning.

L484-486 this not results and discussion but a statement that ends a conclusion

Conclusions: This is not how conclusions are presented in a manuscript. For starters it is unusual to have numbered conclusions. Please write this like a conclusion in a

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scientific manuscript. In addition your first conclusion point 1. is not in this manuscript. This is not a conclusion of this manuscript

L517: Proofread your manuscript! Use a spell checker!!!

Figure 1 quality is not acceptable: resolution, is too low

Tables should be uniformly formatted

English should be edited for better reading flow

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Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-244, 2018.

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