

## ***Interactive comment on “Preparation and analysis of zero gases for the measurement of trace VOCs in air monitoring” by Jennifer Englert et al.***

**Anonymous Referee #2**

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The paper of Englert et al. investigates purifying techniques for preparation of “zero gas” for analytical applications, e.g. analysing traces of volatile organic compounds (VOC) in air samples. Three different types of gas purifiers were tested: (1) absorption cartridge, (2) heated palladium catalyst and (3) heated platinum catalyst. The tests were conducted at three different laboratories. The air purifiers using the catalytic techniques are suitable to remove a broad range of VOC from air whereas the adsorption cartridge cannot fully clean air.

In summary, the results presented are suitable to be published in AMT but as a Technical Note after streamlining the results presented together with an Electronic Supplement. The experiments conducted are tests with already available techniques for purifying air and thus no clear innovative approach is presented which may merit a

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publication as a full paper.

The “introduction” should be condensed with finally leading to the research questions. The author team should justify their selection of the used purifying techniques.

In the “experimental” part all commercial suppliers of materials should be listed. Details of the analytical systems used in the experiments should be reported in the supplement, likely in a Table.

The “data analytical details” chapter should be moved to the supplement as well as Table 1 and Table 2. A summary of the applied techniques is sufficient as part of the experimental/method section.

The “results and discussion” part should focus on the performance of the purifying systems only. Additional information should be moved to the supplement. Figures 2 and 3 can be skipped. Figures 4, 5 and 6 may also be skipped or moved to the supplement, Figure 7 should be moved to the supplement.

In the “conclusion” part of the paper please avoid duplication of the abstract and focus on aspects users of air purification systems should consider.

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Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2017-412, 2017.

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