

## ***Interactive comment on “Intercomparison of four different cascade impactors for fine and ultrafine particle sampling in two European locations” by A. S. Fonseca et al.***

**T. Hussein**

tareq.hussein@helsinki.fi

Received and published: 15 March 2016

This manuscript presented a comparison between five multi-stage impactors that measure the particle mass size distributions of both fine and coarse particles; each has its own setup with regards to cutoff size, number of stages, and upper limit of particle size. These instruments were tested in two European cities (indoor-outdoor Prague and outdoor Barcelona). This kind of measurement campaigns are important for the scientific community in order to understand the performance of several instruments and operation range. Therefore, I support publication in ACP or even in another specialized journal such as "Aerosol Science and Technology" or "Indoor Air".

Before I wrote my review I went through the reviewer reports submitted on Feb 13

Printer-friendly version

Discussion paper



and Feb 26. Both provided an extensive review with regards to the technical part and scientific parts. In that sense, I will not go in details about the technicalities of the instruments, but I will talk about the clarity of the results and improving it so that my comments will be taken into account in the ACP revised version.

1. Title: The title is focused on the fine aerosols; however, the sampling was conducted for both fine and coarse aerosols. I suggest the title to be modified as "Comparison between four cascade impactors for two urban aerosols with an emphasis for indoor-outdoor aerosols"

2. Abstract and objectives: While the article is focused on the comparison between the impactors, I believe the indoor-outdoor relationship with respect to the chemical analysis is also very important to be a part of the abstract as well as the objectives.

3. Figures 6 and 7 should be given more space to be discussed with respect to the transport of outdoor aerosols into the indoor air.

---

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2015-1016, 2016.

[Printer-friendly version](#)[Discussion paper](#)