

Interactive comment on “Characterization of primary and secondary wood combustion products generated under different burner loads” by E. A. Bruns et al.

Anonymous Referee #2

Received and published: 2 December 2014

The manuscript of Burns et al. with the title “Characterization of primary and secondary wood combustion products generated under different burner loads” presents a study that describes methods and results of wood combustion experiments. The primary and secondary products under different burner loads were investigated using up-to-date online techniques and more conventional filter methods. A special focus was on study of polycyclic aromatic hydrocarbons (PAHs) and their determination using aerosol mass spectrometer (AMS). The aging of emission products was also tested in a chamber.

The topic as well as the presented questions and answers of this manuscript fit well in

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the scope of this journal. The manuscript presents novel ideas and data and it presents substantial and reliable conclusions. The presented methods and assumptions are valid and clearly outlined. The results are sufficient and the interpretations and conclusions are valid. The experiments are adequately described in the manuscript. The results and investigations of this manuscript are well compared to the other scientific publications of the field. The title describes the content of the manuscript reasonably well as well as does the abstract. The presentation and structure of the manuscript and the used language are clear and of high quality.

This reviewer strongly recommends publication of this skilfully prepared manuscript after the scanty modifications presented below are made and after the comments and questions raised by Anonymous Referee #1 and by Glyn Hughes are addressed.

General comments:

Throughout the manuscript, the adjective ‘significant’ has been used to mean ‘considerable, noteworthy, notable, remarkable’ but as I understand, not to imply any statistical significance. I recommend using other adjectives than significant when you do not mean to express statistical significance.

Specific comments:

This is probably not your fault but in the text all -ff-’s and -ffi-’s are in italics (e.g. in words difference, coefficient, etc.).

Don’t place space in ‘m/z’. Check throughout the manuscript.

Page 26056, lines 19-23. This sentence does not read well. Please, clarify it.

In the text and in the tables, you use numbers 1-6 for the experiments but in the figures, the letters a-f are used. Why not use the same logic throughout the manuscript?

Anonymous Referee #1 has already asked you about the m/z ratios of 60 and 73. Also I would like to see more discussion related to these m/z’s in this manuscript.

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