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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Characterization of organic aerosol produced during pulverized coal combustion in a drop tube furnace" *by* X. Wang et al.

Anonymous Referee #2

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This paper describes the chemical characteristics of the organic aerosols produced during the coal combustion process. The authors present interesting and potentially exciting results with a proposed mechanism to explain their findings. I recommend this work for publication if the following points are resolved satisfactorily.

(1)Page 3352, line19, the authors show "in a coal-fired power plant the typical oxygen/coal ratio is 1.2", but in this study the ratio is ranging from 8.6 to 30 which is away from the typical ratio, reason and explanation are required for this choice.

(2)Page 3354, line1-3, authors have used ATOFMS to measure the water soluble ions, such as K+ of aerosols. I suppose ion chromatography is a better method used for the

quantitative measurements of water soluble ions. Any specific reasons?

(3)As the chemical composition of the coal varies from place to place, I miss the part where the authors have studied about the chemical composition for the coal used in this study, especially the potassium content.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 3345, 2013.