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Interactive comment on "Use of column experiments to investigate the fate of organic micropollutants – a review" *by* Stefan Banzhaf and Klaus H. Hebig

Anonymous Referee #2

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The paper is publishable in its present form with only some slight corrections (here after) The only important recommendation is as follows

I encourage the authors, at the end of the detailed and very analytical description of the observations of column tests on different chemicals to resume, in some way, the main results. For example: which are the main conclusions regarding pharmaceuticals? and regarding pesticides? also if each molecule beahaves in a different way in different settings, is it possible to put in evidence some general rules or behaviours, useful for interested Readers Otherwise the paper seems simply a cold and anlytical list of references and results without any "soul" underlined betwee rows

Here are some specific comments

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SPECIFIC COMMENTS

CHAPTER 1 (add question mark to the title) CHAPTER 2:

Add also biodegration, and not only chemical reaction, as a tool of transformation of micropollutants Be careful, because uranine is not a perfectly conservative tracer (sensible to sun light for example and slightly retarded on fine sediments). Only inorganic anions are very near to be conservative. Hydrodynamic dispersion leads not only to a broadening of the breakthrough curve at a particular observation point during flow through a porous medium but also to the dilution of the concentration and to the formation of a tailing due to the pore size distribution effects (correct the red line in Fig.1) Also the curve for retardation must be corrected (lowering of concentration and even more pronounced tailing due to flushing effects and consequent desorption)

Pag.6,r.24: I suggest to use the term of “large specific surface” for organic matter

Pag.6,r.32: what’s the meaning of the term “zwitter”? Explain now and not after

Pag.7,r.22: Chemdraw is not in the references

Pag.8,r.11: edit in the proper way the notations of ions with apex in the right position

p.24 r.14: the citation of cambridgesoft.com doesn’t seem to be in the main text

p.33 r.25: Schirmer, 2008, is not cited in the main text

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