

Interactive comment on “An innovative treatment concept for future drinking water production: fluidized ion exchange-ultrafiltration-nanofiltration-granular activated carbon filtration” by S. Li et al.

Anonymous Referee #2

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1. In Fig. 5, the initial big permeability recovery looks abnormal and does not have any practical importance. Isn't it more sound to perform backwashing before filtration?
2. In section 2.4, MTC is not different from inverse of [viscosity at T=20 times total resistance]. I believe that the temperature correction factor stems from the dependence of viscosity on temperature. I think it is better to stick to the conventional analysis method using total resistance. In addition, a definition of MTC is not shown in the paper.

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3. The paper shows a novel optimization method of hybrid filtration system in terms of membrane fouling. How do the authors claim that no cake layer is formed?
4. The objective of the paper is to develop an efficient protocol for clean water production. If nano-filtration is used, it requires a much higher pressure than that of UF. In terms of operation cost, does this process provide cost reduction?

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