Review of manuscript: materials-1988681

Title: Lignocellulosic based activated carbon loaded silver nanoparticles and chitosan for efficient removal of cadmium and optimization using Response Surface Methodology

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This script describes the characteristics of lignocellulosic based activated carbon loaded silver nanoparticles and chitosan, and discussion for the removal of cadmium from aqueous media. It is an interesting script, but it is not written properly. There are some points, which require major revision and need to be clarified in the revised text. The points are described below.

1) General: It is interesting results for the cadmium removal by CS-KAC-Ag. However, I can't understand how the effects of Ag nano-particle, KAC and CS on the removal of cadmium from aqueous solution. Are there synergistic effects of these three material to promote the removal reaction? You should write the discussion for removal mechanism using CS-KAC-Ag, especially difference using only KAC, Ag-nanoparticle and chitosan.

2) General: Units used in this paper should be unified. "ml"→"mL", "mg/L"→"mg•L-1", "k1"→"k1", etc.

3) General: "Removal rate"→"Removal"

4) General: You should reconsider the effective digit in this paper.

5) Figures: Figure 1, 7, 8, 9 and 10 are obscure. You should draw the frame of graphs, use bigger numerical characters and plots, insert the unit into parenthesis. Especially, figure 5 is very obscure. You should become the bigger graphs, add the labels of X and Y axes.

I recommended publication of this paper, subject to the above points being satisfactorily addressed.