

Interactive comment on “Removal of Dyes from Simulated Wastewater using Low Cost Activated Carbon Derived from Date Pits” by Salam A. Mohammed et al.

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Our sincere thanks for the efforts by valued reviewer for the constructive comments Responses to the reviewer comments We will take each point been mentioned and here we are providing our response individually: Generally all the comments related to the abstract will be implemented in the final version of the paper (Lines 18-20, 21, 18-28). Line 40-41 quite number of researchers has studied those materials as adsorbent to replace activated carbon (AC).

Line 47-49: true enough the point been mentioned and we totally agree with, therefor we chosen two ranges of the particles sizes (250-425, 425-600 μm) in line 78.

C1

Line 58-60: we have selected four different types of organic dyes to study the performance of the generated AC on the dyes removal.

Line 73: In fact, we are targeting to use the actual textile wastewater in our second level of the research after we have proven the generated AC on dyes removal from the simulated wastewater. We strongly support this comment.

Line 78-80: Both activations were implemented. Chemical activating was conducted (line 73) and then thermal activation was been done.

Line 87: the total mass been used in the three packed beds will be mentioned in our final version of the article but in general 5 ml as volume been filled by AC in each stage (so total volume was 15 ml as whole process).

Line 92: pH was measured using calibrated. Every time before the measuring the calibration was performed using three different standard solutions (pH: 4, 6, and 8).

Line 92: here we believed that the respective reviewer referring to line 82 instead of, this heating as performed on the final AC produced before conducting the water treatment insure that we have exact starting condition for the experiment for each run.

Line 97-101: surly we have generated the calibration curve and table 1 results were based on that particular curve. It will be added in the final draft of the paper.

Line 104-107: This part of the result will be discussed in more details in the final draft.

Line 136: the removal % results were conducted automatically using NIR software (Unscrambler Portable)

Line 148: this point is true at certain conditions, but we believe that when the pollutant is kind of martials having high surface tension then the behavior will be different. We have found in our current second level of this research that the best efficiency at particle size between certain range in compare with other probability which we will show it the coming new article.

C2

Line 149: we totally agree. Graphs 2 and 3 they are note same and are presenting two different particle sizes with the dyes removal results. The required changes on the X and Y axis format will be done and replace them in the final version of the article. With regards to table 1 and graphs 2 and 3, we believe that both are important as we would like to show readers how significant the decrease in the percentage of the removal was using the numbers in the table. Some people can follow that up easily using the table. However, graphical representation is also very useful and gives a clear idea about the adsorption, and the amount of reduction in the dye concentration. If we are required to choose between figure and table, we would certainly remove the table and keep the figure. At the end, as main target of this research was to compare the AC generated using ordinary commercial microwave efficiency with its generated using furnace as power saving and time need for the activation. Salam A. Mohammed (Ph.D)

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