Review Form 3

Journal Name:	**Journal of Engineering Research and Reports**
Manuscript Number:	**Ms_JERR_123525**
Title of the Manuscript:	**Assessing the Sustainable Potential of Chemically Activated Crustacean Shells for Pilot- Scale Removal of Persistent Organic Pollutants in Contaminated Water: A Path Towards Environmental Sustainability**
Type of the Article	**research**

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PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The study is of great value for the scientific community. It analyses bio-based absorbents for the removal of organic pollutants from water. Several low-cost materials, such as periwinkle, clam, whelk, and clam/whelk composite were selected for the development of activated-carbon absorbents. However, the manuscript as a scientific paper requires more attitude to the discussion and conclusion parts.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	The title looks wordy. The author is not the first one to make a path towards environmental sustainability, therefore, I suggest to remove the end too. Try "Assessing the Potential of Chemically Activated Crustacean Shells for Removal of Persistent Organic Pollutants in Contaminated Water"	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	In the abstract, the materials, methods and results are shortly described. However, the conclusion part is missing. I would also suggest to highlight here only essential results.	
Are subsections and structure of the manuscript appropriate?	In general, the structure of the manuscript is appropriate. However, points 3.1.1 and 3.2.1 are redundant. The strict order for subsections is required starting from point 3.3.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	Standard deviation for all the mass evaluations is not given. This leads to the erroneous conclusion(s) and discussion(s) of the overall results. For instance, Specific Area of activated crustacean shells (Table 1): author considers CSBAC as having the highest surface area of 1288 m^2/g, however, SA of PSBAC and CWSBAC are very close to the CSBAC value. Data in Tables 2, 4, 8, 9 might be considered as redundant, I would advise placing it in Figure(s) or describe in a written form with no repetition. The author states that "The SEM-EDX in Figure 2 indicated a broadly open pore structure demonstrating well-developed micropores." And "The EDX analysis demonstrated that active carbons' calcium oxides (CaO) exist. CaO is a strong dehydrator, which absorbs water from the environment and increases the porosity of the treated activated materials, as observed in SEM studies." However, looking to SEM images (Figure 2) no pores of KOH-treated activated carbons are visible and none of them are marked as such on the images. Reference required. Adsorption Capacity against the contact time (Figure 5): Sudden fall of absorption for PSBAC at around 90-100 min may require repetition of the experiment or appropriate explanation in the discussion part. Absorption capacities of CSBAC and CWSBAC are not fully presented in the figure. It is therefore important to fully present data and see what happens with CSBAC and CWSBAC at all (min) points. The view of images of all Figures are "stretched", which distorts the visual evaluation of the results. Current Conclusions (section 4) are given as a repetition of some results. This section requires more attitude.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**	sufficient	

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Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	Consider punctuation and grammatic: [1] and [7]; The samples were mounted …; using 100ml volume flasks; This **conform** to similar work by **[19**; Reason for capitalization of some words is unclear and seems excessive, for instance: "… **Incomplete** removal of the organic pollutants", "Cost, **Kinetics**, compatibility, selectivity…", **Commercial Activated Carbon**, **Activated Carbon,** polyaromatic **Hydrocarbon,** … Loba (LO)chemice analytical grade with 99.0% **Purity** was used…, and other. Consider to rephrase so to begin a sentence with author's name "[15] noted that 6 to 8 million tonnes…" Consider *Italic* font for Latin names	
Optional/General comments	A reader faces with a bulk of standard evaluated experiments with scattered minor discussion of the results. Conclusions are not well discussed. There are multiple repetitions (in written form) of the graphical and tabular representation of the results.	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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