

[Review Form2](#)

Book Name:	Recent Developments in Chemistry and Biochemistry Research
Manuscript Number:	Ms_BPR_3409
Title of the Manuscript:	Green Supports for Heterogeneous Photocatalysts and their application in Wastewater Remediation
Type of the Article	Book chapter

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 work gives the current status of pollution and discusses the current status quo of water treatment giving limitations per method.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes the title is suitable as it covers the discussed points	
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.	The abstract is okay	
Are subsections and structure of the manuscript appropriate?	The manuscript structure and subsections are okay but subsection 1.4.1 can be changed to Carbon supports as more details given in this section includes all carbon supports. Include this references and increase the discussion examples of different supports mentioned. https://doi.org/10.1039/C9NJ02747E ; https://doi.org/10.1002/slct.201901589 ;	
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.	The manuscript first considers water pollution, then introduces how pollutants affects source water, and then further discusses how water is currently treated, giving a perspective advantages and disadvantages of each process. This part on the advantages and disadvantages needs references. Moreover, the manuscript then discussed the need for photocatalysis and how its limitations leads to three different generation of photocatalysts. This needs references to be more valid or if the authors are proposing the three generations, they should state that.. The following comments must also be considered: <ol style="list-style-type: none"> 1. It would be important to show and discuss how Carbon supports or supports in general achieve high efficient charge separation through in-depth mechanism discussion. 2. Different methods that are used to disperse nanomaterial photocatalysts is supports must be outlined with a schematic example of one method from literature. 3. More figures are required to be added during the discussion sections. Figures that show how the use of a catalyst differs during doping or when a support is added or when it is incorporated with other photocatalysts; This literature can be considered: https://doi.org/10.1016/j.mtcomm.2024.110753; https://doi.org/10.1021/acsomega.0c03881; https://doi.org/10.1007/s42114-024-01014-1; 4. The chapter can benefit from results that show dyes degradation, add a table of different catalysts used for dyes and phenol degradation and compare some parameters. 	

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	<p>5. Show limitations of using metal supports with results. Here, limitations such as leaching can be added and difficulty of separation as supported by literature.</p> <p>6. It is important to have section 1.6 which mentions the current novel strategies in the design of heterogeneous photocatalysts such as integrated AOPs (https://doi.org/10.1002/cssc.202401471), and advancement of heterojunction discussions towards the design of triple S-scheme heterojunctions (https://doi.org/10.1007/s42114-024-01014-1;https://doi.org/10.1016/j.cej.2024.155094)</p> <p>7. Add references to table 2 to help readers to see the mentioned patents for reference.</p> <p>8. All Figures must be labelled properly and given captions per book formatting requirements.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>=</p>	<p>The references are not enough and some recent references have been suggested: https://doi.org/10.1016/j.mtcomm.2024.110753; https://doi.org/10.1021/acsomega.0c03881; https://doi.org/10.1039/C9NJ02747E; https://doi.org/10.1002/slct.201901589; https://doi.org/10.1002/adsu.202400434; https://doi.org/10.1007/s42114-024-01014-1; https://doi.org/10.1002/cssc.202401471.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The quality of English is satisfactory. There are some minor mistakes that must be ironed out by the authors throughout the manuscript.</p>	
<p>Optional/General comments</p>	<p>This work can be considered for publication but the following must be added.</p>	

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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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