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| Book Name: | [Chemistry and Biochemistry: Research Progress](https://www.bookpi.org/bookstore/product/chemistry-and-biochemistry-research-progress-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4123** |
| Title of the Manuscript: | **β-Cyclodextrin-Modified Cotton Fabric for Medical and Hospital Applications with Photodynamic Antibacterial Activity Using Methylene Blue** |
| Type of the Article | **Book chapter** |

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| PART 1: 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. A minimum of 3-4 sentences may be required for this part.** | **The modified fabric exhibits strong antibacterial activity particularly against Staphylococcus aureus , it introduces a novel approach to functionalizing cotton fabric with B-cyclodextrin and methylene blue, offering antibacterial and photodynamic cabilities that are crucial for medical and hospital use.** |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **It clearly specifies the material studied and mentions the unique features of photodynamic antibacterial activity using methylene blue.**  The title is somewhat long and could be streamlined for better readability, e.g. ‘Photodynamic Antibacterial B-Cyclodextrin-Modified Cotton Fabric for Medical Applications’. |  |
| 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 well structured and provides comprehensive overview of the study.And I have some suggestions to improve the clearity.** Points to Add:1-Briefly mention the global significance of antimicrobial resistance and the need for innovative materials in medical textiles. 2-Highlight the most impactful results qualitatively, such as the percentage reduction in bacterial activity and pgotobleaching improvements, to emphasize the fabric’s effectiveness.  3-Conclude with a brief note on the potential impact of the findings on public health or future research directions.  Points to delete:  Remove or condense highly specific procedural information (e.g appearance of 1730cm-1 band in IR), that may not be critical for general understanding in the abstract. |  |
| **Is the manuscript scientifically, correct? Please write here.** | **Yes, it appears to be scientifically sound and well structured. However data and interpretations is essential to determine its validity.**  Manuscript mentioned statistical tools such as (ANOVA), but greater detail on confidence intervals, p-values and replicates for all experiments would enhance the scientific rigor. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | **Yes, they are sufficient.** |  |
| Is the language/English quality of the article suitable for scholarly communications? | Yes, it appears suitable. |  |
| Optional/General comments | Manuscript is well structured demonstrating significant innovation and practical applications for medical textiles. |  |

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| **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)*** |  |

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| **Reviewer Details:** | |
| **Name:** | **Zahraa Mohammed Essam Ameen Mohammed** |
| **Department, University & Country** | **Suez University, Egypt** |