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| Book Name: | **Innovative Solutions: A Systematic Approach Towards Sustainable Future** |
| Manuscript Number: | **Ms\_BPR\_3724.29** |
| Title of the Manuscript:  | **EV AND VE DEGREE DEPENDENT TOPOLOGICAL INDICES OF TOROIDAL POLYHEX GRAPH** |
| Type of the Article | **Complete Book Chapter** |

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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.** | This paper focuses on an important aspect of chemical graph theory by exploring various topological indices, such as Zagreb indices, Randic index, NK-index, multiplicative F-index, and multiplicative Zagreb indices for the Toroidal polyhex and its subdivision graphs depend on EV and VE degrees. The authors present a comprehensive study aimed at analyzing molecular structures and facilitating the optimal design of mentioned structures through the application of these indices. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes** |  |
| 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 section is too brief and vague, failing to adequately summarize the core content of the article. |  |
| **Are subsections and structure of the manuscript appropriate?** | **Almost** |  |
| **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.** | Topological indices and their investigation is a well known field in graphical mathematics. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | References are not sufficient. Add some more references related to recently published work in well-known journals like about topological indices |  |
| Minor REVISION commentsIs the language/English quality of the article suitable for scholarly communications? | Yes |  |
| Optional/General comments | This paper focuses on an important aspect of chemical graph theory by exploring various topological indices, such as Zagreb indices, Randic index, NK-index, multiplicative F-index, and multiplicative Zagreb indices for the Toroidal polyhex and its subdivision graphs depend on EV and VE degrees. The authors present a comprehensive study aimed at analyzing molecular structures and facilitating the optimal design of mentioned structures through the application of these indices. However, there are a few minor areas where improvements could be made:1. The abstract section is too brief and vague, failing to adequately summarize the core content of the article.
2. The literature review is not comprehensive and in-depth enough, lacking a thorough overview of related research progress, and does not effectively highlight the value and significance of the study.
3. Add some more references related to recently published work in well-known journals like about topological indices like <http://dx.doi.org/10.1002/qua.27322> and <http://dx.doi.org/10.1038/s41598-024-54962-5>
4. The description of the research methodology is simplistic, lacking sufficient details, preventing readers from fully understanding the adopted research approach.
5. The analysis and discussion are not profound enough, lacking logical interpretation and academic explanation of the computational results.
6. Do the QSPR analysis if possible.
7. The discussion section needs to elaborate on how the research findings can be applied to fields such as network science, chemistry, and social network analysis.
8. The conclusion section is overly subjective and superficial, failing to adequately summarize the core contributions of the article, as well as specific implications for future research.

Accept the manuscript after revision. |  |

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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: | **Ali Raza** |
| Department, University & Country | **University of the Punjab, Pakistan** |