

REVIEWER'S REPORT

Manuscript No.:IJAR-58871

Title: DIGITAL TECHNOLOGIES FOR PREDICTING THE OPERATIONAL RELIABILITY OF GLASS-FIBER MECHANICAL STRUCTURES.

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		√		
Techn. Quality			√	
Clarity		√		
Significance		√		

Reviewer's ID: JPR- DR. PRITI GUPTA

Detailed Reviewer's Report

1. The title uses “glass-fiber mechanical structures,” while the manuscript consistently discusses GFRP engineering structures.
2. Define GFRP at its first occurrence and use the abbreviation consistently.
3. The abstract is informative but should explicitly identify the paper's novelty and methodological contribution.
4. The phrase “digital prognostic system” should be defined clearly at its first use.
5. Figure 1 is useful, but the graphical architecture could be improved by clearly showing the direction of information flow and feedback loops.
6. Table 1 is useful but should include a column describing data inputs and uncertainty sources.
7. The damage index equation should specify the assumptions under which effective modulus can be used as an indicator of damage.
8. The manuscript should clearly distinguish between **damage detection, damage diagnosis, damage prognosis, reliability assessment, and RUL prediction.**
9. The references are generally relevant and include several recent publications from 2024–2026.
10. Reference formatting should be checked carefully for consistency in punctuation, DOI presentation, author names, journal titles, and page/article numbers.
11. The manuscript would benefit from a dedicated **Limitations and Future Research** section.
12. The authors should consider discussing cybersecurity because the proposed framework relies on continuous transfer and storage of structural data.
13. MORE FIGURES MAY BE INCLUDED.