

**Review Form 3**

Journal Name:	<a href="#">Current Journal of Applied Science and Technology</a>
Manuscript Number:	Ms_CJAST_124365
Title of the Manuscript:	<b>Predictive Maintenance and Damage Mitigation in Bridge Structures Using Integrated Acoustic Emission and Digital Image Correlation Techniques</b>
Type of the Article	<b>Review</b>

### Review Form 3

#### PART 1: Review Comments

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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.	I add some comments for improvement.	
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.	I add comment on	
Are subsections and structure of the manuscript appropriate?	Yes	
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.	I add detailed comments for the author. Please consider those comments.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	I suggest some references in the comment file.	

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<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>No, language should be improve.</p>	
<p>Optional/General comments</p>	<ol style="list-style-type: none"> <li>1. Please provide specific results gained from these techniques review. A brief conclusion of the result could enhance the abstract. Please add the result obtained from Integrated Acoustic Emission and Digital Image Correlation Techniques.</li> <li>2. The introduction section avoids repetition of the idea like a phrase that the author repeated multiple times "Bridges are essential infrastructural facilities" in different forms. Moreover, please clear the scope of the manuscript and also add some literature explaining bridge failure by scouring mechanism to make the manuscript clear and enhanced. Some papers on scour mechanisms are the following. <ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.3390/w12020374">https://doi.org/10.3390/w12020374</a></li> <li>• <a href="https://doi.org/10.3390/w11081656">https://doi.org/10.3390/w11081656</a></li> <li>• <a href="https://doi.org/10.3390/w16172550">https://doi.org/10.3390/w16172550</a></li> <li>• <a href="https://doi.org/10.3390/w15213798">https://doi.org/10.3390/w15213798</a></li> <li>• <a href="https://doi.org/10.1016/j.res.2024.110334">https://doi.org/10.1016/j.res.2024.110334</a></li> </ul> </li> <li>3. Please add research limitations and challenges associated with these methods. The author needs to add critical assessment and the potential disadvantages of these techniques. Furthermore, what are the practical implications of the research findings?</li> <li>4. In the methodology section, please add a flowchart showing details of the methodology. Also, add some detail on topic selection for review such as database searched and timeframe database. How AE and DIC complement each other in practical application could enhance the quality of the manuscript.</li> <li>5. Please make the description of the figures more descriptive. For instance, Figure 3 should explain the steps of the DIC technique in more detail. The author also needs to add brief details of the figure in the text for reader understanding.</li> <li>6. Please add more discussion on the practical applications of the study including where AI and DIC have been successfully implemented. For instance, how these techniques enhanced bridge monitoring would improve the quality of the manuscript. Moreover, the author should make a detailed comparison between these techniques and non-destructive testing techniques. This would be helpful for a better understanding of the reader.</li> <li>7. The author needs to revise the conclusion section by including the main results from the review and future research direction should be provided.</li> <li>8. Please check the manuscript thoroughly for grammatical errors and sentence structure. Some sentences are quite long and difficult to understand. For instance, "However recent technological advancements of information technologies and sensors have led to new methods</li> </ol>	

Field Code Changed

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	of structures performance monitoring". Grammatical errors like "Bridges weaken with age" could be "Bridges weaken over time should be eliminated.	
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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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