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| Book Name: | [**Science and Technology: Developments and Applications**](https://www.bookpi.org/bookstore/product/science-and-technology-developments-and-applications-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4835** |
| Title of the Manuscript: | **Comprehensive Technical Inspection of a Medieval Bridge (Ponte de Vilanova, in Allariz) Using Microtechnological Tools** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Eng 2024, 5(4), 3259-3283.**

**Available:** [**https://doi.org/10.3390/eng5040171**](https://doi.org/10.3390/eng5040171)

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | 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.** | **This manuscript is valuable to the scientific community as it showcases advanced drone and thermographic imaging techniques for non-invasive structural inspection of medieval bridges. It contributes to civil engineering, heritage conservation, and structural health monitoring by offering a scalable and cost-effective inspection method. The findings enhance the accuracy and safety of bridge assessments, supporting sustainable preservation practices for historic structures.** |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **The title is well-structured and clearly conveys the study’s focus on technical inspection using advanced microtechnological tools. It effectively highlights the historical significance of the Ponte de Vilanova and the use of modern inspection methods, making it suitable for scholarly communication.** |  |
| 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 comprehensive, effectively summarizing the research objectives, methodology, key findings, and conclusions. It clearly highlights the use of drones and thermographic imaging for non-invasive inspection of the Ponte de Vilanova, making it relevant to civil engineering and heritage conservation.** |  |
| **Is the manuscript scientifically, correct? Please write here.** | **The manuscript is scientifically sound, employing established structural inspection methods enhanced by advanced microtechnological tools such as drones and thermographic imaging. The methodology is well-documented, and the findings align with recognized principles in civil engineering, structural health monitoring, and heritage conservation. The conclusions are supported by visual, thermal, and underwater inspections, ensuring a thorough assessment of the bridge’s condition. Minor clarifications on data calibration, measurement accuracy, and potential limitations of drone-based inspections could further strengthen its scientific rigor.** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | **The references are relevant and provide a strong foundation for the study, covering key topics in structural health monitoring, drone-based inspections, and heritage conservation. However, some sources are slightly dated, and incorporating more recent studies (post-2020) on advancements in thermographic imaging, UAV-based structural assessments, and underwater inspection technologies would enhance the manuscript’s depth.**  **I suggest including recent publications from journals such as *Structural Health Monitoring*, *Journal of Cultural Heritage*, and *Automation in Construction* to reflect the latest innovations in non-invasive inspection techniques.** |  |
| Is the language/English quality of the article suitable for scholarly communications? | The language quality is suitable for scholarly communication, with clear technical explanations and logical structuring. |  |
| Optional/General comments | This manuscript presents an innovative and practical approach to the non-invasive inspection of historic structures using drones and thermographic imaging. The methodology is well-structured, and the findings contribute significantly to civil engineering, structural health monitoring, and heritage conservation. The integration of aerial and underwater inspection techniques enhances safety and efficiency, making this study highly relevant for preserving aging infrastructure. With minor refinements in language clarity and the inclusion of recent references, this paper has strong potential for scholarly impact. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the 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 detail)*  There are no ethical issues in this manuscript. |  |

**Reviewers:**

**Bright Ojo, University of Arkansas, USA**