

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_122749
Title of the Manuscript:	FUNDAMENTALS OF BIOMEDICAL INSTRUMENTATION (BMI): PRINCIPLES AND APPLICATION
Type of the Article	Minireview Article

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PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>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.</p>	<p>The manuscript "Fundamentals of Biomedical Instrumentation (BMI): Principles and Application" is a key resource for the scientific community, offering a thorough grounding in the principles and practices of biomedical instrumentation. It provides essential knowledge for researchers, engineers, and clinicians involved in developing and applying medical technologies. By bridging theoretical concepts with practical applications, this work advances the field and promotes innovation in medical device development. Its impact extends to improving clinical outcomes and fostering interdisciplinary collaboration.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes "Fundamentals of Biomedical Instrumentation: Principles and Practical Applications" "Principles and Applications of Biomedical Instrumentation: A Comprehensive Guide"</p>	
<p>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.</p>	<p>Yes, the abstract is quite comprehensive. Biomedical instrumentation is a cornerstone of modern healthcare, integrating engineering, medicine, and research to improve diagnosis, monitoring, and treatment. This review paper aims to educate and inspire new researchers and professionals by exploring fundamental concepts of biomedical devices, with a focus on measurements, sensors, and signal processing. It discusses key components such as transducers, electrodes, and amplifiers, and examines the classification and application of instruments in clinical settings. The paper also addresses challenges like electrical safety and rapid technological change while highlighting innovations such as wearable devices and telemedicine, which promise to advance healthcare delivery. By fostering multidisciplinary cooperation, biomedical instrumentation enhances healthcare through precise diagnoses and therapies, driving the development of customized and efficient treatments.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes</p>	
<p>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.</p>	<p>The manuscript demonstrates strong scientific correctness by thoroughly addressing the foundational principles and applications of biomedical instrumentation. It accurately covers critical concepts such as measurements, sensors, signal processing, and key components like transducers and electrodes, ensuring that technical details are both precise and relevant. The discussion of current challenges and innovations, such as wearable devices and telemedicine, reflects up-to-date knowledge and advances in the field. Overall, the manuscript's rigorous approach and adherence to established scientific principles underpin its credibility and value to the research community.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Yes, The reference collection is adequate and needs to be systematically ordered.</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Yes</p>	
<p><u>Optional/General</u> comments</p>	<p>The manuscript provides a thorough overview of the fundamental concepts and applications in biomedical instrumentation. It effectively integrates theory with practical insights, making it a valuable resource for both newcomers and experienced professionals in the field.</p>	

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PART 2:

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

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