

[Review Form 2](#)

Book Name:	Contemporary Research and Perspectives in Biological Science
Manuscript Number:	Ms_BPR_3798
Title of the Manuscript:	BIOELECTRONIC INTERPRETATION OF HUMAN COGNITIVE PROCESSES
Type of the Article	Book chapter

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)
<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>Such an interesting work, touching upon such a modern and timely topic as the issue of integrating the human central nervous system with modern computing systems. Modern development of medicine has raised the question of prolonging human life, but the capabilities of the central nervous system have proven to be not as limitless as previously believed. At present, this is manifested by an increase in the number of age-related neurodegenerative and neurogenetic diseases accompanied by dementia, movement disorders and external adaptation disorders, the therapeutic treatment of which remains ineffective, and the costs of maintaining such patients create a significant burden on the budgets of developed countries.</p> <p>Therefore, in modern conditions, the possibility of integrating computing systems and the central nervous system would allow, if not to restore health to such patients, then at least to give them the opportunity to integrate into the modern information space and perform certain social tasks, thereby returning them to an active social life.</p> <p>The authors examine in detail various physical mechanisms and processes that can be used in modern bioelectric systems to organize the interaction of electronics and biological systems. These issues are extremely important, since complex biological systems, such as the central nervous system, have their own levels of protection from external interference, which often leads to rejection of implantable systems and disruption of their operation.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>It fits perfectly and reflects the main idea.</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 well written and reflects the main idea of the article.</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>It would be very desirable to include a block devoted to modern studies of the functional organization of the central nervous system, as well as theories of information processing in it.</p> <p>I would also like to see a block devoted to issues of central nervous system research at the current stage of neuroscience development, technical implementation of these studies and considering the possibilities of overcoming various limitations of the methods used.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>⋮</p>	<p>In the presented work, the authors refer to a large number of works published in the last third of the last century, while modern works of recent years are practically not represented in the review. Moreover, most sources describe local scientific research of individual specialists, without compliance with modern requirements, since there are no references to international identifiers, such as DOI, PMID, ISBN, etc., which complicates their analysis, especially in light of the interaction of the international scientific community.</p> <p>The above creates the impression of a superficial familiarity of the authors with the described topic and the absence of deep systemic knowledge of the issues under consideration.</p>	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments	<p>Thus, the presented work, despite a very interesting idea, requires significant correction.</p> <ol style="list-style-type: none">1. It is necessary to reconsider the presented idea in light of modern scientific research and present a modern view of the proposed ideas and especially note the results of the implementation of opinions proposed in the last century in modern practical developments.2. Add blocks devoted to modern views on the functional organization of the central nervous system, issues of its study, including the use of interventional technologies, and also consider issues of their limitations and the possibility of overcoming them precisely in light of the described technological capabilities.3. It is necessary to supplement the list of references with modern sources, especially those published in the last 5 years. Their number should represent at least 80% of the volume of all scientific sources. All sources should be mentioned in the review under the appropriate links, to be able to assess their significance for modern scientific research. <p>I hope that my comments will help the authors to do a worthy and interesting work!</p>	

PART 2:

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

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