

[Review Form 2](#)

Book Name:	<b>Chemical warfare and environmental warfare operations</b>
Manuscript Number:	<b>Ms_BP_3060G.4</b>
Title of the Manuscript:	<b>INTRODUCTION TO CHEMICAL AND BIOLOGICAL WEAPONS</b>
Type of the Article	<b>Book chapter</b>

**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>
<b>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.</b>	This manuscript is significant for the scientific community as it offers a comprehensive overview of both chemical and biological weapons, focusing on their mechanisms, effects, and protective measures. Its exploration of the biochemical interactions of chemical warfare agents with the human body contributes to a deeper understanding of the lethality of these substances, which is critical for both military and civilian defense strategies. However, while it covers important historical and technical information, the manuscript lacks updated references and precise biochemical detail, which limits its potential impact. Overall, the manuscript serves as a valuable introductory resource, but it would benefit from further refinement to make it more relevant and authoritative for modern scientific discourse.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The current title, "Introduction to Chemical and Biological Weapons," is descriptive but somewhat generic. It conveys the basic subject but doesn't fully capture the depth or specific focus of the manuscript, particularly its emphasis on the mechanisms, protective measures, and impacts of chemical and biological warfare. A more precise and engaging title could be: "Chemical and Biological Weapons: Mechanisms, Impacts, and Protective Strategies."	
<b>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.</b>	The abstract provides a basic introduction to chemical and biological weapons, but it is not comprehensive enough. It mainly focuses on the definition of chemical and biological weapons and briefly mentions their lethality and ease of use. However, it lacks critical details that should give the reader a better understanding of the scope of the article.  <b>1. Expand on the Key Topics:</b> The abstract should briefly mention the main sections of the manuscript, such as the types of chemical and biological weapons, their effects on humans, environmental impact, protective measures, and decontamination techniques. <b>2. Add Specifics:</b> For example, mention that nerve agents, blister agents, blood agents, and choking agents are discussed in detail. This would help clarify the breadth of the content. <b>3. Conclusion or Key Insights:</b> The abstract should include a summary of the manuscript's main takeaways, such as the importance of understanding biochemical reactions and the need for advanced protective strategies.	
<b>Are subsections and structure of the manuscript appropriate?</b>	The manuscript's structure is generally clear, with distinct sections focusing on important topics such as the introduction to chemical and biological weapons, protective measures, detection, and decontamination principles. However, the subsections could be improved to enhance clarity and flow.  <b>Subsection Titles:</b> Some subsections could be renamed or adjusted to better reflect their content. For example, instead of simply "Protective Clothing," consider something more descriptive like "Protective Equipment for Chemical and Biological Warfare" to encompass all protective gear discussed (clothing, boots, gloves, masks).  <b>Consistency in Depth:</b> Certain subsections, like the one on <b>Detection and Warning</b> , are brief compared to others like <b>Decontamination Principles</b> . Ensuring a more balanced depth of information across all sections would improve coherence.  <b>Integration of Figures:</b> Visuals are important, but they are not well-integrated into the manuscript.	

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	<p>Each figure should be clearly referenced and explained in the text. You could create separate subsections like “<b>Protective Mask Design</b>” or “<b>Types of Detection Systems</b>” to better integrate the figures.</p> <p><b>Add Subsections Under Broader Topics:</b> For example, under the section on <b>Decontamination</b>, it would be helpful to have subsections detailing <i>wet decontamination, mechanical decontamination, etc.</i>, to provide clarity and avoid long blocks of text.</p> <p><b>Conclusion Section:</b> The conclusion is currently labeled "Conclusions" but does not effectively summarize the key points of the manuscript. Consider restructuring this section to provide a more concise and cohesive summary.</p>	
<p><b>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.</b></p>	<p>The manuscript presents scientifically correct information on chemical and biological weapons, particularly in explaining the types of agents, their biochemical mechanisms of action, and the protective and decontamination measures. The descriptions of how nerve agents inhibit enzymes like acetylcholinesterase, as well as the function of protective gear such as gas masks, align with established scientific understanding in toxicology and chemical defense. However, the manuscript could be further strengthened by incorporating more recent research and studies to ensure that the information remains up-to-date and relevant to current scientific advances. Despite this, the core concepts presented are technically sound and form a solid foundation for understanding chemical and biological warfare.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p> <p>-</p>	<p>The references provided in the manuscript are somewhat outdated, with many sources from the 1990s and early 2000s. While these references offer foundational knowledge, more recent studies and reports are necessary to ensure the manuscript reflects the latest developments in the field of chemical and biological warfare, especially in areas like protective technologies, decontamination methods, and international treaties.</p>	
<p><u>Minor</u> REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>The language quality of the manuscript is adequate but needs significant improvement to meet the standards required for scholarly communication. While the core ideas are clear, the writing contains several issues that affect readability and professionalism:</p> <ol style="list-style-type: none"> <li><b>Grammar and Punctuation:</b> There are numerous grammatical errors, including missing punctuation, run-on sentences, and awkward phrasing. For instance, sentences like <i>"Biological weapons are defined as using microorganisms such as viruses bacteria or fungi to cause disease and death"</i> lack proper punctuation and clarity.</li> <li><b>Sentence Structure:</b> Some sentences are overly complex or fragmented, making it difficult to follow the arguments. Simplifying the structure and breaking down longer sentences would improve clarity.</li> <li><b>Technical Terminology:</b> The manuscript uses appropriate technical terms, but some are not well-explained for readers who may not be experts in the field. Definitions or brief explanations of key terms would enhance accessibility.</li> </ol>	
<p><u>Optional/General</u> comments</p>		

**PART 2:**

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

**Reviewer Details:**

Name:	<b>Maqsood Ahmad</b>
Department, University & Country	<b>BUIEMS, Pakistan</b>