

Review Form 1.7

Journal Name:	Asian Journal of Biotechnology and Genetic Engineering
Manuscript Number:	Ms_AJBGE_118195
Title of the Manuscript:	AN APPLICATION OF RESIDUE NUMBER SYSTEM (RNS) TO NEXT-GENERATION SEQUENCING (SOLiD)
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalajbge.com/index.php/AJBGE/editorial-policy>)

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PART 1: Review Comments

	Reviewer's comment	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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>The manuscript introduces the application of the Residue Number System (RNS) to Next-Generation Sequencing, specifically SOLiD sequencing. This approach is novel as it proposes an alternative method to traditional binary systems, potentially offering improvements in sequencing flexibility and efficiency. The research is important for the scientific community, particularly in the fields of bioinformatics and molecular biology, as it could lead to advancements in DNA sequencing techniques, enhancing accuracy and reducing computational complexity.</p> <p>The title "An Application of Residue Number System (RNS) to Next-Generation Sequencing (SOLiD)" is suitable as it clearly indicates the scope and focus of the research. However, for more clarity and specificity, a suggested alternative title could be: "Enhancing SOLiD Sequencing Accuracy and Efficiency through the Residue Number System."</p> <p>The abstract provides a good overview of the study's aims, methodology, results, and conclusions. It succinctly captures the essence of the research, highlighting the potential of RNS in SOLiD sequencing. However, it could be improved by briefly mentioning the main results in terms of specific benefits or improvements achieved with the RNS approach.</p> <p>The manuscript is well-structured with clear subsections that guide the reader through the background, methodology, and results. Each section logically builds upon the previous one, providing a comprehensive understanding of the research conducted. The introduction, methodology, and results sections are particularly detailed and informative.</p> <p>Based on the provided text, the manuscript appears to be scientifically correct. The use of RNS in the context of DNA sequencing is well-explained, and the methodology is detailed.</p> <p>The references included in the manuscript appear to be relevant, but they might not be fully sufficient or recent. It is recommended to include more recent studies, especially those published in the last 3-5 years, to ensure the research is grounded in the latest scientific advancements. Additionally, some references seem to be missing from the provided text, and it would be beneficial to check and complete them.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality is generally good, but there are some areas where clarity and readability could be improved. For instance, some sentences are quite long and complex, which may obscure the intended meaning. Simplifying these sentences and ensuring consistent use of scientific terminology would enhance the readability of the manuscript.</p>	
<p>Optional/General comments</p>	<ul style="list-style-type: none"> - Consider providing more detailed examples or case studies to illustrate the practical benefits and applications of the RNS approach in SOLiD sequencing. - A comparative analysis of the performance of the RNS approach versus traditional methods in terms of accuracy, speed, and computational efficiency would strengthen the manuscript. 	

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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>	

Reviewer Details:

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