

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_124472
Title of the Manuscript:	Performance comparative analysis of PID and Sliding mode controller in speed control of Induction Motor Drive with intermittent loading
Type of the Article	Research Article

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory 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>This manuscript is important for the scientific community as it provides valuable insights into improving control strategies for induction motor drives, which are widely used in industrial applications. By comparing the PID and Sliding Mode Controllers, the study addresses key challenges in achieving precise speed control under varying load conditions, which is critical for applications like robotics and automation. The clear presentation of results and the focus on improving performance metrics, such as steady-state error and rise time, make this research highly relevant. I appreciate the manuscript for its practical contributions and potential to advance control techniques in electromechanical systems.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title is grammatically incorrect. Here is a revised title "Comparative Performance Analysis of PID and Sliding Mode Controllers in Speed Control of Induction Motor Drives with Intermittent Loading".</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>	<ol style="list-style-type: none"> 1. Add a clear objective: Begin with a brief statement about the purpose of the study. For example: "This study aims to evaluate the effectiveness of PID and SMC in controlling the speed of squirrel cage induction motors." 2. Specify what software tool was used 3. Quantify results: Consider including a brief comparison of the performance metrics for both controllers, not just stating that SMC performed better 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>No, "Design of PID controller" sub-section is under "Sliding Mode Controller" section. They should have been in separate sections.</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 presents a scientifically robust and technically sound approach for comparing PID and Sliding Mode Controllers (SMC) in speed control of induction motor drives under intermittent loading conditions. The methodology employs a clear mathematical foundation, using well-established control algorithms and vector control techniques for decoupling torque and flux components. The analysis is comprehensive, evaluating critical performance metrics like steady-state error, rise time, and overshoot. The simulation results are clearly presented and compared across controllers, reinforcing the conclusion that the SMC offers superior precision and stability, especially in high-precision applications such as robotics.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>References are sufficient and recent. No addition of references is required.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality is suitable but some typos are there such as "ete" instead of "etc", "Loer" instead of "lower" in page 2, "motoir" instead of "motor" in page 4, "moel" instead of "model" in page 12. Some fonts in page 12 are different from rest of the page.</p>	
<p>Optional/General comments</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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