

**BPI Review Form 070520**

Book Name:	<b><u>Current Innovations in Chemical and Materials Sciences</u></b>
Manuscript Number:	<b>Ms_BP_8733A</b>
Title of the Manuscript:	<b>Effect of amount of boron carbide on wear loss of Al-6061 matrix composite by Taguchi technique and Response surface analysis</b>
Type of the Article	<b>Book chapter</b>

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**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (If agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. Authors must write his/her feedback here)
Is the manuscript important for the scientific community? Please write a few sentences explaining your answer	The subject matter of this manuscript is beneficial to the academic community. Research on metal-ceramic composites is currently valuable for both the scientific and industrial communities.	
Is the title of the article suitable? Do you have any alternative Title in your mind?	The following title appears to be more suitable: Using Taguchi technique and response surface analysis to study the effect of boron carbide amount on wear loss of Al-6061 matrix composite	
Is the abstract of the article comprehensive? If your answer is No, please provide suggestions	The article's abstract is well-written, but the English text requires revision.  Metal Matrix Composites (MMCs) have been widely investigated and used in automobile and aerospace industries due to their advantages of improved strength, stiffness, and increased wear resistance over <b>monolithic</b> alloys. <b>They are</b> also considering limited reports on the study of weight % influence on wear characteristics of Al-6061-Boron Carbide (B4Cp) composites. This study presents the effect of weight % of B4Cp in Al-6061 alloy matrix on wear loss during dry sliding wear in pin-on-disc tribometer at different wear parameters against <b>oil-hardened</b> non-shrinking (OHNS) steel disk at room temperature. The composites are prepared by <b>the stir</b> casting technique. Tribological investigations were examined according to the L9 orthogonal array of Taguchi. The influence of % of reinforcement along with load, speed, <b>and</b> distance were examined for the wear loss of composites. The results, analyzed using the Taguchi and Response Surface Method to understand <b>the significance</b> of considered parameters (percentage of reinforcement, speed, time, <b>and</b> load) on wear loss, revealed increased wear resistance of composite with increasing B4C particles. The observed results have been explained based on the microstructural <b>behavior</b> and response surface of <b>wear-tested</b> composites.	
Do you think the English quality of the article is suitable for scholarly communications? If your answer is No, please provide suggestions	The manuscript's English is inadequate and requires a thorough revision across all sections to achieve the desired quality.	
Please provide your comments regarding the appropriateness of different sections of the manuscript.	It appears that the different sections of the article have been executed accurately, and the article demonstrates good coherence.	

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Do you think that the references in the manuscript are proper, recent and sufficient? If you have any suggestions, please write here.	The utilized sources are relatively outdated and not up-to-date, and authors should particularly use sources after the year 2020, especially in the introduction section..	
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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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