



SDI Review Form 1.6

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_37349
Title of the Manuscript:	Microstructural Evolution of Aluminum-4043/Nickel-coated Silicon Carbide Composites Produced via Stir Casting
Type of the Article	Original research paper

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:

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PART 1: Review Comments

		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)
Compulsory REVISION comments	Authors have studied the microstructure of the Ni coated SiC Powder reinforced to Al-4043 alloy by stir casting. Overall it is a good paper. It should be published. But it needs minor revisions. <u>Line 74</u>: SiC_p should be written as SiC. The format should be same everywhere. - Nagaral et al [10] and Zakaria [2] investigated wear and corrosion behaviours; these are not related to your work. These citations should be replaced by other work relating to your study. - Authors are requested to reveal the EDX report for the Al alloy used. Include an elemental composition table. - The quality of the figure-2 is bad. Give a high dpi image. <u>Line 125</u>: Was used as matrix.....; Rephrase to, Al-4043 alloy was used as matrix..... - Refer caption for Fig-3; your sample is Al/Ni coated SiC Composite. Use this phase as captions in Fig-3, Fig-4 and Fig-5. - Authors are talking about the formation of Al₄C₃ phase during casting without Ni coating on the SiC powder. Paper quality will be improved if previous results on Al₄C₃ formation will be included and cited in the results and discussion section. - Why authors chosen Ni coating? - During Ni coating deposition on SiC particles, how the authors confirm the coating is uniform on all particles? I mean to say coating deposition may be on the top surface of SiC particles and the under layer particles may remain uncoated.	The authors would like to express their appreciation to the reviewer for the time spent to read through our manuscript and for the comments raised. The responses to the reviewer's comments are stated as follow: - The superscript "p" has been removed and the SiC has been uniformly written all through the body of the manuscript text. - The two references mentioned are still relevant to the present study as the effect of the SiC reinforcement addition to Al matrix was found to influence the mechanical/ wear/corrosion properties of the composites formed. There may be no need for their removal. - The elemental composition table for the Al-4043 alloy has been included. - The quality of the Figure 2 has been improved by replacing it with a high dpi image. - The "Aluminum alloy (Al-4043)" has been added to the beginning of the statement on line 125. - The authors have now added "Ni coated" to the figure captions of Fig-3, Fig-4 and Fig-5. - Previous results on Al₄C₃ has been included - The authors decided to go for Ni coating due to its readily availability and it is cheaper than other elemental coating. - Over time, the Ni coating on the substrates for a period of 75 min has always resulted in a 15 µm thickness of coating and this was stated in the manuscript.
Minor REVISION comments		
Optional/General comments		