



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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

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)
Compulsory REVISION comments	Authors have chosen stir casting process to fabricate a novel MMC. However, few points needed more information, to produce high quality work. 1. Literature survey of the work should be in more detail and must contains the recently published work. (2015 to 2017) Eg. Srivastava AK et al 2016, ijems 2017,) rohatagi PK et al etc. 2. Authors have done pouring in open atmosphere. Therefore, Level of porosity in the fabricated samples must be reported. 3. Optical and SEM images shows the uniform distribution of SiC particles/whiskers into the matrix material. However, it needed detailed study of recognition of particles. Either it is SiC particles or it may be some other elemental presence during casting operation. 4. How it is proved by the study that it is filament-like or particulate-like features present in the MMCs. 5. Authors have reported that "In order to prevent interfacial reaction which could result in the formation of Al₄C₃ phase". which compound phase was obtained from interfacial reaction instead of Al₄C₃ phase in this process. It should be specified in detail with proper chemical reactions if any. 6. Conclusion must shows the summary of all experimental work which are the key points of this work.	1. The authors would like to appreciate the reviewer for the time spent to read and give these comments. The authors have now included more recent published work. 2. The level of porosity was notably small which was stated in the report and its analysis was not considered in this study. However, we have suggested hot isostatic pressing for full densification of the cast MMCs. 3. The authors appreciate the reviewer again, however, the precipitates seen in micrographs are solid solution of SiC both as particles and as eutectic whiskers which will definitely consist of any trace elements present in the melt. 4. Based on the observation made on the micrographs, the eutectic precipitates were seen as filaments or whiskers in the MMCs produced. 5. Based on our observation coupled with other previous work reported in literature on the subject, the formation of Al₄C₃ was not observed in the MMCs and which may have resulted from the Ni coating on the SiC and instead of Al₄C₃ formation, solid solution of SiC was formed. 6. The authors have adhered to the comment on conclusion section
Minor REVISION comments	1. Use standard words like Al should be written as Aluminium where it used separately.	1. The authors have noted the comment and had adhered to the suggestion.
Optional/General comments	1. Use technical words and try to avoid those findings which are not the part of your experimental work. if you are using the findings or basis of other researchers work , it must be cited properly.	1. The authors would like to appreciate the reviewer for this comment.