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| Book Name: | **[Engineering Research: Perspectives on Recent Advances](https://www.bookpi.org/bookstore/product/engineering-research-perspectives-on-recent-advances-vol-1/)** |
| Manuscript Number: | **Ms\_BPR\_4013** |
| Title of the Manuscript:  | **Synthesis and Characterization of Exfoliated Graphite/ABS Composites** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments |
|  | Reviewer’s comment | Author’s Feedback*(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimumof 3-4 sentences may be required for this part.** |  |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** |  |  |
| 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. |  |  |
| **Is the manuscript scientifically, correct? Please write here.** |  |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** |  |  |
| Is the language/English quality of the article suitable for scholarly communications? |  |  |
| Optional/Generalcomments | 1. While the introduction is well-written and provides excellent context, it lacks a clear articulation of the problem statement. Specifically, the rationale for selecting ABS and exfoliated graphite as components needs to be more explicitly addressed. Why is this combination significant, and what specific challenges or gaps in the field does this composite aim to address?
2. Regarding the characterization, the manuscript would benefit from the inclusion of XRD and EDX analyses of graphite oxide. These data are essential to validate the material's structure and composition. Additionally, the C/O ratio of both GO and thermally reduced GO should be provided and thoroughly discussed.
3. Raman spectroscopy is a critical technique for characterizing graphene-based materials as it provides insights into structural defects, disorder, and the degree of reduction. Therefore, it is essential to include Raman analysis results for graphite, graphene oxide (GO), and reduced graphene oxide (rGO) in the manuscript.
4. You found that incorporating reduced graphene oxide (RGO) into ABS enhances its electrical conductivity. However, the manuscript does not clearly explain why improving the electrical conductivity of the composite is significant. It is essential to discuss the practical implications of this enhancement.
5. In the conclusion, the statement 'Incorporation of exfoliated graphite decreases the electrical resistivity value of the composites' is too general. It is crucial to specify that this pertains to ABS-based composites and to elaborate on the significance of this reduction in electrical resistivity. Additionally, discuss potential applications where this improved electrical property would make the ABS/exfoliated graphite composite particularly valuable, such as in electronic components, conductive materials, or electromagnetic shielding.
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| **PART 2:** |
|  | **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)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in details)* |  |

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| **Reviewer Details:** |
| Name: | **Akbi Hamdane** |
| Department, University & Country | **Algeria** |