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| Book Name: | [**Chemical and Materials Sciences: Developments and Innovations**](https://www.bookpi.org/bookstore/product/chemical-and-materials-sciences-developments-and-innovations-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4326** |
| Title of the Manuscript: | **Formation of Al2O3-HfO2 Eutectic EBC Film on Silicon Carbide Substrate** |
| 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.** | This manuscript is important as it addresses the development of advanced environmental barrier coatings (EBCs) for high-temperature applications, particularly in gas turbines. The study on Al₂O₃-HfO₂ eutectic structures offers insights into improving oxidation and corrosion resistance in silicon carbide substrates, which is crucial for enhancing the performance and longevity of aerospace components. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title is suitable, but an alternative could be better option. |  |
| 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. | The abstract is generally comprehensive but could include specific results and implications for practical applications to enhance clarity. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript appears scientifically correct, but a discussion on potential limitations would strengthen it. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | The references are relevant but could benefit from more recent studies to reflect current advancements in the field. |  |
| Is the language/English quality of the article suitable for scholarly communications? | The language quality is suitable for scholarly communication, though minor proofreading could improve clarity. |  |
| Optional/Generalcomments |  |  |

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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: | **Pardeep Kumar** |
| Department, University & Country | **Maharishi Markandeshwar (Deemed to be University), India** |