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| Journal Name: | [**Advances in Research**](https://journalair.com/index.php/AIR) |
| Manuscript Number: | **Ms\_AIR\_134873** |
| Title of the Manuscript:  | **In Situ Precipitated Calcium Carbonate in the Presence of Wood Flour and High Refined Old Corrugated Containerboard – A Handsheet Study** |
| Type of the Article |  |

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| PART 1: Comments |
|  | Reviewer’s comment**Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | 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 minimum of 3-4 sentences may be required for this part.** | This manuscript presents an innovative approach in papermaking by integrating in situ precipitated calcium carbonate (ISPCC) with recycled fibers such as old corrugated containerboard (OCC), nano-fibrillated OCC, and wood flour. The study offers a sustainable solution for cost reduction, resource optimization, and enhanced paper properties. The work contributes to the ongoing efforts of making the paper industry more eco-friendly and energy-efficient. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | Yes, the title is suitable. It clearly reflects the content and scope of the manuscript. |  |
| 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 it can be improved by:Clarifying the experimental design briefly.Including a concluding sentence on the impact or implication of findings.Suggested edit: "These findings suggest that ISPCC can be effectively produced with different fiber sources and may serve as an efficient filler for paper products, leading to improved performance and environmental sustainability." |  |
| Is the manuscript scientifically, correct? Please write here. | Yes, the manuscript is scientifically sound. The methodology is clearly described, and the results are supported by data and TAPPI standards. However, minor revisions in language and formatting are recommended for clarity. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | Yes, the references are sufficient and many are from 2021–2022. You may optionally include one or two more recent references on industrial ISPCC or nano-fibrillated cellulose applications to strengthen the literature review. |  |
| Is the language/English quality of the article suitable for scholarly communications? | The manuscript is understandable but needs minor grammatical and language editing. Sentence structures can be polished, and some typos (e.g., "then" instead of "than") should be corrected. |  |
| Optional/General comments | Figures are informative but would benefit from clearer captions and better resolution.Consider emphasizing practical implications in the conclusion. |  |

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| **PART 2:**  |
|  | Reviewer’s comment | Author’s comment *(if agreed with the 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 detail)* |  |

**Reviewer details:**

**Fatemeh Hassani Khorshidi, Sharif University of Technology, Iran**