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| Book Name: | [Chemical and Materials Sciences: Research Findings](https://www.bookpi.org/bookstore/product/chemical-and-materials-sciences-research-findings-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4543** |
| Title of the Manuscript: | **Lignin-containing adhesion enhancer for wood-plastic composites** |
| Type of the Article | **BOOK CHAPTER** |

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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 book’s chapter presentes:**1. **This study presents advancements in the synthesis of polyelectrolyte complex (LPEC) nanoparticles formed through the interaction between lignin and polyethyleneimine.**
2. **Applying these nanoparticles to poplar sawdust significantly reduces wettability and enhances mechanical properties.**
3. **The findings contribute to the improvement of wood-plastic composites, particularly in interfacial adhesion and hydrophobicity.**
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| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes.** |  |
| **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.** | **Yes.** |  |
| **Is the manuscript scientifically, correct? Please write here.** | **Yes.** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | **Yes.** |  |
| **Is the language/English quality of the article suitable for scholarly communications?** | **Yes.** |  |
| **Optional/General** comments | **This is a very interesting and comprehensive study.** |  |

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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: | **Guilherme Santos da Silveira** |
| Department, University & Country | **Federal University of Technology of Parana, Brazil** |