Corepan Bois
Consortium de recherche sur les panneaux composites à base de bois

UNIVERSITÉ LAVAL

Advancing Sustainable Wood Adhesives: A Green Chemistry and Wood Engineering Approach to Tannin Extraction for Engineered Wood Panels

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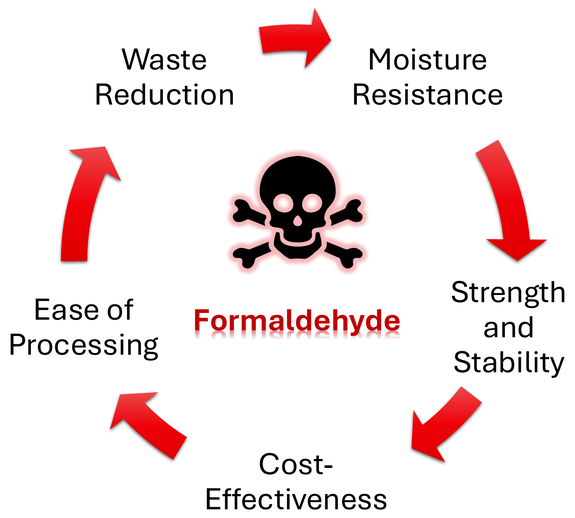
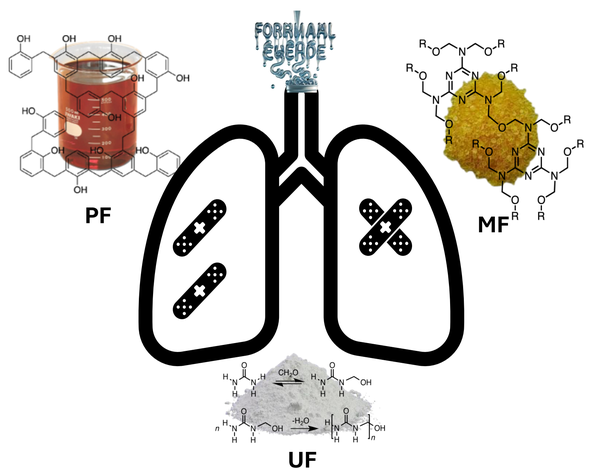
Introduction

In many industries, petrochemical adhesives are the primary choice

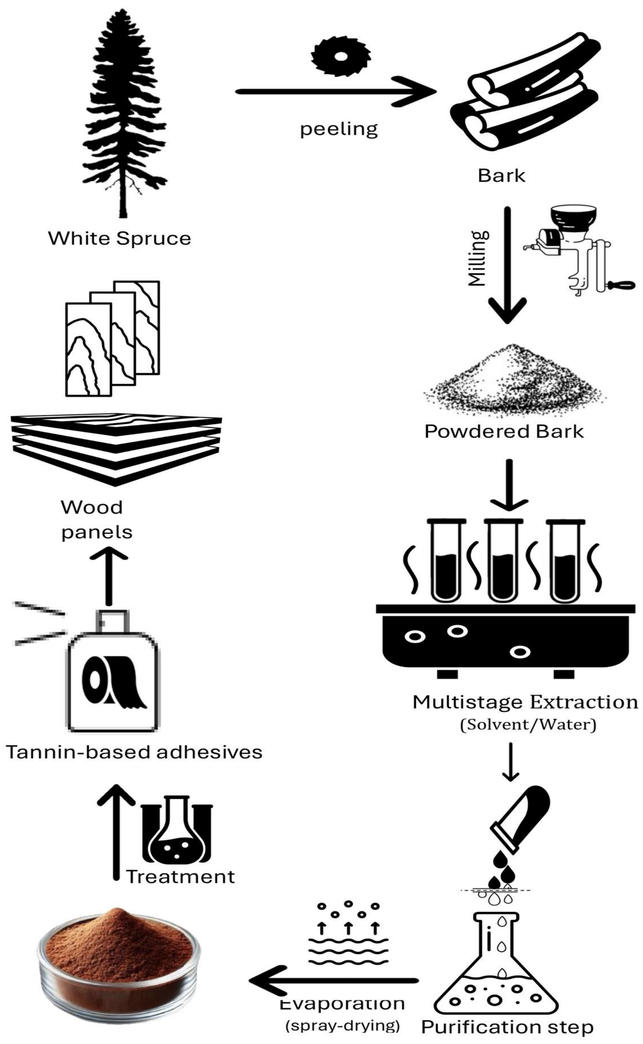


Formaldehyde is present in the three main adhesives used in the **wood industry**.



Formaldehyde, a hazardous **volatile organic compound** in wood adhesives, is continuously off-gassed from wood products driving indoor air pollution a chronic exposure risks.

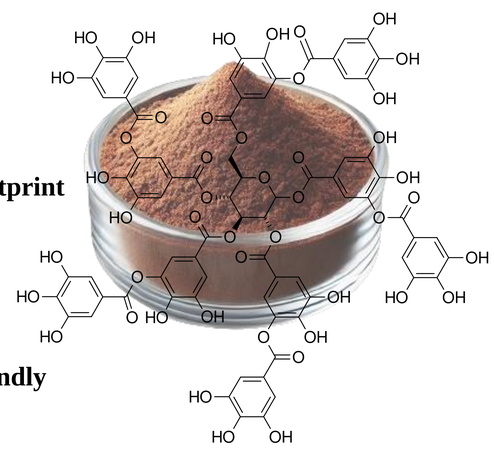
Methodology



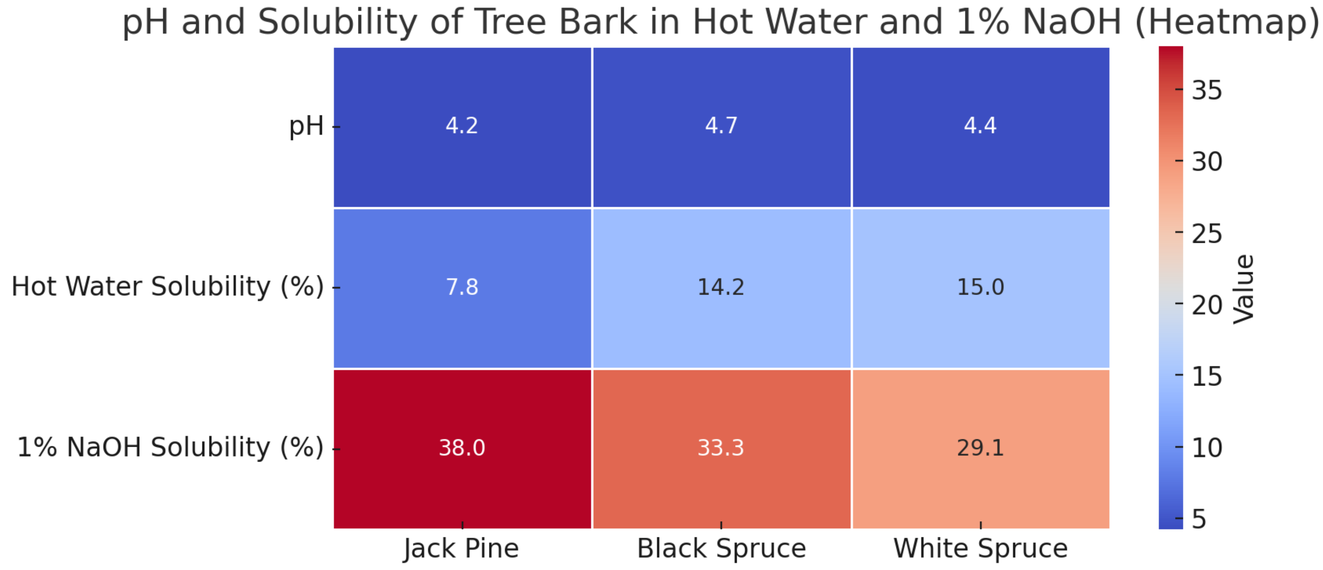
Objectives

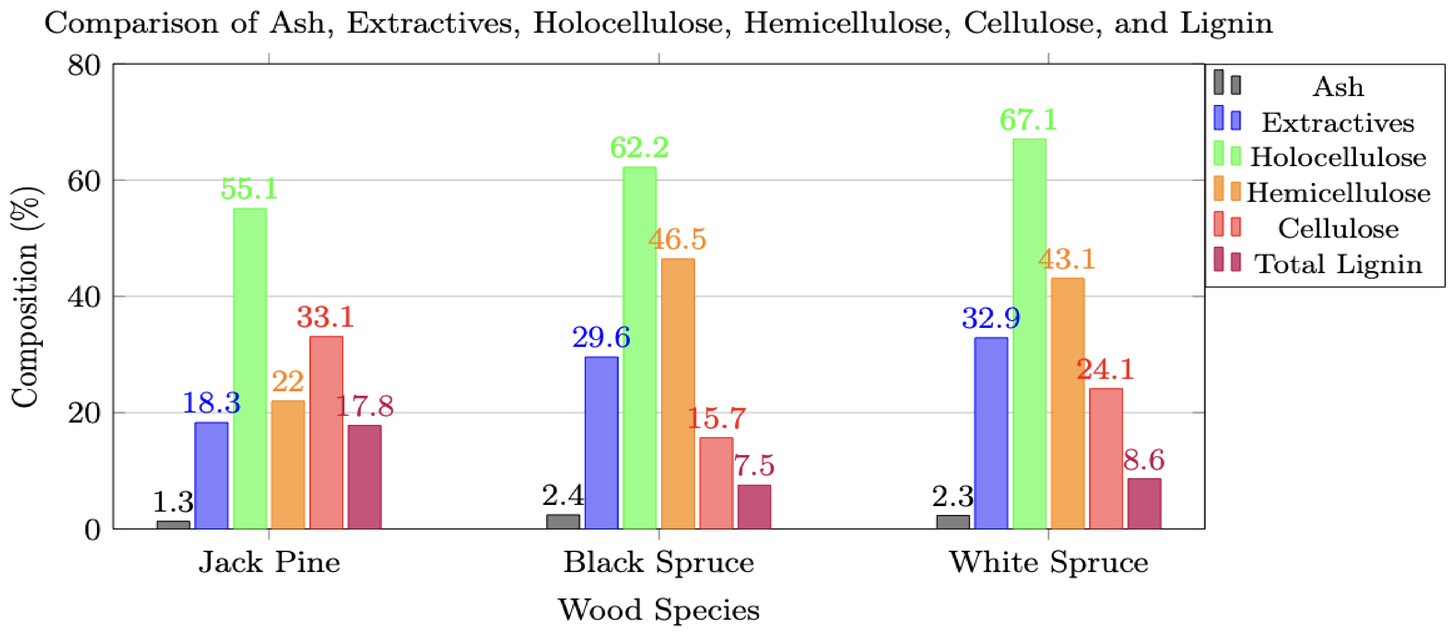
- Optimize Tannin Extraction
- Develop Formaldehyde-Free Adhesives
- Characterize Composite Panels

- **Affordable price**
- **Biobased**
- **Reduced Carbon Footprint**
- **Non-Allergenic**
- **High bondability**
- **Environmentally friendly**



Results and Conclusion





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