###### **Title: Template for submission to Forest Products Journal**

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This page should only include the title of the manuscript, which should be as concise as possible. If possible, the title should be written in such a way as to attract a broader audience. Sometimes, the novelty itself could be part of the title and is encouraged

**Please do not include any author information, including names, affiliations, contributions, funding, or acknowledgements.**

Please use 12 point, Times New Roman, double spaced, with continuous line numbering throughout the document.

# Abstract

The abstract should contain, in condensed form (250 words for an article, 100 for a Technical

Note), the essence of the entire work, summarizing why the work was done, what was done and how, results and conclusions, and its significance. An original article should briefly discuss in the abstract the novelty, key finding, or new finding of the research experiment.

# Introduction

In the text, make certain all figures and tables are called out in numeric order and that all references are cited. References should be cited at the appropriate location in the text using the author-date style, in chronologic order. For example: . . . (Brown and Banks 1990, Adams 1995, Evans et al. 1997).

# Materials and Methods

## Headings

# First level headings: Times New Roman, 16 point, bold, no indent

## Second level headings (if needed): Times New Roman, 14 point, italics, no indent

First and second level headings are included in the template under Home/Styles

# Results

Results and Discussion sections can be combined.

# Discussion

# Conclusions

# Acknowledgements

Please do not include the acknowledgements text in the document. This information should be uploaded separately.

# Literature Cited

References should be listed at the end of the manuscript in a section called "Literature Cited." They should be listed in alphabetic order. Translate foreign titles; indicate the original language and if an English abstract is available. If the author has consulted an online source, the citation should include the complete uniform resource locator (URL) and the date the source was accessed. If the source is an online version of a printed journal or other printed material, the citation should include the standard reference information. Place the full URL for the DOI at the end of the citation, if available. MS Word will automatically create a hotlink if you hit “enter” after the DOI. Please refer to a most recently published journal publication for a wide range of examples; however, below are some of the most common examples:

Hunt, C., J. O’Dell, J. Jakes, W. J. Grigsby, and C. R. Frihart. 2015. Wood as polar size exclusion chromatography media: Implications to adhesive performance. *Forest Prod. J.* 65(1–2):9–14. <https://doi.org/10.13073/FPJ-D-14-00039>

Frihart, C. 2017. Protein adhesives. *In:* Handbook of Adhesive Technology. A. Pizzi and K. L. Mittal (Eds.). CRC Press, Boca Raton, FL, USA. pp. 145-475. <https://doi.10.1201/9781315120942-20>

deMoura, M. F. S. F., and N. Dourado. 2018. Wood Fracture Characterization. CRC Press, Boca Raton, FL, 149 pp. <https://doi.org/10.1201/9781351106979>

Plaza, N. Z., C. R. Frihart, C. G. Hunt, D. J. Yelle, L. F. Lorenz, W. T. Heller, S. V. Pingali, D. S. Stone, and J. E. Jakes. 2017. Small angle neutron scattering as a new tool to study moisture-induced swelling in the nanostructure of chemically modified wood cell walls. *In:* International Conference of Wood Adhesives, C. G. Hunt, G. D. Smith, and N. Yan (Eds.), October 25–27, 2017, Atlanta, Georgia; Forest Products Society, Peachtree Corners, Georgia. 5 pp.

Evans, R. 2005. Drying schedules for southern pine. USDA Forest Products Laboratory GTR-324. 4 pp. http://www. fpl.fs.fed.us/documents/pdf2005/fpl\_ 2005\_evans002.pdf. Accessed November 4, 2018.

# Tables and Figures

All figures and tables should be placed after the references, not in the body of the article.

Figures and tables are when printed are: 1 column (20.3 picas; approx. 3.5 in.); 1-1/2 columns (29 picas; 4.5 in.); or 2 columns (42 picas; 7 in.).

## Tables

All tables should be typed on separate pages and numbered consecutively. Tables should be kept simple and used for summary data, rather than raw data, if possible. Captions should be included above each table.

Example table:

Table 1.—Grade distribution; number of specimens (and associated percentage) in each grade by species.

|  |  |  |
| --- | --- | --- |
| Grade | Red oak: no. of pieces (%) | White oak: no. of pieces (%) |
| 1 | 107 (52.5) | 109 (53.4) |
| 2 | 64 (31.4) | 58 (28.4) |
| 3 | 19 (9.3) | 27 (13.2) |
| 4 | 14 (6.9) | 10 (4.9) |

## Figures

Example figure caption:

Figure 1.—Hardwood composite billets on Tinius Olsen machine before (upper panel) and after (lower panel) failure (ASTM D143-14 [ASTM 2017a]).

There are specific requirements for figures. Please read the detailed instructions under the heading “FPJ Figure Guidelines”, on the FPS website, <https://cdn.ymaws.com/forestprod.org/resource/resmgr/preparing_figures_for_public.pdf>

Vector graphics (EPS format) do not become pixelated when expanded, and so are preferred. Failure to follow those instructions can delay publication of the paper and incur additional costs for the author.

The Forest Products Society strongly encourages the use of SI units. Authors, however, may still choose the units most appropriate for their audience. In principle, highly technical papers should give preference to SI units only; general interest or industry-targeted papers might be more appropriate in dual units. Consistent units should be used throughout the paper.