



representation of the fiber hierarchy in softwood from a single fiber, showing the middle layer, S1, S2, S3, and lumen. Courtesy of: Moser, C., Lindström, M. E., and (2015). "Toward industrially feasible methods for following the process of manufacturing fibers," *BioRes.* 10(2), 2360-2375.

Formatting your submission to *BioResources*

2018

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Manuscript Section Sequence

- **ABSTRACT**
- **INTRODUCTION**
- **EXPERIMENTAL**
 - **Materials**
 - *Third level headings as needed*
 - **Methods**
- **RESULTS AND DISCUSSION**
- **CONCLUSIONS**
 1. Given in a numbered list.
- **ACKNOWLEDGEMENTS**
- **REFERENCES CITED**

Abstract

- The abstract has a maximum length of 200 words.
- Abbreviations and acronyms should be defined in the abstract and again in the main text.

Manuscript Body

- All abbreviations and acronyms should be defined the first time they are used in the manuscript, even if also defined in the abstract.
- The margins of the manuscript body, *except in the References Cited*, are fully justified.
- **Sentences should not begin with abbreviations, acronyms, or numbers.**

In-text Citations

- Do not use footnotes or brackets to refer to the references cited entries.
- In-text citations should be listed **chronologically** within parentheses in the text. Multiple authors in the same year should be listed alphabetically within that year. For example:
 - (Knope *et al.* 2002; Smith *et al.* 2002; Dwyer and Ludgate 2003; Haverford 2004)
- Only last names (surnames or family names) belong in parenthetical citations.

Experimental Section

- All instruments and equipment specifically listed should be adequately described, to include the make, model, manufacturer, and manufacturer location (City, Country).
- The term ‘significant’ should be used judiciously because this term typically implies statistical analysis. Unless statistics are performed, do not use when describing changes in specific data values.
- If there is statistical significance, please include the p-value or other relevant statistic.

Special Concerns for Animal/Human Experiments (1)

Manuscripts that involve animal or human experimental subjects will be considered for publication only if the work detailed therein meets all of the following guidelines:

- Follows international, national, and/or institutional guidelines for humane animal treatment and complies with relevant legislation;
- Has been approved by the ethics review committee at the institution or practice at which the studies were conducted where such a committee exists;
- For studies using client-owned animals, demonstrates a high standard (best practice) of veterinary care and involves informed client consent;

Special Concerns for Animal/Human Experiments (2)

Prior to consideration of a manuscript, to verify compliance with *BioResources* policies, the authors must:

- Provide a letter certifying that legal and ethical requirements have been met with regards to the humane treatment of animals described in the study;
- Specify in the Experimental section that the ethical review committee approval process and the international, national, and/or institutional guidelines followed.

Scientific Units

- Place a space between a value and an abbreviation or unit (*e.g.*, 24 h)
 - Time: s (second); min (minute); h (hour); d (day)
 - Mass: g (gram); kg (kilogram); μg (microgram)
 - Volume: L (liter); mL (milliliter); μL (microliter)
 - Length: cm (centimeter); mm (millimeter); nm (nanometer)
 - Temperature: $^{\circ}\text{C}$ (centigrade); K (Kelvin)
 - Pressure: kPa (kilopascal); atm (atmosphere)
 - Frequency: Hz (hertz); MHz (megahertz)
 - Power: W (watts); kW (kilowatts)
 - Voltage: V (volts); kV (kilovolts)
 - Current: A (amps); mA (milliamps)
 - Resistance: Ω (ohm)
 - Molarity: M (moles per liter)
 - Percent by weight: wt.%

Special Characters and Phrases

- Ensure that special characters are correct.
- Use ° (degree symbol; °C) rather than ^o (superscript o; °C)
- Use μ (*e.g.*, μm) rather than u (*e.g.*, um)
- Use ± rather than +/-
- Correct SimSun or other specifically symbolic fonts anywhere in the text, as it disturbs line spacing and causes other formatting troubles.
 - Use the “Insert Symbol” function in Word to add symbols that will match the font you are using.
 - This mistake is particularly seen for characters such as (), x, and °C may that be atypical and need to be replaced; they tend to appear somewhat skewed or italicized, and typically take up an extra space in the line.
- Latin phrases are italicized
et al., etc., e.g., i.e., vs., versus, circa, via, in situ, in vitro

Equations

- Equations should be left justified with one indent at 0.5”. A number in parentheses follows the equation at 5.5” or 6.0”. On the next line, variables are defined. For example:

The mass and volume of each wood sample was measured. The density (D) was calculated according to Eq. 1,

$$D \text{ (g/cm}^3\text{)} = m / v \tag{1}$$

where m is the mass (g) and v is the volume (cm³).

- Note the space before and after mathematical expressions (*e.g.*, +, -, /, ×), and that there is no line of space before/after an equation unless a new paragraph follows directly after the equation.
- Replace any instance of ‘x’ when used as multiplication with ‘×’, ‘+/-’ with ‘±’.
- If the author inserts an equation using the equation generator for any variables that can be typed or inserted manually, delete the equation and manually insert using the ‘Insert, symbol’ function.

Figures

- Figures should be consistent within the manuscript regarding format, font, and presentation.
- All figures should have a relatively high resolution (no blurred images).
- Figures in plates (more than 1 image, graph, or micrograph defined by one caption) should be clearly identified with a label (*i.e.*, a, b, c; typically in the upper or lower left corner) and defined in the caption.
 - Do not use such terms as “upper, lower, right, left, or center” to denote figures in the caption.
- Figure legends should be clear and concise, and should stand alone.
 - Take care that symbols in legends show up appropriately in your final version.
- Abbreviations, symbols, statistics, *etc.* in the figures should be defined in the caption or the legend.
- All figures should be specifically cited in the body of the manuscript.
- Formatting specifics:
 - Caption (10 point Arial, left justified; no period unless the caption ends with a complete sentence)
 - Labels that denote specific figures in a plate (*i.e.*, a, b, c, *etc.*) (12 point Arial Bold on/next to the figure)
 - Axis labels for graphs (10 point Arial Bold)

Graphs

- Authors are encouraged to use color graphs whenever possible, since this does not affect costs and typically increases ease of interpretation.
- Check each axis for consistent and complete axis labels. The label should stand alone, and all units should be provided in parentheses (not brackets).
 - There must be a space between the label and the units, *e.g.*, “time (h)”.
 - Again, be careful that symbols in axis labels show up properly.
- For mean data, error bars (standard deviation or standard error of the mean) should be associated with each data point or bar.
- It is best not to label profiles within the graph, but rather use a legend to define each profile.
- Check labels, legends, *etc.* for spelling errors and appropriate formatting (*i.e.*, italics, bold, underline, and special characters).

Micrographs

- A scale bar should be placed in the lower right corner of all micrographs to provide the relative size of the structure(s) of interest.
 - The length of the micron bar may be defined in the figure caption, or the length placed above the bar.
- For light micrographs, use color whenever possible.
- Electron (scanning and transmission) micrographs typically have information such as micrograph number, date, magnification (and associated scale bar), and accelerating voltage on the bottom of the original image—**this information is to be cropped** from the bottom of each plate image where it appears.
 - See article template for more information and an example.
 - The magnification provided on the image is often listed in the caption. This magnification is correct only if the original image (or negative) size has not been altered.
- Labels or arrows denoting structures within the micrograph should be defined in the legend.

Taxonomy Nomenclature

- Always italicize binomial nomenclature. If authors use the name/abbreviated name of the person who named the species, this is not italicized (*e.g.*, *H. italica* (L.) Rothm.).
 - The same applies if “sp., spp., or subspp.” abbreviations are used.
- The genus name is always capitalized, while species (and subspecies) is not.
- Full species name should be spelled out the first time it is used (*Vulpes vulpes*), then it can subsequently be shortened (*V. vulpes*).
- Make sure to define the Latin name at first when switching back and forth between the use of Latin and common names (...the red fox (*Vulpes vulpes*)...).
- If using only the genus name in a sentence, it does not need to be italicized.

Tables

- Tables should be generated with the table function in Microsoft Word.
 - An example can be seen and copied from the *BioResources* article template.
- Tables should fit within page margins.
- Use title case for table titles and column headings
- Headings should stand alone. All units should be provided in (parentheses), not [brackets].
- All abbreviations, symbols, statistics, or other shorthand in the tables should be defined in a table footnote.
- All tables should be specifically cited in the body of the manuscript.
- Formatting specifics:
 - Title (12 point Arial, every word capitalized, left justified)
 - Body (10 point Arial, centered in each column)
 - Footnotes (10 point Arial, left justified)

References Cited

- Full citations in the references section are listed in **alphabetical** order.
 - Not numbered
 - **All** authors of a work must be listed as well as the volume number, issue number (if there is one), page numbers, and DOI (for journal articles).
 - For a citation with more than 10 authors, the first 10 authors are listed and the remaining denoted by “*et al.*”
- The author names in the References Cited are sometimes given incorrectly (rather than Surname, F. I.). Be careful with international names, and if in doubt, search the article online to verify.
- Either a complete or properly abbreviated journal name is acceptable. Within each manuscript, be consistent with the naming regime.
 - If you choose to abbreviate journal names, use only their official abbreviations, available at: <https://www.library.caltech.edu/journal-title-abbreviations> (choose first letter of title after navigating to this page)
 - Shortened names still are capitalized and have periods after each shortened word.
 - For example: *Cell Chem. Technol.*, *Chem. Eng. J. Bioch. Eng.*, *Holz Roh. Werkst.*
- All sources must be listed in the References Cited, including national standards (*i.e.*, ASTM, EN, CSA, GB/T, ISO, TAPPI, TS) and information from websites.
- Formatting of references is often inconsistent. Take time to ensure that the formatting is correct.
- Compare all references in the manuscript text with the References Cited for missing entries or inconsistent dates.

References Cited: Formatting Examples (1)

- Journal article

Barcík, Š., Gašparík, M., and Horejš, P. (2014). “Influence of thermal modification on nail withdrawal strength of spruce wood,” *BioResources* 9(4), 5963-5975. DOI: 10.15376/biores.9.4.5963-5975

- Test standard

ISO 9087 (1998). “Determination of nail and screw holding power under axial load application,” International Organization for Standardization, Geneva, Switzerland.

TAPPI T222 om-02 (2002). “Acid-insoluble lignin in wood and pulp,” TAPPI Press, Atlanta, GA.

GB/T 2677.20 (1995). “Fibrous material - Determination of holocellulose,” Standardization Administration of China, Beijing, China.

References Cited: Formatting Examples (2)

- Book

Wang, N. G., Yin, S.-C., Katrakov, I. B., Markin, V. I., Mikushina, I. V., and Khudenko, S. V. (2002). *Methods of Investigation of Wood and Its Derivatives*, Altai University Publisher, Barnaul, Russia.

In a language other than English:

Blažej, A., Šutý, L., Košík, M., Krkoška, P., and Golis, E. (1975). *Chémia Dreva [Chemistry of Wood]*, ALFA, Bratislava, Slovakia.

- Chapter in a book with editors

James, A. M. (2001). “Music in the 21st century,” in: *Textbook of Music Psychology and the Wooden Instrument Throughout History*, Z. Catania (ed.), McGraw Hill, New York, NY, pp. 150-175.

- Master’s Thesis or Ph.D. Dissertation

Cook, J. R. (2013). *Amine Functionalization of Bacterial Cellulose for Targeted Delivery Applications*, Master’s Thesis, University of Western Ontario, London, Canada.

References Cited: Formatting Examples (3)

- Website

Montoya, I. (2015). “Fencing,” (<http://www.keepusingthatword.com>), Accessed 28 July 2015.

Perkins, A. (2013). “Trees and small town public health,” *The Pawnee Sun*, (www.pawneesun.com/articles/perkins/tree_health.html), Accessed 31 Aug 2014.

- Abstract/poster presentation at a conference

Maminski, M., Parzuchowski, P., Borysiuk, P., and Boruszewski, P. (2009). “Hyperbranched macromolecules as modifiers of urea-formaldehyde resins,” in: *Proceedings of the Wood Adhesives 2009 Conference*, Lake Tahoe, NV, pp. 424-426.

(Here the page numbers refer to the abstract book)

References Cited: Formatting Examples (4)

- Technical Report

Bell, E. R., Peck, E. C., and Krueger, N. T. (1954). *Modulus of Elasticity of Wood Determined by Dynamic Methods* (Report No. 1977), U.S. Department of Agriculture Forest Products Laboratory, Madison, WI.

Sluiter, A., Hames, B., Ruiz, R., Scarlata, C., Sluiter, J., Templeton, D., and Crocker, D. (2008). *Determination of Structural Carbohydrates and Lignin in Biomass* (NREL/TP-510-42618), National Renewable Energy Laboratory, Golden, CO.

- Legislature

European Commission (EC) Regulation 231/2012 (2012). “Commission Regulation (EU) No 231/2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council,” European Union, Brussels, Belgium.

References Cited: Formatting Examples (5)

- Patent

Arnold, H. W., Dorough, G. L., and Latham, G. H. (1943). “Coated cellulosic material,” U. S. Patent No. 2334236.

- Lecture

Smith, G. (2012). “Lectures and course notes for WOOD 487,” Department of Wood Science, University of British Columbia, Vancouver, Canada.

- Handbook/user guide

SAS (2001). *User Guide: Statistics* (Release 8.02), SAS Institute, Cary, NC.

Basic Text Format

Manuscript Parts in their correct styles	Text style
Manuscript Title	16 point Arial bold (Title case)
Author List	12 point Times New Roman
Abstract	10 point Arial
<i>Keywords</i>	10 point Times New Roman italic
<i>Author contact information</i>	10 point Times New Roman italic
<i>*Corresponding author</i>	10 point Times New Roman italic
MAJOR HEADINGS: INTRODUCTION, EXPERIMENTAL, RESULTS AND DISCUSSION, CONCLUSIONS, ACKNOWLEDGEMENTS, REFERENCES	12 point Arial bold, all capital letters
Subheading: Materials, Methods, Others as Needed	12 point Arial bold, capitalize important words
<i>Third-level headings</i>	12 point Times New Roman, italic, capitalize first word only
Main body of text	12 point Times New Roman