



PAN PACIFIC FIBRE VALUE CHAIN CONFERENCE 2018

Current research and perspectives on the
Fibre Value Chain

4 - 7 December 2018 | Rotorua | New Zealand

Guidelines for Authors

Conference Abstracts Due: 30 June 2018

Conference Manuscripts & Extended Abstracts Due:

28 August 2018

1. GENERAL

1.1 PROCEEDINGS

All delegates are supplied with a set of Conference Proceedings either print or electronic format. It is our aim to ensure that these Proceedings include all papers to be presented at the event.

Papers accepted for the Appita Conference must not have been accepted or presented elsewhere. Material of commercial nature is unacceptable in an Appita technical paper

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As the abstracts, extended abstracts and manuscript will be issued in print and electronic format it is necessary for all authors to follow the rules outlined in **Sections 2 - 3**. It is important that these rules are followed to allow smooth preparation of material and a uniform format throughout the book. Failure to observe these rules may result in the manuscript not being published. Please use the Word Document templates provided in the Authors resources area of the Appita conference website.

A copy of your PowerPoint presentation, for use at the conference, is **not acceptable** as a manuscript.

Abstracts, extended abstracts and manuscript must be received in electronic format via email.

Please try and keep file size as small as possible. Appita can accept files up to 10 MB, however we ask that the file size be kept low, as we often receive many emails at the one time.

Failure to supply a manuscript of your paper may lead to the rejection of the paper.

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If you have requested peer review of your manuscript, and the reviewers have deemed it worthy of the status of 'Peer reviewed', it will be so identified in the Proceedings by having a distinctive header on each page.

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The author is responsible for all material contained in the manuscript submitted. Also, the author must ensure that the co-authors named endorse the material. It will be necessary for you to obtain the approval of any organization whose results, etc. are discussed in your paper.

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2. DOCUMENT PREPARATION

Microsoft Word doc or dox format is required, as we need to be able to edit the document, to insert page numbers, etc. Appita cannot open documents in Macintosh format. PDF files are not acceptable, as we may need to adjust the format of the manuscript to ensure a consistent appearance throughout the Proceedings. We also have to add sequential page numbers.

2.1 ABSTRACTS

Abstracts must be limited to 300 - 600 words. Longer abstracts may be returned to the authors for shortening.

2.1.1 Page size

Only A4 is acceptable. Margins at "normal" (all margins 2.54cm)

2.1.2 Font

Times Roman only.

2.1.3 Paper title

Title of the paper page should be centred in 14 point, bold, caps.

2.1.4 Authors

After a space type the authors' names in 12 point, bold, sentence case.

Then type the positions, organisations and business addresses of the authors in 10 point, sentence case. Include the email address of the corresponding author.

2.1.5 Text

10 point, justified single line spacing. One line space between paragraphs

2.2 EXTENDED ABSTRACTS

An extended abstract contains references, comparisons to related work, proofs of key theorems and other details expected in a research paper but not in an abstract. An extended abstract is a research paper whose ideas and significance can be understood in less than an hour.

The extended abstract should contain a minimum of 500 words and a maximum of 1250 words. Extended abstracts can contain figures, tables and/or images which are not included in the word count. Please use the Extended **Abstract Template** provided.

2.2.1 Page size

Only A4 is acceptable. Margins at "normal" (all margins 2.54cm).

2.2.2 Font

Times Roman only.

2.2.3 Paper title

After a space type the authors' names in 14 point, bold, upper case.

2.2.4 Authors

After a space type the authors' names in 12 point, bold, sentence case.

Then type the positions, organisations and business addresses of the authors in 10 point, sentence case. Include the email address of the corresponding author.

2.2.5 Text

The extended abstract must contain the following sections: abstract and keywords, introduction, methodology, findings, conclusion, and references. Section can be named differently and subsections can be included.

The extended abstract shall be written in font Time New Roman, single line spacing and 10 font size. The extended abstract should contain a minimum of 500 words and a maximum of 1250 words. Extended abstracts can contain figures, tables and/or images which are not included in the word count. The references are not included in the word count as well. Page format should be A4 page size with margins 2.5 cm wide from the right, left, top and bottom. Pages should not be numbered.

Supporting figures, tables and images of the results (no more than two (total) figures, tables or images) may be included in the extended abstract.

Tables, images and figures should be centred. Figures and images should be numbered (see Figure 2 for an example) and figure headers should be placed under the figure or image; as for the tables, they should also be numbered (see Table 2 for an example) and the table header should be placed at the top. References (if any) of the tables, figures and images should be presented right under the tables, figures and images in the form of author surname and publication date.

2.3 MANUSCRIPTS

Manuscripts must be limited to eight (8) A4 pages. Longer manuscripts may be returned to the authors for shortening. Alternatively, an additional printing fee may be charged.

2.3.1 Page size

Only A4 is acceptable; we cannot afford to spend time correcting formatting, especially if figures have moved as a result of changing paper size.

2.3.2 Margins (IMPORTANT!)

Manuscripts must be formatted in two columns with margins top, bottom, right and left margins set at 2.54 cm. Column width 7.46 cm with 1.0 cm spacing between column. See example on page 6.

2.3.3 Font

Times Roman only.

2.3.4 Paper title

Type the title of the paper at the top of the left column in 14 point, bold, sentence case.

2.3.5 Authors

After a space type the authors' names in 10 point, bold, upper case.

Then type the positions, organisations and business addresses of the authors in 10 point, sentence case.

2.3.6 Headings/Sub headings/Sub sub headings

Headings should be typed in 10 point, bold, upper case.

Sub-headings should be typed in 10 point, bold, sentence case type.

Sub-sub headings should be typed in 10 point, italics, sentence case.

2.3.7 Text

10 point, single line spacing. One line space between paragraphs

2.3.8 Page Numbering

Please **do not** number pages as this numbering will have to be removed prior to printing the Proceedings, as we will have sequential page numbering.

2.3.9 References - Journals

Please use the following style:

(a) Authors' family names and initials in upper and lower case.

(b) Full title of the paper, in upper and lower case

(b) Name of journal, abbreviated if necessary in italics.

(d) Volume number in bold, issue number in brackets followed after a colon by first page number then year of publication in brackets.

eg: Sidebottom, J and Moffatt, W, Investigating the source of high TRS emissions from a dissolving tank vent, *Appita J*, **61**(6):472 (2008)

2.3.10 References - Books

Please use the following style:

(a) Authors' family names and initials in upper and lower case.

(b) Title of book including edition in sentence case, bold.

(c) Page number

(d) Publisher

(e) Year of publication in brackets.

eg: Clark J – 183-187 **Pulp technology and treatment for water** : Miller Freeman, NY (1978)

Material such as 'Private Communications' or 'Unpublished Work' **cannot** be accessed by the reader. Such references are unacceptable for publication but can be included in the text.

Strictly speaking, a reference is a document which can be obtained by the reader, and private communications do not fall into this category. If you have received additional assistance from others working in the field other than that which can be found in the literature, you should acknowledge this in the text of the paper rather than by reference.

NB Double-check all references. We all know the frustration of trying to find an incorrectly referenced article.

2.3.11 Appendices

Appendices should incorporate details of sampling techniques and statistical analysis along with all long detailed tables. Tables in appendixes should be labelled as tables and should continue the number sequence of the tables in the text. When two or more appendix sections are required, they should be labelled using consecutive numbers; '1', '2', etc.

Mathematical or chemical formulae pertinent to the text should stand alone between lines of the text and should be numbered consecutively (Arabic numerals) throughout the paper. Unusual abbreviations and symbols should be identified.

2.4 ILLUSTRATION: Photographs, charts, drawings, graphs etc.

For good reproduction in the hardcopy version all illustrations will be in greyscale.

Use highly contrasting colours to indicate distinctions. Print a test page in greyscale to see if the illustration has sufficient contrast.

2.4.1 Insertion into Text

Please insert illustrations at the appropriate section of the manuscript. Illustrations may be one or two columns in width. Use the 'lock' command to ensure the illustration is inserted exactly where you want it, as it may move when opened on another computer.

2.4.2 Numbering

Illustrations should be numbered consecutively through the paper. They are to be referred to as 'Figures'.

2.4.3 Captions

Captions should be placed directly below each illustration and numbered consecutively. e.g. Fig 3 Tear index versus PFI beating revs for radiata pine kraft pulps.

2.4.4 Tables

Please also insert tables in the appropriate section of the manuscript. Captions should be placed directly above each table. e.g. Table 2 Properties of bleached pulps.

2.4.5 Equations, formulae and Units of Measurement

Use SI system of measurement.

2.4.6 Graphics and Photos

Graphics and photos must be crisp and clear (minimum resolution of 300 dpi). They must be inserted into the manuscript at the appropriate section. We cannot accept audio or video for inclusion in the manuscripts.

SAMPLE OF CORRECTLY FORMATTED MANUSCRIPT:

Starch-nanoclays as barrier coatings for paperboard

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Keywords: Starch, Montmorillonite, Nanoclay, Ball milling, Barrier coatings, WVTR, WAXD, Compatibiliser

ABSTRACT

In this paper, we report the synthesis, characterization and use of barrier coatings based on starch and montmorillonite nanoclays.

Different milling conditions have been systematically studied in order to achieve a pigment structure that maximises barrier performance as measured by water vapour transmission rate (WVTR). Parameters examined included ball mill type (magneto versus planetary), the mill speed, the mill size and milling time.

barrier coat that improved WVTR by 30% when compared with uncoated paperboard. This improvement is attributed to delamination of the nanoclay to form an intercalated structure.

Starch has the ability to form a barrier coat when applied as a barrier coat for less demanding.

Paper uses paper or paperboard to distribute a large variety of food products such as dry foods (e.g. cookies), frozen foods (e.g. fish fingers) and fresh food such as apples and kiwi fruits [1]. Paper or paperboard comprises a compressed complex structure of cellulose fibres, mineral fillers and additives. This structure is highly porous and a poor barrier to water vapour and volatile gases. The corrugated structure is used for food packaging application needs to be treated or coated in some manner in order to improve resistance to liquid. There are a number of alternative ways to achieve barrier properties. Coatings, laminated boards and composites have been used, but these treatments are difficult to re-pulp or compost. Today, environmental and commercial considerations are creating a strong push among large retailers for paperboard that is free of wax and chlorofluorocarbon (CFC) barrier treatments, such as those based on mineral fillers in dispersion coatings [3-8]. The latter process has several advantages, most notably higher machine speeds and fewer processing steps, leading to significant cost savings without compromising recyclability. A further positive step would be to apply, by conventional coating techniques, an environmentally friendly barrier coating.

REFERENCES

Books: Authors family name(s), initials, title of book (bold), page number, publisher, year (brackets)

1. Coles, R., McDowell, D. and Kirwan, M.J. (Eds) - **Food packaging technology**. Blackwell Publishing; CRC Press, Oxford (2003).

2. Andersson, C. - New ways to enhance the functionality of paperboard by surface treatment - a review, *Packag. Tech. Sci.*, 21(6):339 (2008).

3. Kimpimäki, T. and Santamäki K. - Barrier dispersion coating - New feasibility for the packaging industry, *Paperi Ja Puu - Paper and Timber*, 80(4):249 (1998).

4. Väähä-Nissi, M. et al. - New water-based barrier coatings for paper and paperboard, *Appita J.*, 54(2):106 (2001).

5. Schuman, T. et al. - Characteristics of pigment-filled polymer coatings on paperboard, *Prog. Org. Coat.*, 54(4):360 (2005).

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7. Zou, Y. et al. - The effect of pigments and latices on the properties of coated paper, *Colloids Surf. A: Physicochem. Eng. Aspects*, 294(1-3):40 (2007).

8. Kugge, C. and Johnson, B. - Improved barrier properties of double dispersion coated liner, *Prog. Org. Coat.*, 62(4):430 (2008).

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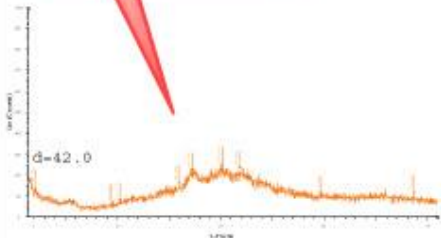
Journals: Authors family name(s), initials, title of paper, abbreviated journal name, Volume No (bold); issue number (brackets), colon, first page number, year (brackets)

Magneto dry ball milling of wheat starch and nanoclay powders in the presence of PEG plasticiser improved WVTR of coated board by 20%, whereas the unmilled

Charge that is primarily due to the presence of cationic starch (equal to d minus h in Figure 4) of clays via isomorphous substitution, as recently explained by Chivrac et al. [27] and Zhang et al. [25]. The use of cationic starch in this manner as a compatibiliser in the coating is expected to improve the WAXD pattern. The WAXD pattern shows a peak at 2θ = 20.2° which corresponds to a d-spacing of 4.4 Å. The structure as the peak intensity is very low.

Fig. 7 WAXD pattern of a composite containing 9 wt% OHPS, 4 wt% nanoclay and 1 wt% cationic starch compatibiliser

Adding a plasticiser (1:5 ratio to starch), along with the compatibiliser in a coating containing 9 wt% OHPS and 4 wt% nanoclay, gave an improvement in WVTR of 30% when compared with uncoated paperboard.



Figures embedded at appropriate place in text

Two-column throughout

Title 14pt bold, sentence case

Authors 10pt bold, upper case

Positions, organisations and addresses 10 point lower case

Times Roman font throughout

Headings 10pt bold, upper case