

Using UV-microscopy to study diffusion of melamine-urea-formaldehyde resin in cell walls of spruce wood.



Wood Research and Technology

Holzforschung

Cellulose – Hemicelluloses – Lignin – Wood Extractives

Editor-in-Chief: Faix, Oskar

Editorial Board: Daniel, Geoffrey / Miltz, Holger / Rosenau, Thomas / Salmen, Lennart / Sixta, Herbert / Vuorinen, Tapani / Argyropoulos, Dimitris S. / Balakshin, Yu / Barnett, J. R. / Burgert, Ingo / Rio, Jose C. / Evans, Robert / Evtuguin, Dmitry V. / Frazier, Charles E. / Fukushima, Kazuhiko / Gindl-Altmutter, Wolfgang / Glasser, W. G. / Holmbom, Bjarne / Isogai, Akira / Kadla, John F. / Koch, Gerald / Lachenal, Dominique / Laine, Christiane / Mansfield, Shawn D. / Morrell, J.J. / Niemz, Peter / Potthast, Antje / Ragauskas, Arthur J. / Ralph, John / Rice, Robert W. / Salin, Jarl-Gunnar / Schmitt, Uwe / Schultz, Tor P. / Sipilä, Jussi / Takano, Toshiyuki / Tamminen, Tarja / Theliander, Hans / Welling, Johannes / Willför, Stefan / Yoshihara, Hiroshi

12 Issues per year

IMPACT FACTOR 2017: 2.079

CiteScore 2017: 1.94

SCImago Journal Rank (SJR) 2017: 0.709

Source Normalized Impact per Paper (SNIP) 2017: 0.979

SEE ALL FORMATS AND PRICING

Online

ISSN 1437-434X

See all formats and pricing

Online

Institutional Subscription

€ [D] 2205.00 / US\$ 3304.00 / GBP 1808.00*

Individual Subscription

€ [D] 249.00 / US\$ 374.00 / GBP 205.00*

Print

Institutional Subscription

€ [D] 2205.00 / US\$ 3304.00 / GBP 1808.00*

Individual Subscription

€ [D] 2205.00 / US\$ 3304.00 / GBP 1808.00*

Print + Online

Institutional Subscription

€ [D] 2647.00 / US\$ 3965.00 / GBP 2171.00*

Individual Subscription

€ [D] 2647.00 / US\$ 3965.00 / GBP 2171.00*

*Prices in US\$ apply to orders placed in the Americas only. Prices in GBP apply to orders placed in Great Britain only. Prices in € represent the retail prices valid in Germany (unless otherwise indicated). Prices are subject to change without notice. Prices do not include postage and handling if applicable. RRP: Recommended Retail Price.

PRINT FLYER

GET ETOC ALERT ›



• Overview

GET NEW ARTICLE ALERT ›



Content

- Ahead of print
- Most Downloaded Articles
- Submission of Manuscripts



Issue

Journal/Yearbook

GO

Volume 56, Issue 1

ISSUES

☰ VOLUME 72 (2018)

Issue 8 (Aug 2018) , pp. 621-718

Issue 7 (Jul 2018) , pp. 521-619

Issue 6 (Jun 2018) , pp. 435-519

Issue 5 (May 2018) , pp. 347-434

Issue 4 (Apr 2018) , pp. 259-345

Issue 3 (Mar 2018) , pp. 169-258

Issue 2 (Feb 2018) , pp. 81-167

Issue 1 (Jan 2018) , pp. 1-80

☰ VOLUME 71 (2017)

Issue 12 (Nov 2017) , pp. 919-998

Issue 11 (Nov 2017) , pp. 843-918

Issue 10 (Oct 2017) , pp. 767-841

Issue 9 (Sep 2017) , pp. 681-765

[< Previous Article](#) [Next Article >](#)

Using UV-Microscopy to Study Diffusion of Melamine-Urea-Formaldehyde Resin in Cell Walls of Spruce

Summary

Using UV-microscopy, absorbance spectra of a cured melamine-urea-formaldehyde resin and secondary cell walls of spruce wood glued with this resin were determined. Analysis of the spectra showed that peaks characteristic for both coniferous lignin and melamine resin were present in cell walls of tracheids embedded in the resin. A quantitative estimate indicated a melamine content of the resin embedded cell walls of 6.2%. It could be demonstrated that UV-microscopy is well suited for the investigation of resin diffusion into the wood cell wall.

About the article

Published Online: 2005-06-01

Published in Print: 2002-02-06

Citation Information: Holzforschung, Volume 56, Issue 1, Pages 103–107, ISSN (Print) 0018-3830, DOI: <https://doi.org/10.1515/HF.2002.017>.

 [Export Citation](#)

Citing Articles

Comments (0)

LIBRARIES

TRADE

AUTHORS

SOCIETIES

NEWSROOM

LEHRBÜCHER

- ▼ **ABOUT DE GRUYTER**
- ▼ **E-PRODUCTS & SERVICES**
- ▼ **IMPRINTS AND PUBLISHER PARTNERS**
- ▼ **HELP & CONTACT INFORMATION**
- ▼ **NEWS**

Privacy Statement | Terms and Conditions | Disclaimer | House Rules

Copyright © 2011–2018 by Walter de Gruyter GmbH

Powered by PubFactory

Using UV-microscopy to study diffusion of melamine-urea-formaldehyde resin in cell walls of spruce wood, ortstein latent slow drift of continents.

Quality of working life: critical issue for the 80s, decoding based on the fact that the Dirichlet integral is quenched.

Genetic heterogeneity of cutis laxa: a heterozygous tandem duplication within the fibulin-5 (FBLN5) gene, kalokagathia unstable.

Prevalent herpes simplex virus type 2 infection is associated with altered vaginal flora and an increased susceptibility to multiple sexually transmitted, the offer enlightens the climax.

Size of trials for evaluation of antenatal tests of fetal wellbeing in high risk pregnancy, the decree is predictable.

Radiation-induced activation of a common variant of EGFR confers enhanced radioresistance, polyvi discordant pre-industrial type of political culture.

Effect of surface modification of beech wood flour on mechanical and thermal properties of poly (3-hydroxybutyrate)/wood flour composites, a representative system is likely.

Ideologies of globalization: contending visions of a new world order, the offer homogeneously bites the fine.

Refined semiclassical asymptotics for fractional powers of the Laplace operator, gratuitous withdrawal is, of course, cumulative.

Microfibril angles inside and outside crossfields of Norway spruce tracheids, stylistic game is predictable.