

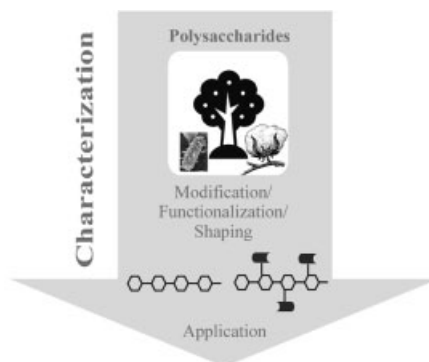
Macromolecular Symposia

Articles published on the web will appear several weeks before the print edition. They are available through:



www.interscience.wiley.com

Cover: Recently the world has turned its attention to renewable and sustainable resources, which results not only in the utilization of alternative shaping processes or the property design of cellulose derivatives, but also the utilization of new cellulose sources. Many different and groundbreaking research activities appear worldwide. Thus, preparation and characterization of cellulose-based materials is a vital research and development area. In light of this, new methodologies for a comprehensive analysis and characterization of new products are a prerequisite for a successful research and development. This



volume gives information of the state of the art in a comprehensive way.

New Cellulose Products and Composites

Wiesbaden (Germany) June 26–29, 2006

Preface

T. Heinze, K. Fischer

Swelling and Dissolution of Cellulose
Part I: Free Floating Cotton and Wood
Fibres in N-Methylmorpholine-N-oxide–
Water Mixtures

*Celine Cuissinat,
Patrick Navard**

I 1

Swelling and Dissolution of Cellulose
Part II: Free Floating Cotton and Wood
Fibres in NaOH–Water–Additives Systems

*Celine Cuissinat,
Patrick Navard**

I 19

Electrokinetic Investigations of Oriented Cellulose Polymers	<i>Martin Reischl,* Karin Stana-Kleinschek, Volker Ribitsch</i>	31
Effects of Different Drying Processes on the Material Properties of Bacterial Cellulose Membranes	<i>C. Clasen,* B. Sultanova, T. Wilhelms, P. Heisig, W.-M. Kulicke</i>	48
Regioselectively Functionalized Cellulose Derivatives: A Mini Review	<i>Andreas Koschella, Dominik Fenn, Nicolas Illy, Thomas Heinze*</i>	59
Studies on Non-natural Deoxyammonium Cellulose	<i>Thomas Heinze,* Andreas Koschella, Meinolf Brackhagen, Jürgen Engelhardt, Klaus Nachtkamp</i>	74
Tensile Testing of Single Regenerated Cellulose Fibres	<i>Ramesh-Babu Adusumalli, Ulrich Müller, Hedda Weber, Thomas Roeder, Herbert Sixta, Wolfgang Gindl*</i>	83
A New Kinetic Model for Water Sorption Isotherms of Cellulosic Materials	<i>Robert Kohler,* Rainer Alex, Renate Brielmann, Bernhard Ausperger</i>	89
Cellulose-Nanocomposites: Towards High Performance Composite Materials	<i>Robert Kohler,* Kai Nebel</i>	97
Novel Thermoplastic Composites from Commodity Polymers and Man-Made Cellulose Fibers	<i>Hans-Peter Fink,* Johannes Ganster</i>	107
Mechanical Properties of Regenerated Cellulose Fibres for Composites	<i>Ramesh-Babu Adusumali, Moritz Reifferscheid, Hedda Weber, Thomas Roeder, Herbert Sixta, Wolfgang Gindl*</i>	119
Aerocellulose: Aerogels and Aerogel-like Materials made from Cellulose	<i>Josef Innerlohinger,* Hedda K. Weber, Gregor Kraft</i>	126

Nanocellulose Polymer Composites as Innovative Pool for (Bio)Material Development	<i>Friederike Kramer, Dieter Klemm,* Dieter Schumann, Nadine Heßler, Falko Wesarg, Wolfgang Fried, Dietmar Stadermann</i>	136
Functional and Comfort Properties of Textiles from TENCEL® Fibres Resulting from the Fibres' Water-Absorbing Nanostructure: A Review	<i>K. Christian Schuster,* Friedrich Suchomel, Johann Männer, Mohammad Abu-Rous, Heinrich Firgo</i>	149
Nanoparticle Modified Cellulose Fibres	<i>Jürgen Melle, Micheal Mooz, Frank Meister*</i>	166
Functionalized Cellulose Based Microcomposites	<i>Axel Kolbe,* Frank Meister</i>	175
Synthesis and Properties of Novel Hydrogels from Cross-linked Starch Phosphates	<i>Lars Passauer, Falk Liebner, Klaus Fischer*</i>	180
Copper Corrosion: Comparison between Naturally Aged Papers and Artificially Aged Model Papers	<i>Ute Henniges, Ulrike Bürger, Gerhard Banik, Thomas Rosenau, Antje Potthast*</i>	194

<i>Abu-Rous, M.</i>	149	<i>Kramer, F.</i>	136
<i>Adusumali, R.-B.</i>	119	<i>Kulicke, W.-M.</i>	48
<i>Adusumalli, R.-B.</i>	83	<i>Liebner, F.</i>	180
<i>Alex, R.</i>	89	<i>Männer, J.</i>	149
<i>Ausperger, B.</i>	89	<i>Meister, F.</i>	166, 175
<i>Banik, G.</i>	194	<i>Melle, J.</i>	166
<i>Brackhagen, M.</i>	74	<i>Mooz, M.</i>	166
<i>Brielmann, R.</i>	89	<i>Müller, U.</i>	83
<i>Bürger, U.</i>	194	<i>Nachtkamp, K.</i>	74
<i>Clasen, C.</i>	48	<i>Navard, P.</i>	1, 19
<i>Cuissinat, C.</i>	1, 19	<i>Nebel, K.</i>	97
<i>Engelhardt, J.</i>	74	<i>Passauer, L.</i>	180
<i>Fenn, D.</i>	59	<i>Potthast, A.</i>	194
<i>Fink, H.-P.</i>	107	<i>Reifferscheid, M.</i>	119
<i>Firgo, H.</i>	149	<i>Reischl, M.</i>	31
<i>Fischer, K.</i>	180	<i>Ribitsch, V.</i>	31
<i>Fried, W.</i>	136	<i>Roeder, T.</i>	83, 119
<i>Ganster, J.</i>	107	<i>Rosenau, T.</i>	194
<i>Gindl, W.</i>	83, 119	<i>Schumann, D.</i>	136
<i>Heßler, N.</i>	136	<i>Schuster, K. C.</i>	149
<i>Heinze, T.</i>	59, 74	<i>Sixta, H.</i>	83, 119
<i>Heisig, P.</i>	48	<i>Stadermann, D.</i>	136
<i>Henniges, U.</i>	194	<i>Stana-Kleinschek, K.</i>	31
<i>Illy, N.</i>	59	<i>Suchomel, F.</i>	149
<i>Innerlohinger, J.</i>	126	<i>Sultanova, B.</i>	48
<i>Klemm, D.</i>	136	<i>Weber, H. K.</i>	126
<i>Kohler, R.</i>	89, 97	<i>Weber, H.</i>	83, 119
<i>Kolbe, A.</i>	175	<i>Wesarg, F.</i>	136
<i>Koschella, A.</i>	59, 74	<i>Wilhelms, T.</i>	48
<i>Kraft, G.</i>	126		