

BioMACROMOLECULES

An interdisciplinary journal focused at the interface
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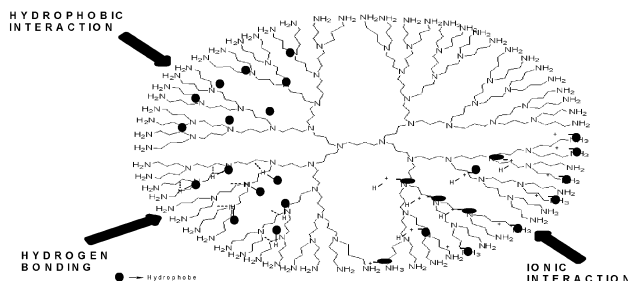
Volume 7, Number 3
March 2006

BOMAF6 7(3) 649–998 (2006)
ISSN 1526-7797

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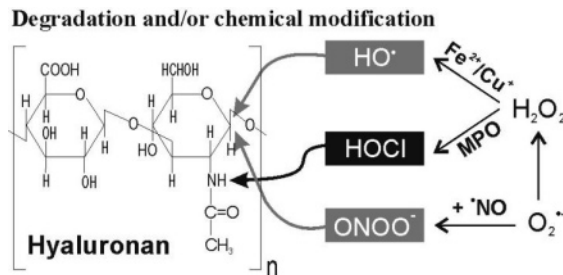
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Umesh Gupta, Hrushikesh Bharat Agashe,
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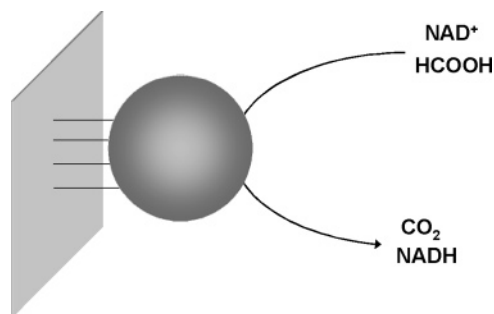


L. Šoltés,* R. Mendichi, G. Kogan, J. Schiller,
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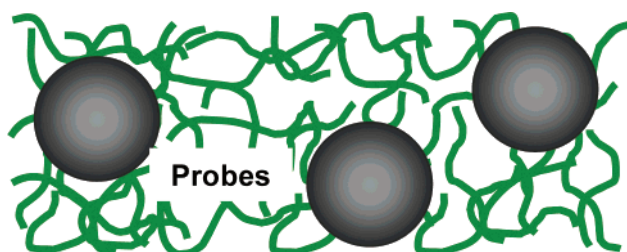
669 Stabilization of a Formate Dehydrogenase by Covalent Immobilization on Highly Activated Glyoxyl-Agarose Supports

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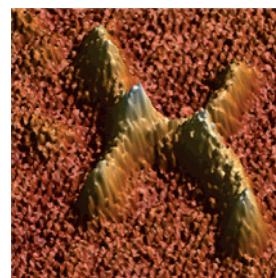
674 DWS Microrheology of a Linear Polysaccharide

Y. Hemar* and D. N. Pinder



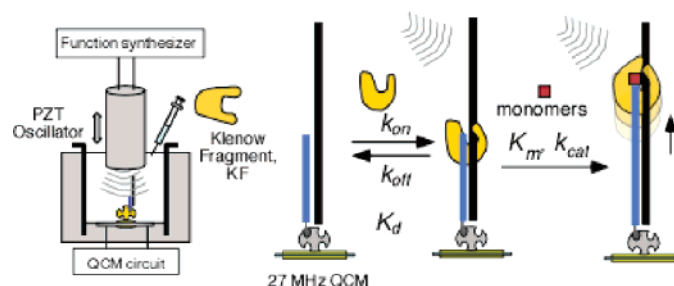
677 Generic Technique to Generate Large Branched DNA Complexes

Paul Tosch, Christoph Wälti,*
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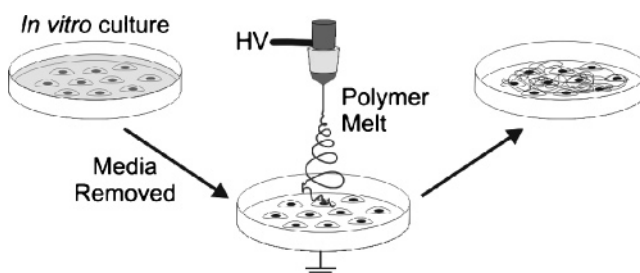


682 Effect of Ultrasound on DNA Polymerase Reactions: Monitoring on a 27-MHz Quartz Crystal Microbalance

Yu Hoshino, Takayoshi Kawasaki, and
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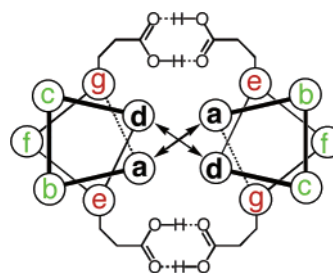


686 Direct in Vitro Electrospinning with Polymer Melts



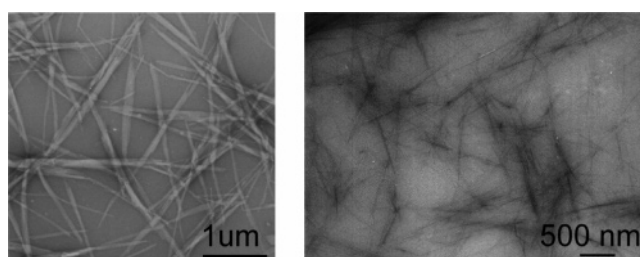
Paul D. Dalton,* Kristina Klinkhammer,
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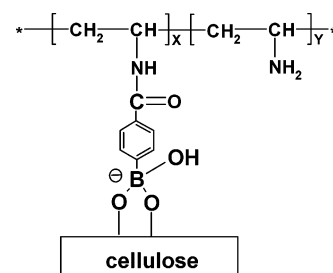
He Dong and Jeffrey D. Hartgerink*

696 Surface Acylation of Cellulose Whiskers by Drying Aqueous Emulsion



Huihong Yuan, Yoshiharu Nishiyama,
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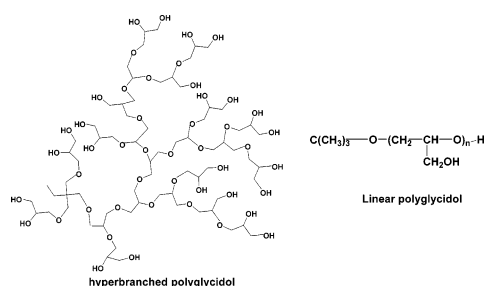


Wei Chen, Chen Lu, and Robert Pelton*

Articles

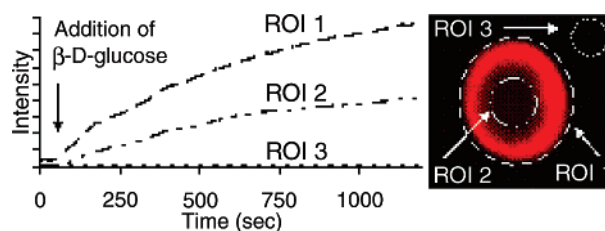
703 Biocompatibility Testing of Branched and Linear Polyglycidol

Rajesh Kumar Kainthan, Johan Janzen, Elena Levin, Dana V. Devine, and Donald E. Brooks*



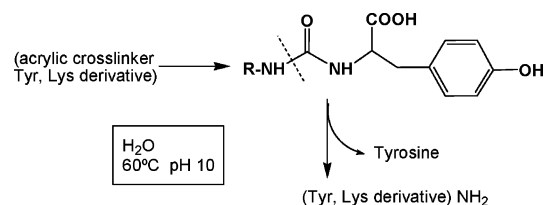
710 Real-Time Assessment of Spatial and Temporal Coupled Catalysis within Polyelectrolyte Microcapsules Containing Coimmobilized Glucose Oxidase and Peroxidase

Erich W. Stein, Dmitry V. Volodkin, Michael J. McShane,* and Gleb B. Sukhorukov



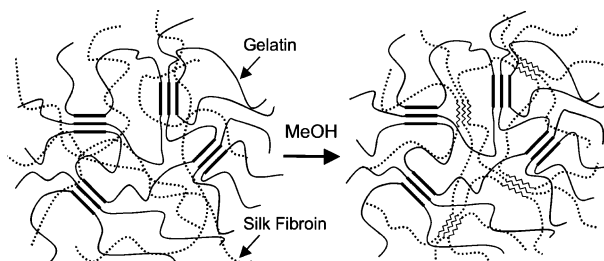
720 New Pseudopeptidic Cross-Linker Containing Urea Bonds: Study of Its Degradation Routes in Aqueous Media Using Capillary Electrophoresis-Mass Spectrometry

Paloma Pérez, Carolina Simó, Christian Neusüss, Matthias Pelzing, Julio San Román, Alejandro Cifuentes, and Alberto Gallardo*



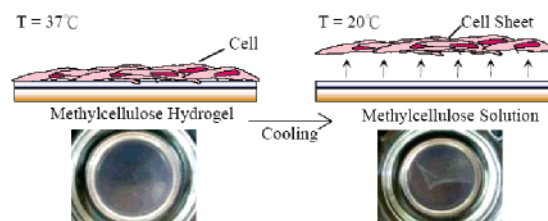
728 Mixed Protein Blends Composed of Gelatin and *Bombyx mori* Silk Fibroin: Effects of Solvent-Induced Crystallization and Composition

Eun S. Gil, David J. Frankowski, Michelle K. Bowman, Arif O. Gozen, Samuel M. Hudson,* and Richard J. Spontak

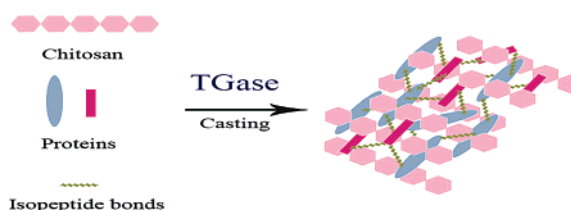


736 Novel Living Cell Sheet Harvest System Composed of Thermoreversible Methylcellulose Hydrogels

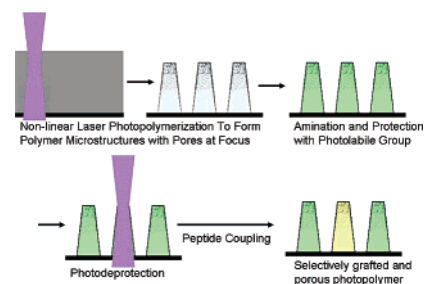
Chun-Hung Chen, Chen-Chi Tsai, Wannhsin Chen, Fwu-Long Mi, Hsiang-Fa Liang, Sung-Ching Chen, and Hsing-Wen Sung*


744 Chitosan–Whey Protein Edible Films Produced in the Absence or Presence of Transglutaminase: Analysis of Their Mechanical and Barrier Properties

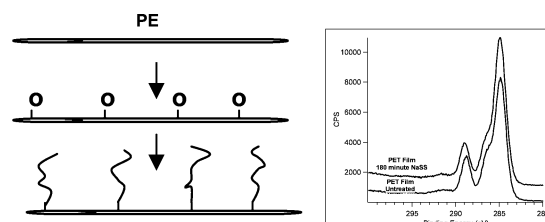
Prospero Di Pierro, Belkis Chico, Reynaldo Villalonga, Loredana Mariniello, Angelo E. Damiao, Paolo Masi, and Raffaele Porta*


750 Synthesis and Characterization of Peptide Grafted Porous Polymer Microstructures

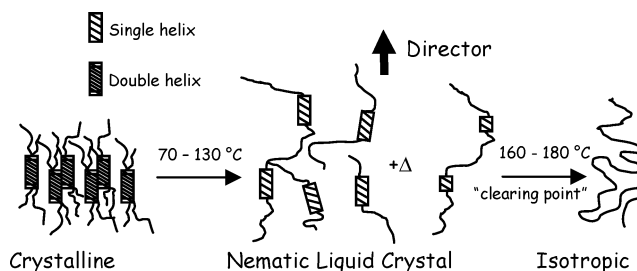
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755 Radical Graft Polymerization of Styrene Sulfonate on Poly(ethylene terephthalate) Films for ACL Applications: “Grafting From” and Chemical Characterization

M. Ciobanu, A. Siove, V. Gueguen, L. J. Gamble, D. G. Castner, and V. Migonney*

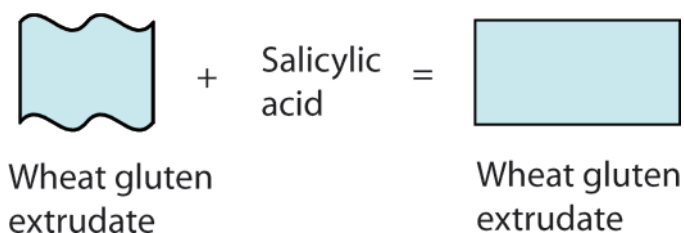

761 Amylose Crystallization from Concentrated Aqueous Solution

John A. Creek, Gregory R. Ziegler,* and James Runt



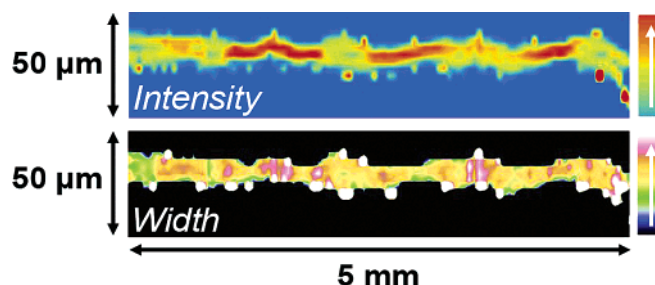
771 Enlarged Processing Window of Plasticized Wheat Gluten Using Salicylic Acid

N. Henrik Ullsten, Mikael Gällstedt, Eva Johansson, Astrid Gräslund, and Mikael S. Hedenqvist*



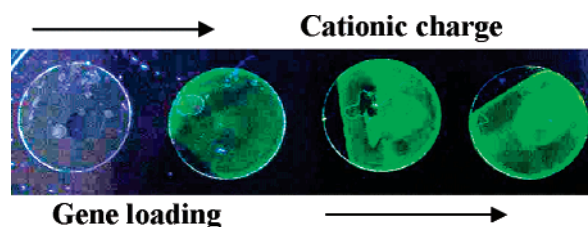
777 Characterizing the Decay of Ancient Chinese Silk Fabrics by Microbeam Synchrotron Radiation Diffraction

A. C. Hermes, R. J. Davies, S. Greiff, H. Kutzke, S. Lahlil, P. Wyeth, and C. Riekel*



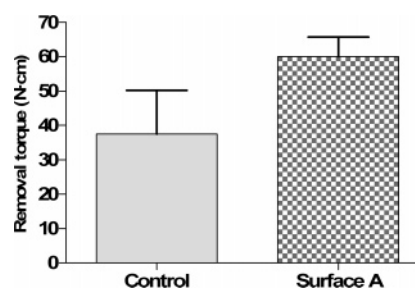
784 Controlled Delivery of Antisense Oligodeoxynucleotide from Cationically Modified Phosphorylcholine Polymer Films

ZhuoQi Zhang, XiChuan Cao, XiuBo Zhao, Sarah B. Withers, Cathy M. Holt, Andrew L. Lewis, and Jian R. Lu*



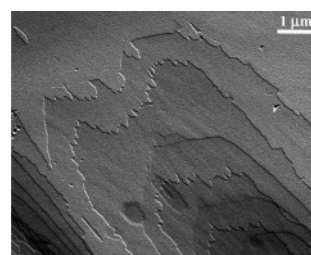
792 Use of rhBMP-2 Activated Chitosan Films To Improve Osseointegration

J. L. López-Lacomba,* J. M. García-Cantalejo, J. V. Sanz Casado, A. Abarrategi, V. Correas Magaña, and V. Ramos



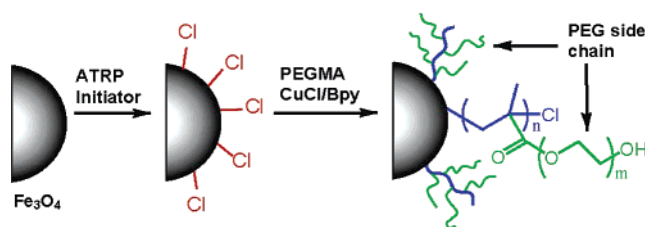
799 Crystalline Structure of Poly(hexamethylene adipate). Study on the Morphology and the Enzymatic Degradation of Single Crystals

Sebastià Gestí, Ahmed Almontassir, María Teresa Casas, and Jordi Puiggalí*



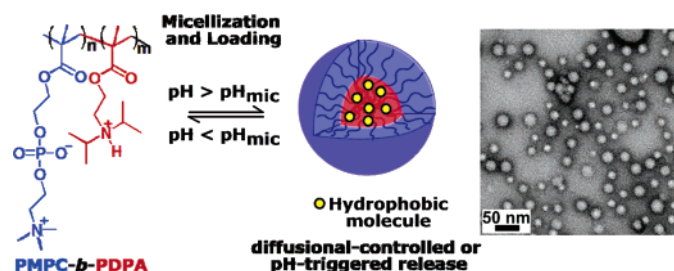
809 Cellular Response to Magnetic Nanoparticles "PEGylated" via Surface-Initiated Atom Transfer Radical Polymerization

Feixiong Hu, Koon Gee Neoh,* Lian Cen, and En-Tang Kang



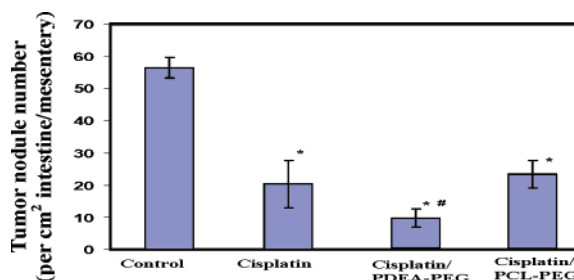
817 Phosphorylcholine-Based pH-Responsive Diblock Copolymer Micelles as Drug Delivery Vehicles: Light Scattering, Electron Microscopy, and Fluorescence Experiments

Cristiano Giacomelli, Lucile Le Men, Redouane Borsali,* Joséphine Lai-Kee-Him, Alain Brisson, Steven P. Armes,* and Andrew L. Lewis



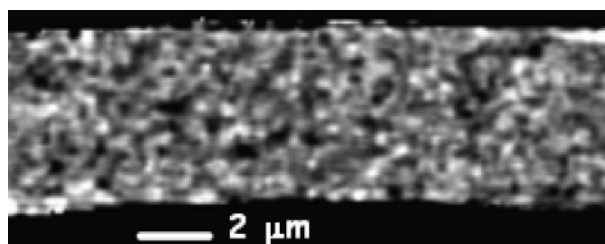
829 Anticancer Efficacies of Cisplatin-Releasing pH-Responsive Nanoparticles

Peisheng Xu, Edward A. Van Kirk, William J. Murdoch,* Yihong Zhan, Dale D. Isaak, Maciej Radosz, and Youqing Shen*



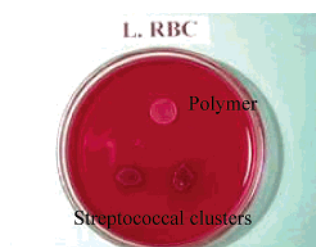
836 Quantitative Mapping of the Orientation of Fibroin β -Sheets in *B. mori* Cocoon Fibers by Scanning Transmission X-ray Microscopy

Daniel Hernández Cruz, Marie-Eve Rousseau, Marcia M. West, Michel Pézolet, and Adam P. Hitchcock*



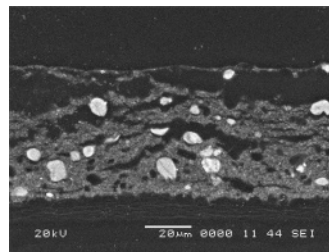
844 Biocompatibility and Fatigue Properties of Polystyrene–Polyisobutylene–Polystyrene, an Emerging Thermoplastic Elastomeric Biomaterial

Mirosława El Fray, Piotr Prowans, Judit E. Puskas,* and Volker Altstädt



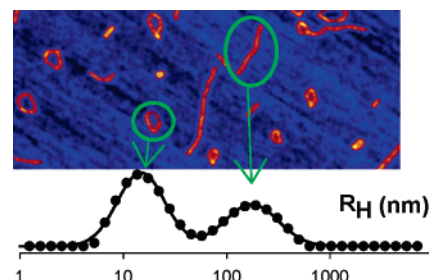
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Fabienne Fay,* Isabelle Linossier, Valérie Langlois, Estelle Renard, and Karine Vallée-Réhel



858 Determination of Molecular Parameters of Linear and Circular Scleroglucan Coexisting in Ternary Mixtures Using Light Scattering

Marit Sletmoen, Erik Geissler, and Bjørn T. Stokke*



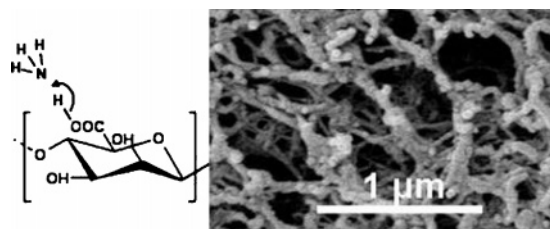
866 Improved Methods for the Structural Analysis of the Amylose-Rich Fraction from Rice Flour

Rachelle M. Ward, Qunyu Gao, Hank de Bruyn, Robert G. Gilbert, and Melissa A. Fitzgerald*



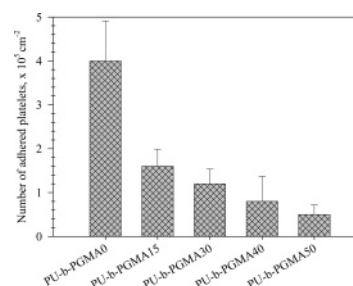
877 FTIR Spectroscopy of NH_3 on Acidic and Ionotropic Alginate Aerogels

Romain Valentin, Raluca Horga, Barbara Bonelli, Edoardo Garrone, Francesco Di Renzo, and Françoise Quignard*



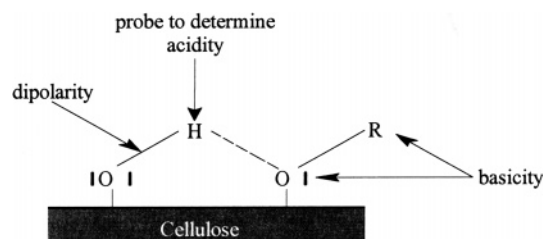
883 Synthesis, Swelling Behavior, and Biocompatibility of Novel Physically Cross-Linked Polyurethane-*block*-Poly(glycerol methacrylate) Hydrogels

Kibret Mequanint,* Alpesh Patel, and Deon Bezuidenhout

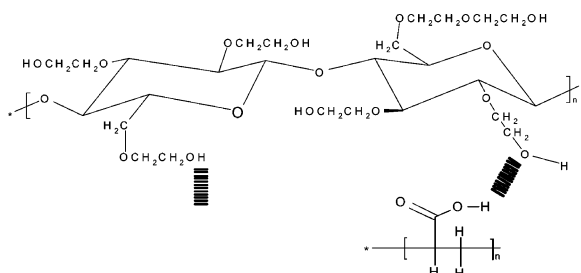


892 XPS Studies of Chemically Modified Banana Fibers

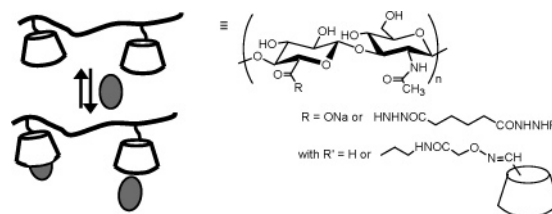
L. A. Pothan,* F. Simon, S. Spange, and S. Thomas

**899 Rheological Characterization of Bioadhesive Binary Polymeric Systems Designed as Platforms for Drug Delivery Implants**

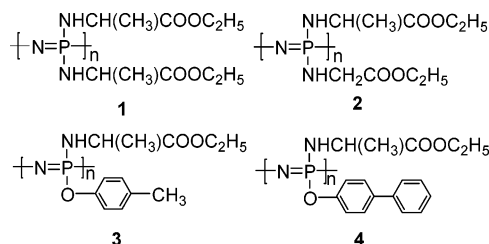
Gavin P. Andrews and David S. Jones*

**907 Controlled Synthesis and Inclusion Ability of a Hyaluronic Acid Derivative Bearing β -Cyclodextrin Molecules**

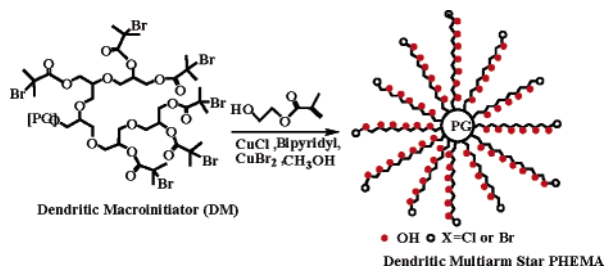
Aurélia Charlot, Alain Heyraud, Pierre Guenot, Marguerite Rinaudo, and Rachel Auzély-Velty*

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Anurima Singh, Nicholas R. Krogman, Swaminathan Sethuraman, Lakshmi S. Nair, Jacqueline L. Sturgeon, Paul W. Brown, Cato T. Laurencin, and Harry R. Allcock*

**919 Synthesis of Multiarm Star Poly(glycerol)-*block*-Poly(2-hydroxyethyl methacrylate)**

Yu Chen,* Zhong Shen, Emilie Barriau, Holger Kautz, and Holger Frey*

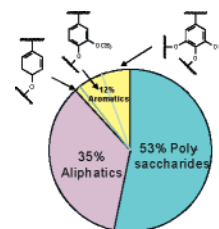


927 Novel Rubbers from Cationic Copolymerization of Soybean Oils and Dicyclopentadiene. 1. Synthesis and Characterization



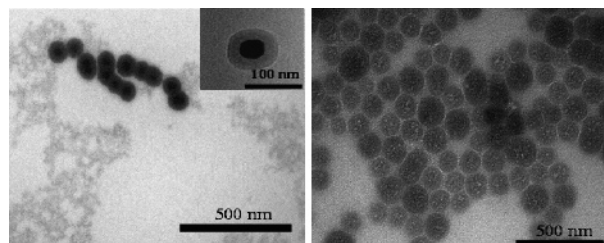
Dejan D. Andjelkovic and Richard C. Larock*

937 Magic-Angle Spinning NMR Studies of Cell Wall Bound Aromatic–Aliphatic Biopolyesters Associated with Strengthening of Intercellular Adhesion in Potato (*Solanum tuberosum* L.) Tuber Parenchyma



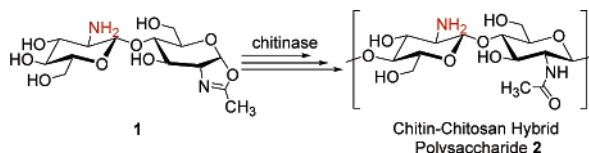
Bingwu Yu, G. Vengadesan, Hsin Wang, Liana Jashi, Tatiana Yefremov, Shiyong Tian, Victor Gaba, Ilan Shomer, and Ruth E. Stark*

**945 Surface Modification of Silica Core–Shell
■ Nanocapsules: Biomedical Implications**



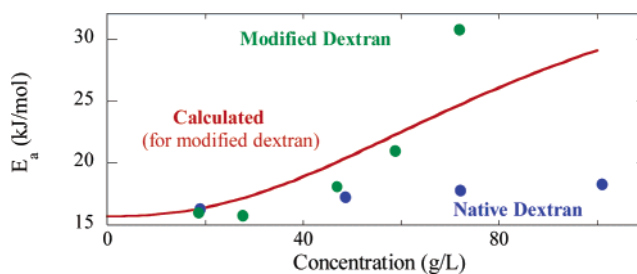
Aleksa V. Jovanovic, Jason A. Flint, Manoj Varshney, Tim E. Morey, Donn M. Dennis, and Randolph S. Duran*

950 Chitinase-Catalyzed Synthesis of Alternatingly *N*-Deacetylated Chitin: A Chitin–Chitosan Hybrid Polysaccharide



Akira Makino, Kazuhiro Kurosaki, Masashi Ohmae, and Shiro Kobayashi*

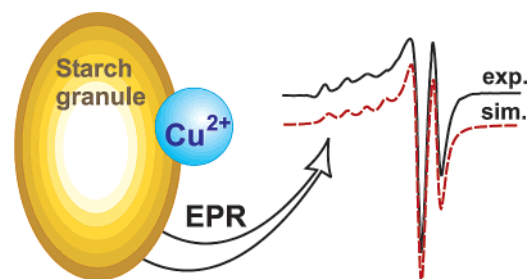
958 Aqueous Solutions of Native and Hydrophobically Modified Polysaccharides: Temperature Effect



A. Durand* and E. Dellacherie

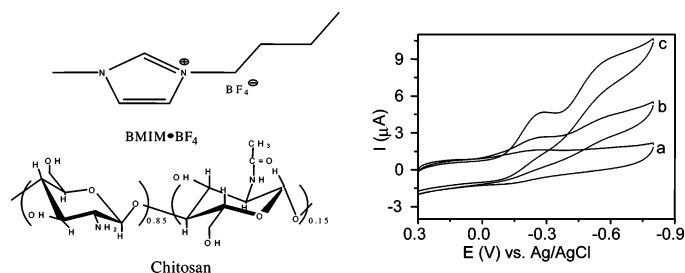
965 Phosphate Positioning and Availability in the Starch Granule Matrix as Studied by EPR

Andreas Blennow,* Karen Houborg, Roger Andersson, Ewa Bidzińska, Krystyna Dyrek, and Maria Łabanowska



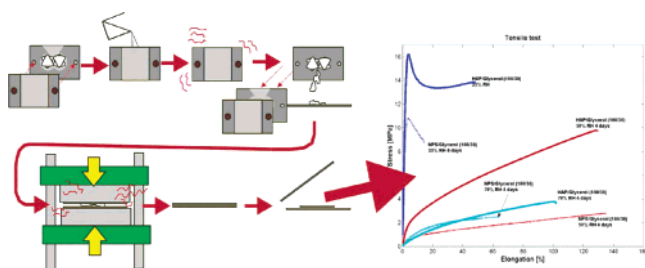
975 Composite System Based on Chitosan and Room-Temperature Ionic Liquid: Direct Electrochemistry and Electrocatalysis of Hemoglobin

Xianbo Lu, Jianqiang Hu, Xin Yao, Zhoupeng Wang, and Jinghong Li*



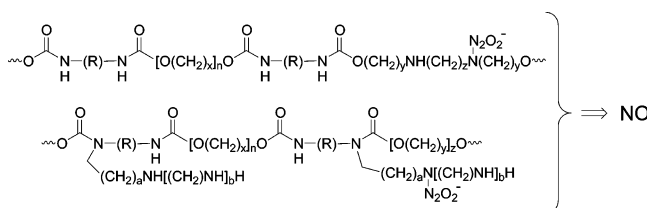
981 Compression Molding and Tensile Properties of Thermoplastic Potato Starch Materials

Mats Thunwall,* Antal Boldizar, and Mikael Rigdahl



987 Nitric Oxide Releasing Polyurethanes with Covalently Linked Diazeniumdiolated Secondary Amines

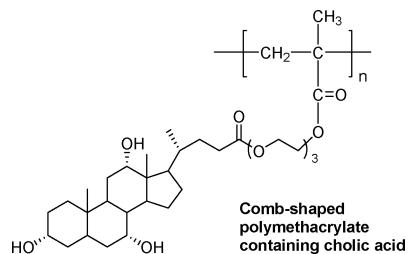
Melissa M. Reynolds, Joseph A. Hrabie, Bong K. Oh, Jeffrey K. Politis, Michael L. Citro, Larry K. Keefer, and Mark E. Meyerhoff*



Notes

995 Preparation of a Comb-Shaped Cholic Acid-Containing Polymer by Atom Transfer Radical Polymerization

Jinqing Hao, Hong Li,* and X. X. Zhu*



■ Supporting Information is available free of charge via the Internet at <http://pubs.acs.org>.

* In papers with more than one author, the asterisk indicates the name of the author to whom inquiries about the paper should be addressed.