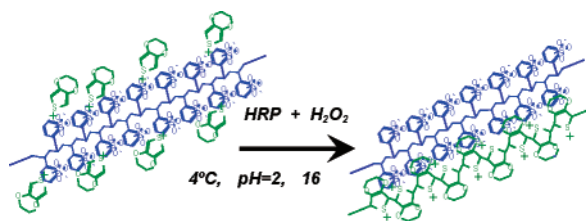


Communications

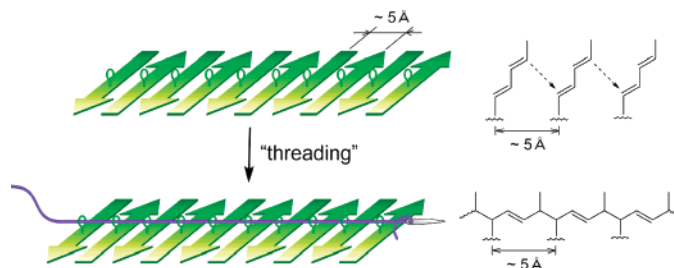
315 First Enzymatic Synthesis of Water-Soluble Conducting Poly(3,4-ethylenedioxythiophene)

Valérie Rumbau, Jose A. Pomposo, Aitziber Elela, Javier Rodriguez, Hans Grande, David Mecerreyes, and Estibalitz Ochoteco*



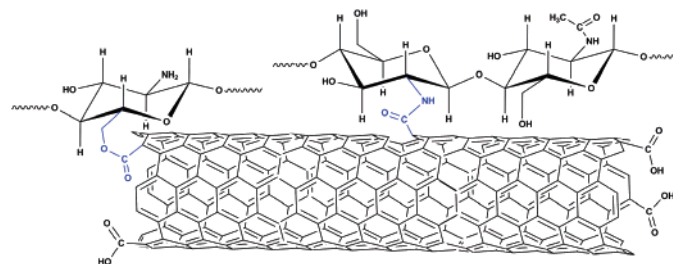
318 “Threading” of β -Sheet Peptides via Radical Polymerization

Takeshi Mori,* Shiro Yasutake, Hideki Inoue, Keiji Minagawa, Masami Tanaka, Takuro Niidome, and Yoshiki Katayama



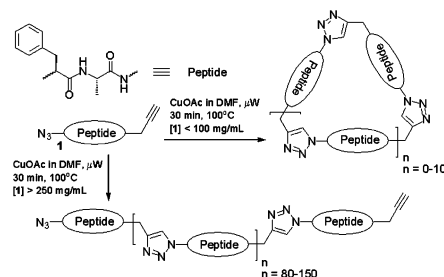
322 Covalent Functionalization of Multiwalled Carbon Nanotubes with a Low Molecular Weight Chitosan

Gang Ke, Wenchao Guan,* Changyu Tang, Wenjie Guan, Danlin Zeng, and Feng Deng



327 Synthesis of Peptide-Based Polymers by ■ Microwave-Assisted Cycloaddition Backbone Polymerization

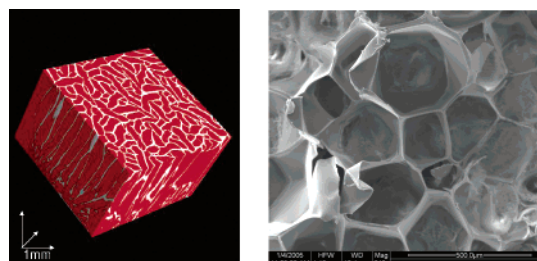
Maarten van Dijk, Khalid Mustafa,
Annemarie C. Dechesne,
Cornelus F. van Nostrum, Wim E. Hennink,*
Dirk T. S. Rijkers, and Rob M. J. Liskamp*



Articles

331 Porous Gelatin Hydrogels: 1. Cryogenic Formation and Structure Analysis

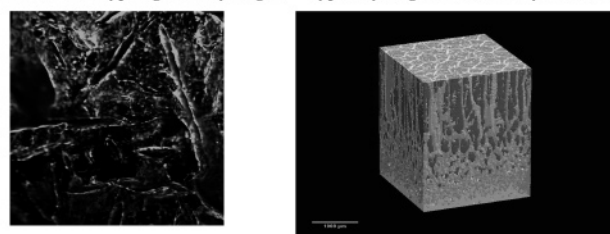
Sandra Van Vlierberghe, Veerle Cnudde,
Peter Dubruel, Bert Masschaele, An Cosijns,
Ilse De Paepe, Patric J. S. Jacobs,
Luc Van Hoorebeke, Jean Paul Remon, and
Etienne Schacht*



338 Porous Gelatin Hydrogels: 2. In Vitro Cell ■ Interaction Study

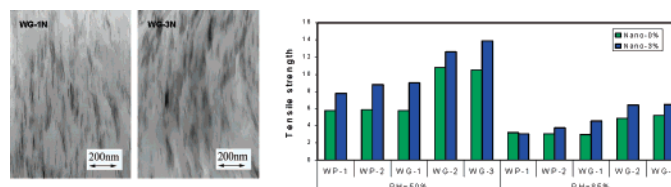
Peter Dubruel,* R. Unger,
Sandra Van Vlierberghe, Veerle Cnudde,
Patric J. S. Jacobs, Etienne Schacht, and
C. J. Kirkpatrick

HUVEC seeded on type I gelatin hydrogels Type I hydrogels visualised by micro-CT



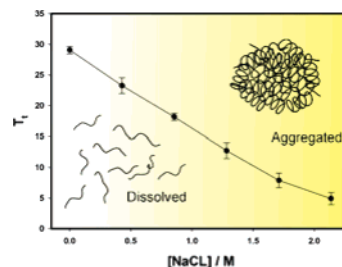
345 Wheat-Gluten-Based Natural Polymer Nanoparticle Composites

Xiaoqing Zhang,* My Dieu Do, Katherine Dean,
Pam Hoobin, and Iko M. Burgar



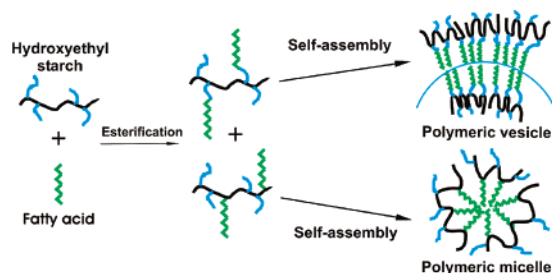
354 Effect of NaCl on the Exothermic and Endothermic Components of the Inverse Temperature Transition of a Model Elastin-like Polymer

Javier Reguera, Dan W. Urry,
Timothy M. Parker, David T. McPherson, and
J. Carlos Rodríguez-Cabello*



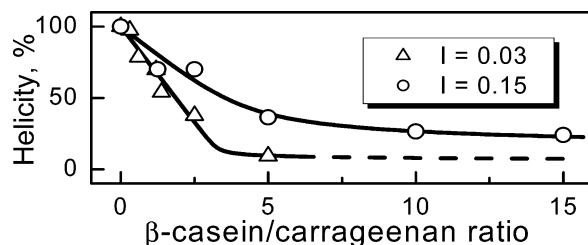
359 Hydrophobically Modified Hydroxyethyl Starch: Synthesis, Characterization, and Aqueous Self-Assembly into Nano-Sized Polymeric Micelles and Vesicles

Ahmed Besheer, Gerd Hause,
Jörg Kressler, and Karsten Mäder*



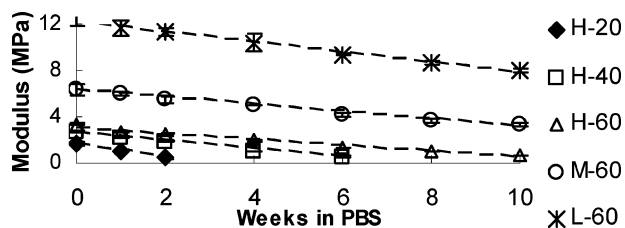
368 Conformational Changes in ι - and κ -Carrageenans Induced by Complex Formation with Bovine β -Casein

Tatiana V. Burova,* Natalia V. Grinberg,
Valerij Ya. Grinberg, Anatoly I. Usov,
Vladimir B. Tolstoguzov, and
Cornelis G. de Kruif



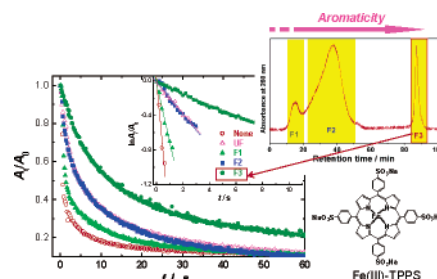
376 Synthesis, Characterization, and In Vitro Degradation of a Biodegradable Photo-Cross-Linked Film from Liquid Poly(ϵ -caprolactone-co-lactide-co-glycolide) Diacrylate

Jin Y. Shen, Xiao Y. Pan, Chin H. Lim,
Mary B. Chan-Park,* Xiao Zhu, and
Roger W. Beuerman



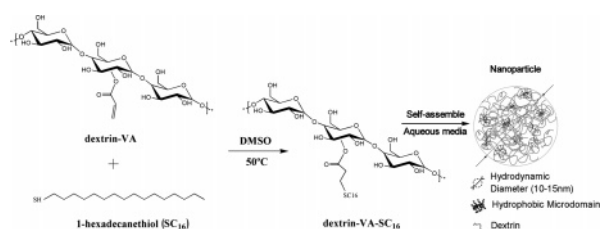
386 Role of Humic Acid Fraction with Higher Aromaticity in Enhancing the Activity of a Biomimetic Catalyst, Tetra(*p*-sulfonatophenyl)porphineiron(III)

Masami Fukushima,* Yasuaki Tanabe,
Kengo Morimoto, and Kenji Tatsumi



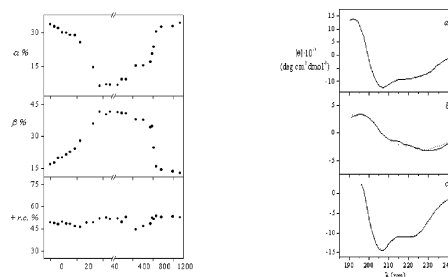
392 Self-Assembled Nanoparticles of Dextrin Substituted with Hexadecanethiol

Catarina Gonçalves, José A. Martins, and Francisco M. Gama*



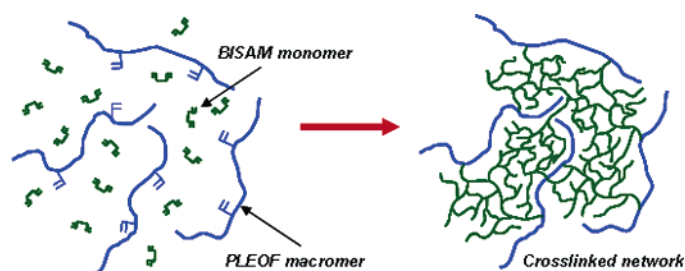
399 Some Properties of Lysozyme–Lithium Perfluorononanoate Complexes

Alessandro Ciurleo, Stefania Cinelli, Monia Guidi, Adalberto Bonincontro, Giuseppe Onori, and Camillo La Mesa*



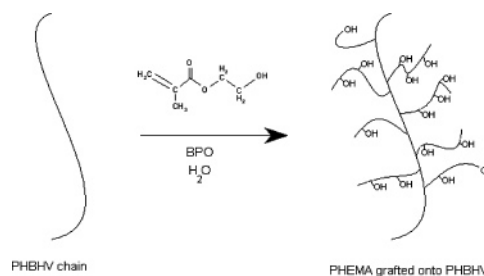
406 Viscoelastic Characterization and Modeling of Gelation Kinetics of Injectable In Situ Cross-Linkable Poly(lactide-co-ethylene oxide-co-fumarate) Hydrogels

Alireza S. Sarvestani, Xuezhong He, and Esmail Jabbari*



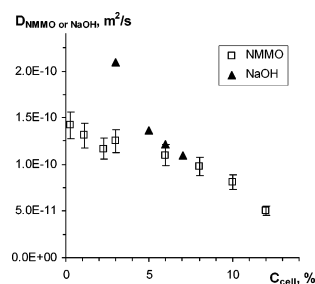
416 Modification of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Film by Chemical Graft Copolymerization

Hoi-Kuan Lao, Estelle Renard,* Isabelle Linossier, Valérie Langlois, and Karine Vallée-Rehel



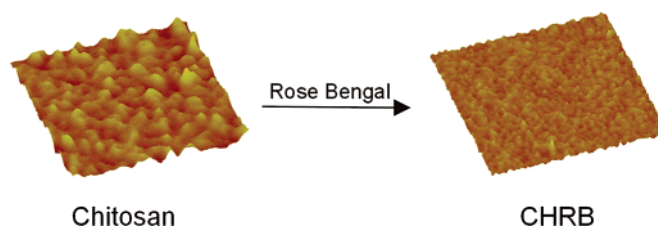
424 Kinetics of Cellulose Regeneration from Cellulose–NaOH–Water Gels and Comparison with Cellulose–N-Methylmorpholine-N-Oxide–Water Solutions

Roxane Gavillon and Tatiana Budtova*

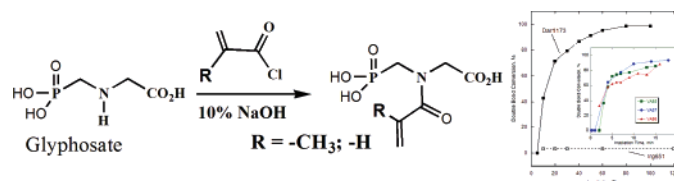


433 Novel Water-Soluble Photosensitizers from Chitosan

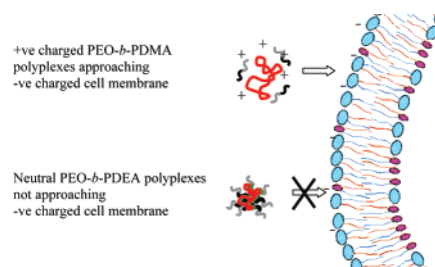
Łukasz Moczek and Maria Nowakowska*

**439 Synthesis and Biological Activity of Photopolymerizable Derivatives of Glyphosate**

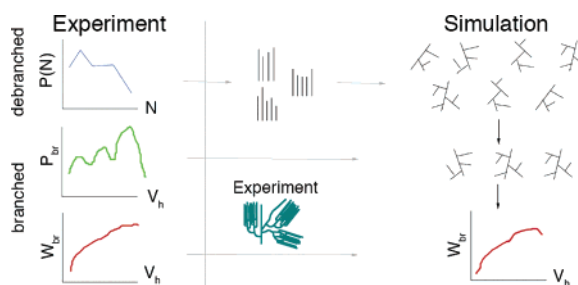
Aneta Bogdanova, Victoria Piunova, Daniel Berger, Andrei V. Fedorov,* and Douglas C. Neckers*

**448 Correlating Transfection Barriers and Biophysical Properties of Cationic Polymethacrylates**

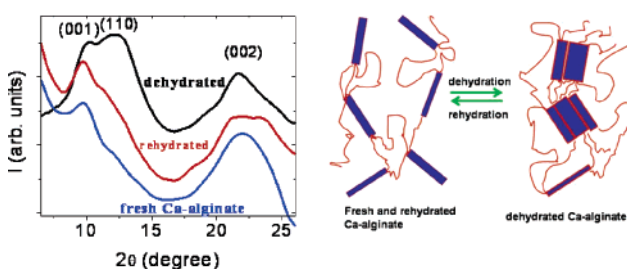
J. F. Tan, T. A. Hatton, K. C. Tam, and H. P. Too*

**455 Interpreting Size-Exclusion Data for Highly Branched Biopolymers by Reverse Monte Carlo Simulations**

Christopher J. C. Watts, Angus Gray-Weale, and Robert G. Gilbert*

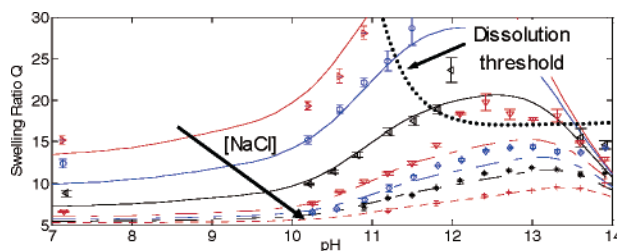
**464 Reexamining the Egg-Box Model in Calcium-Alginate Gels with X-ray Diffraction**

Liangbin Li,* Yapeng Fang, Rob Vreeker, Ingrid Appelqvist, and Eduardo Mendes



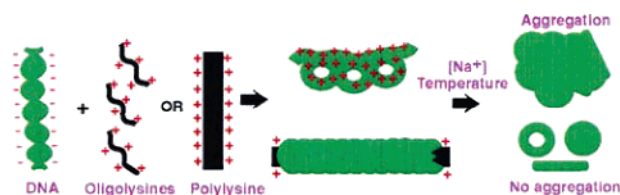
469 Swelling and Dissolution of β -Lactoglobulin Gels in Alkali

Ruben Mercadé-Prieto, Robert J. Falconer, William R. Paterson, and D. Ian Wilson*



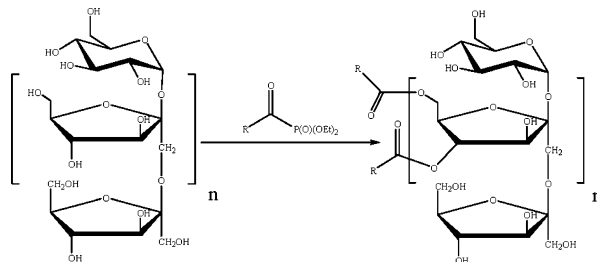
477 Mechanistic Differences in DNA Nanoparticle Formation in the Presence of Oligolysines and Poly-L-lysine

Irina Nayvelt, Thresia Thomas, and T. J. Thomas*



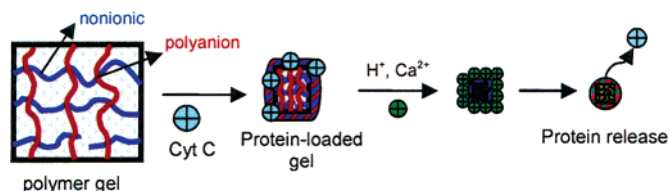
485 Use of Acyl Phosphonates for the Synthesis of Inulin Esters and Their Use as Emulsion Stabilizing Agents

Tina M. Rogge, Christian V. Stevens,* Anton Colpaert, Bart Leveck, and Karl Booten



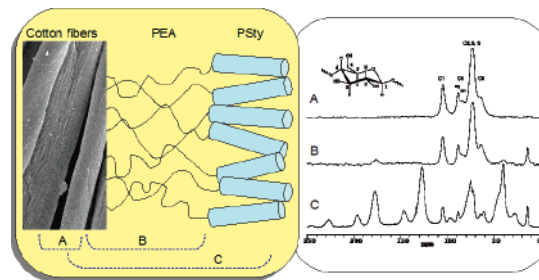
490 Block Polyelectrolyte Networks from Poly(acrylic acid) and Poly(ethylene oxide): Sorption and Release of Cytochrome C

Kyung T. Oh, Tatiana K. Bronich, Victor A. Kabanov, and Alexander V. Kabanov*



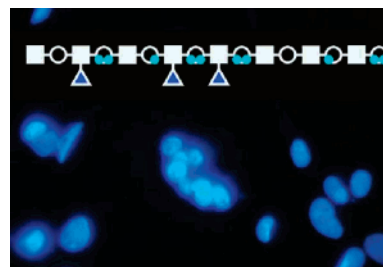
498 Cotton Fibers Encapsulated with Homo- and Block Copolymers: Synthesis by the Atom Transfer Radical Polymerization Grafting-From Technique and Solid-State NMR Dynamic Investigations

Valter Castelvetro,* Marco Geppi, Simone Giaiacopi, and Giulia Mollica

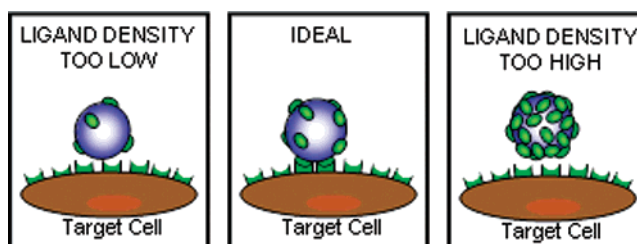


509 Effect of Modified Pectin Molecules on the Growth of Bone Cells

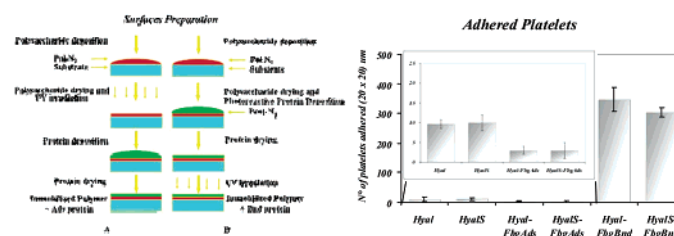
Hanna E. Kokkonen,* Joanna M. Ilvesaro,
Marco Morra, Henk A. Schols, and
Juha Tuukkanen

**516 Polymeric Ultrasound Contrast Agents Targeted to Integrins: Importance of Process Methods and Surface Density of Ligands**

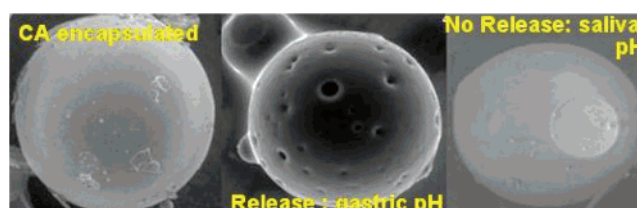
Margaret A. Wheatley,* Justin D. Lathia, and
Kelleny L. Oum

**523 Role of Fibrinogen Conformation in Platelet Activation**

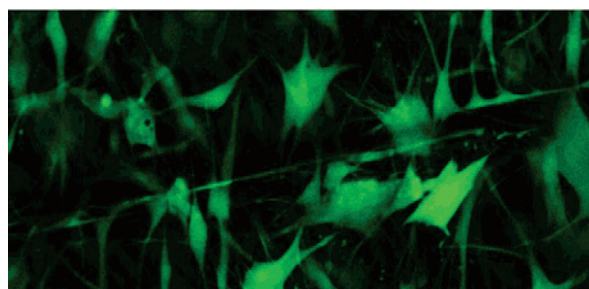
A. Chiumiento, S. Lamponi, and R. Barbucci*

**532 Designing a Self-Associated Cationic Polymer for Enhanced Compatibility, Palatability, and Gastric Release of Cefuroxime Axetil**

Anupa R. Menjoge and Mohan G. Kulkarni*

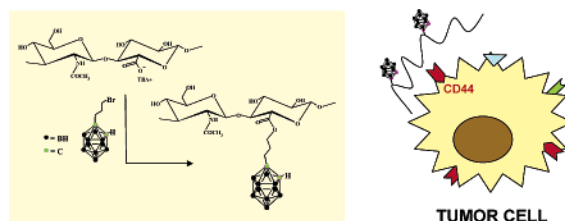
**543 Controlled Microchannelling in Dense Collagen Scaffolds by Soluble Phosphate Glass Fibers**

Showan N. Nazhat,* Ensanya A. Abou Neel,
Asmeret Kidane, Ifty Ahmed, Chris Hope,
Matt Kershaw, Peter D. Lee, Eleanor Stride,
Nader Saffari, Jonathan C. Knowles, and
Robert A. Brown



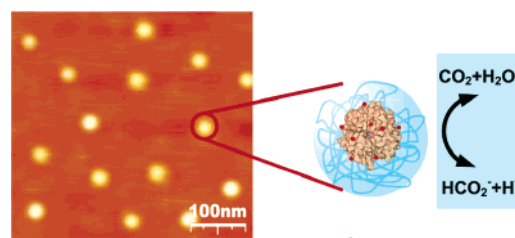
552 Hyaluronan as Carrier of Carboranes for Tumor Targeting in Boron Neutron Capture Therapy

Chiara Di Meo, Luigi Panza, Donatella Capitani, Luisa Mannina, Alessandra Banzato, Maria Rondina, Davide Renier, Antonio Rosato, and Vittorio Crescenzi*



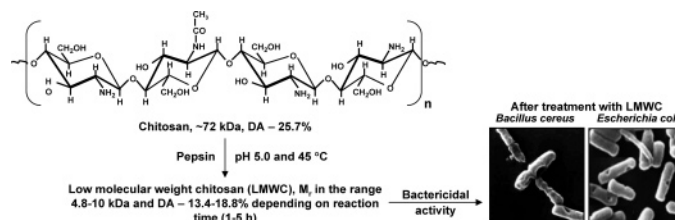
560 Fabrication of Single Carbonic Anhydrase Nanogel against Denaturation and Aggregation at High Temperature

Ming Yan, Zhixia Liu, Diannan Lu, and Zheng Liu*



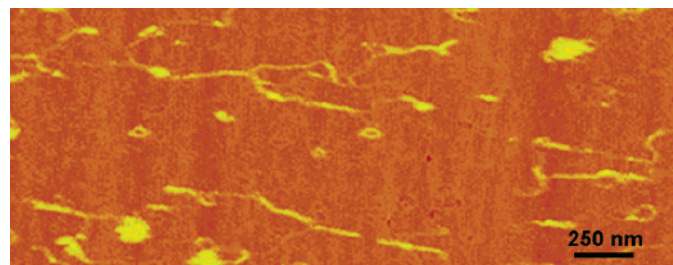
566 Low Molecular Weight Chitosan—Preparation with the Aid of Pepsin, Characterization, and Its Bactericidal Activity

B. Acharya Vishu Kumar, Mandyam C. Varadaraj, and Rudrapatnam N. Tharanathan*



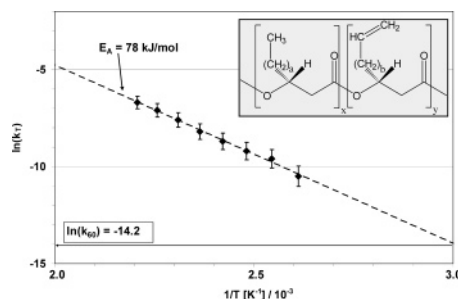
573 Global Structures of High Methoxyl Pectin from Solution and in Gels

Marshall L. Fishman,* Peter H. Cooke, Hoa K. Chau, David R. Coffin, and Arland T. Hotchkiss, Jr.

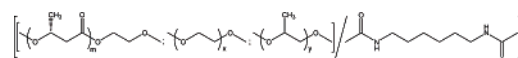


579 Autoxidation of Medium Chain Length Polyhydroxyalkanoate

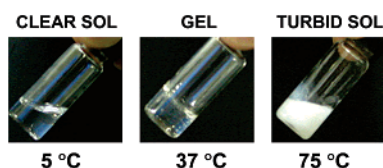
Manfred Schmid,* Axel Ritter, Andreas Grubelnik, and Manfred Zinn



**585 New Biodegradable Thermogelling
■ Copolymers Having Very Low Gelation
Concentrations**

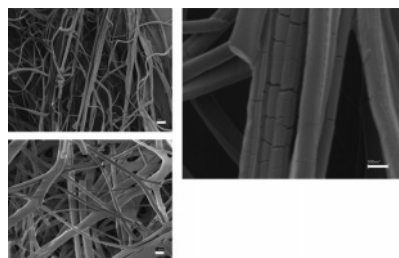


Poly(PEG/PPG/PHB urethane)



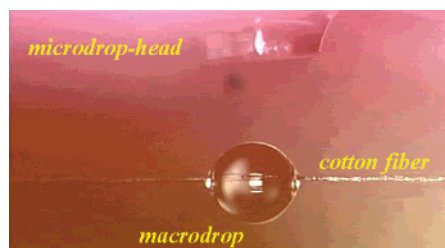
Xian Jun Loh, Suat Hong Goh, and Jun Li*

594 Cross-Linking Chitosan Nanofibers



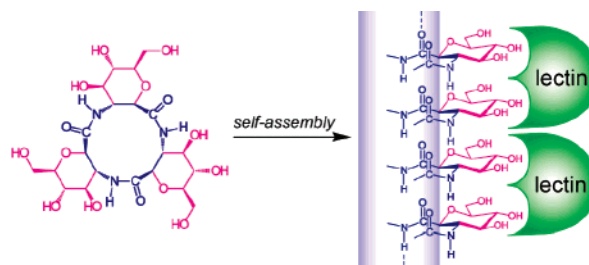
Jessica D. Schiffman and Caroline L. Schauer*

**602 Na-Cellulose Formation in a Single Cotton
Fiber Studied by Synchrotron Radiation
Microdiffraction**



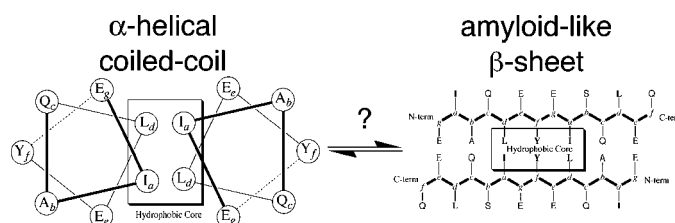
J. Schoeck, R. J. Davies, A. Martel, and
C. Riekel*

**611 Double Assembly Composed of Lectin
■ Association with Columnar Molecular
Assembly of Cyclic Tri- β -peptide Having
Sugar Units**



Futoshi Fujimura, Yoshiki Horikawa,
Tomoyuki Morita, Junji Sugiyama, and
Shunsaku Kimura*

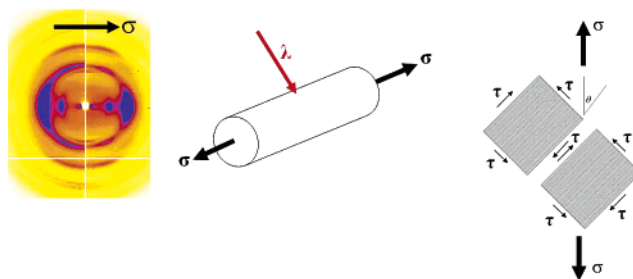
**617 Role of Hydrophobic Clusters in the
■ Stability of α -Helical Coiled Coils and Their
Conversion to Amyloid-like β -Sheets**



He Dong and Jeffrey D. Hartgerink*

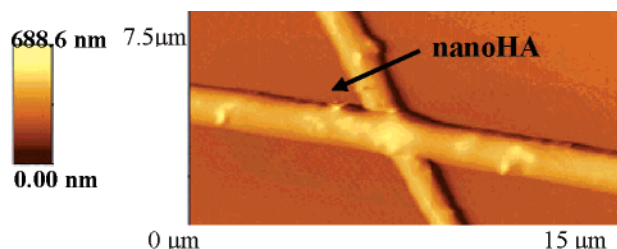
624 Influence of Domain Orientation on the Mechanical Properties of Regenerated Cellulose Fibers

Kenny Kong, Richard J. Davies, Michael A. McDonald, Robert J. Young, Michael A. Wilding, Roger N. Ibbett, and Stephen J. Eichhorn*



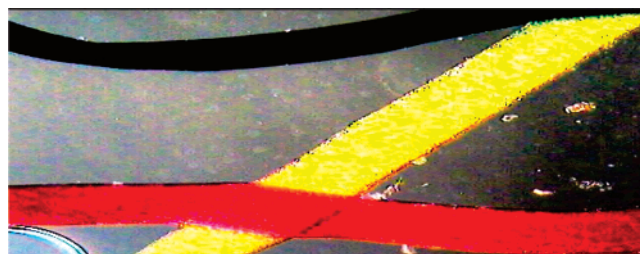
631 Nanostructured Biocomposite Scaffolds Based on Collagen Coelectrospun with Nanohydroxyapatite

Vinoy Thomas, Derrick R. Dean,* Moncy V. Jose, Bini Mathew, S. Chowdhury, and Yogesh K. Vohra



638 Novel Protein Fibers from Wheat Gluten

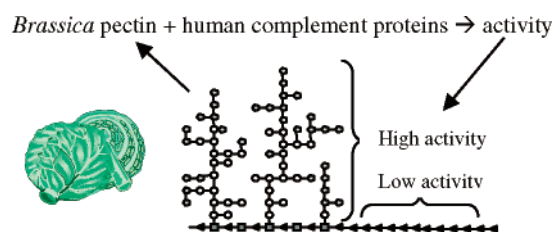
Narendra Reddy and Yiqi Yang*



Wheat gluten fibers dyed with acid dyes

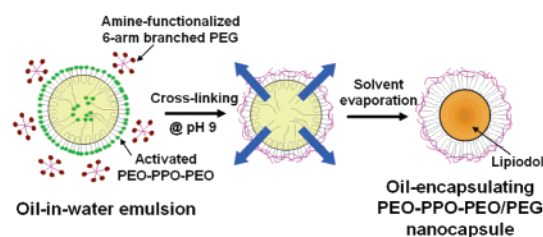
644 Structural Features and Complement-Fixing Activity of Pectin from Three *Brassica oleracea* Varieties: White Cabbage, Kale, and Red Kale

Anne Berit Samuelsen,* Bjørge Westereng, Osman Yousif, Ann Katrin Holtekjølen, Terje E. Michaelsen, and Svein H. Knutsen



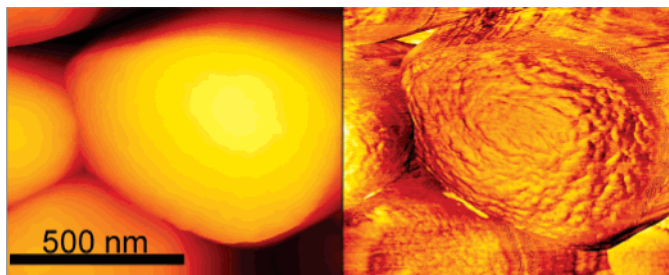
650 Oil-Encapsulating PEO-PPO-PEO/PEG Shell Cross-Linked Nanocapsules for Target-Specific Delivery of Paclitaxel

Ki Hyun Bae, Yuhan Lee, and Tae Gwan Park*



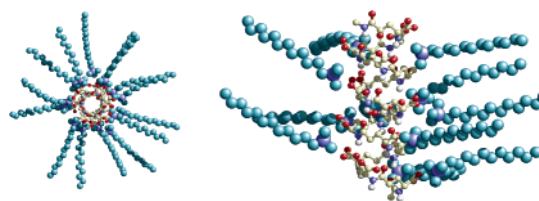
657 Studies on the Influence of Phasins on Accumulation and Degradation of PHB and Nanostructure of PHB Granules in *Ralstonia eutropha* H16

Kenny Kuchta, Lifeng Chi, Harald Fuchs, Markus Pötter, and Alexander Steinbüchel*



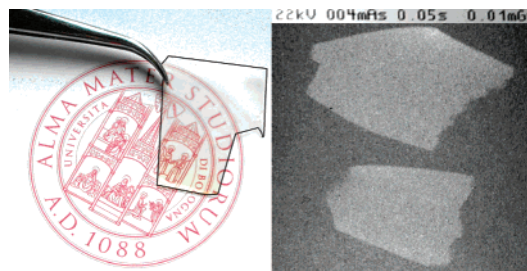
663 Molecular Dynamics Study of Complexes of Poly(glutamate) and Dodecyltrimethylammonium

David Zanuy* and Carlos Alemán*



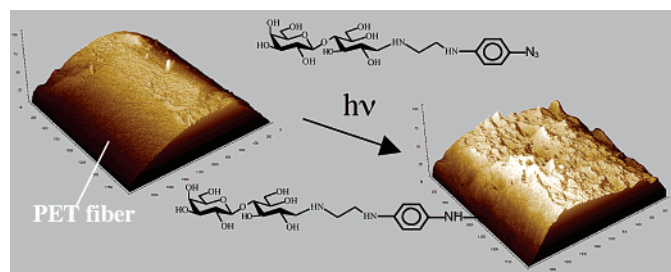
672 Radiopaque Organic–Inorganic Hybrids Based on Poly(D,L-lactide)

Laura Mazzocchetti, Sergio Sandri, Mariastella Scandola,* Anna Bergia, and Giampaolo Zuccheri



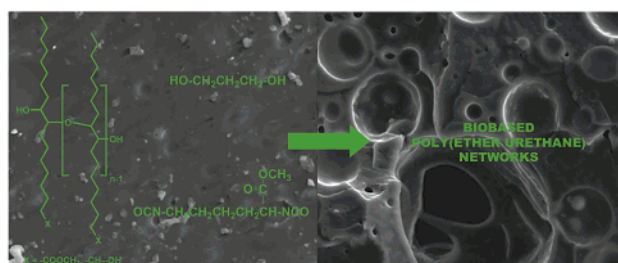
679 Functionalization of Poly(ethylene terephthalate) Fibers by Photografting of a Carbohydrate Derivatized with a Phenyl Azide Group

Laëtitia Renaudie, Christine Le Narvor, Emmanuel Lepleux, and Philippe Roger*



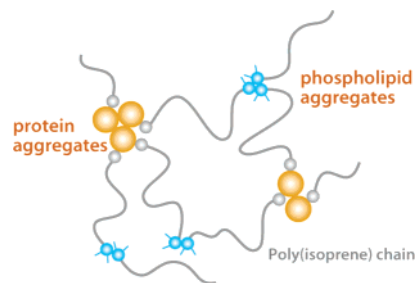
686 Poly(ether urethane) Networks from Renewable Resources as Candidate Biomaterials: Synthesis and Characterization

Gerard Lligadas, Joan C. Ronda,* Marina Galià, and Virginia Cádiz



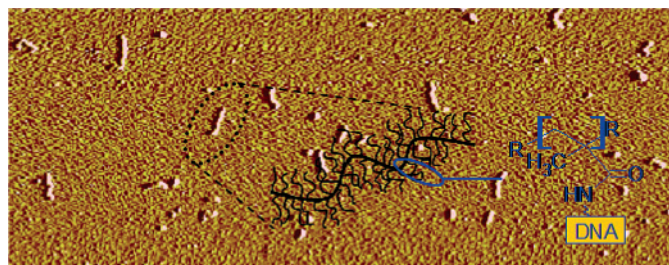
693 Nonuniformity in Natural Rubber As Revealed by Small-Angle Neutron Scattering, Small-Angle X-ray Scattering, and Atomic Force Microscopy

Takeshi Karino, Yuko Ikeda,* Yoritaka Yasuda, Shinzo Kohjiya, and Mitsuhiro Shibayama*



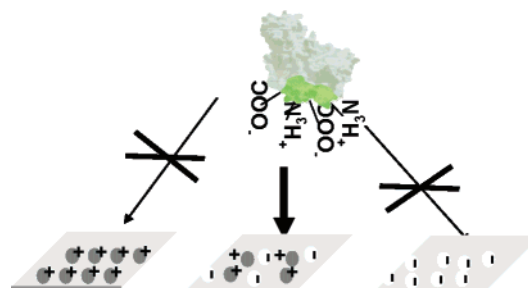
700 Cylindrical Poly(oligo-DNA)

Sabine Fluegel and Michael Maskos*



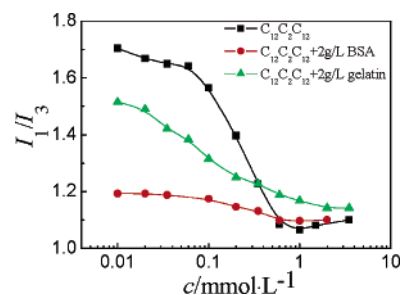
703 Mixed Ion Exchange Supports as Useful Ion Exchangers for Protein Purification: Purification of Penicillin G Acylase from *Escherichia coli*

Manuel Fuentes, Pilar Batalla, Valeria Grazu, Benevides C. C. Pessela, Cesar Mateo, Tamara Montes, Juan A. Hermoso, Jose M. Guisan,* and Roberto Fernandez-Lafuente*



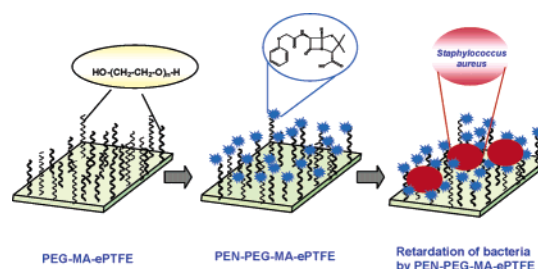
708 Interaction between Proteins and Cationic Gemini Surfactant

Dan Wu, Guiying Xu,* Yuhai Sun, Hongxing Zhang, Hongzhi Mao, and Yujun Feng



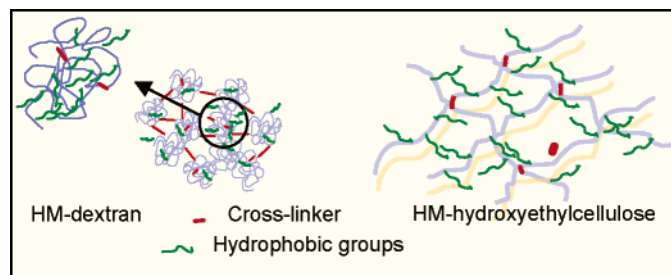
713 Antibacterial Surfaces on Expanded Polytetrafluoroethylene; Penicillin Attachment

Nattharika Aumsuwan, Sabine Heinhorst, and Marek W. Urban*



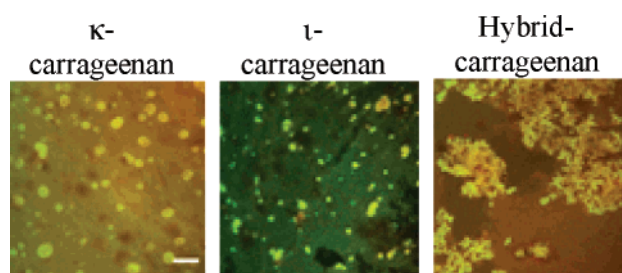
719 Effect of Hydrophobic Modification on Rheological and Swelling Features during Chemical Gelation of Aqueous Polysaccharides

Christelle Silioc, Atoosa Maleki, Kaizheng Zhu, Anna-Lena Kjønksen, and Bo Nyström*



729 Interactions between Carrageenans and Milk Proteins: A Microstructural and Rheological Study

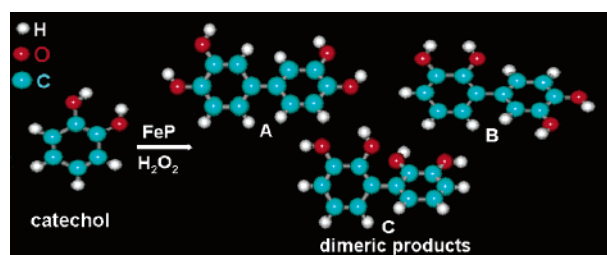
D. Arltøft, R. Ipsen,* F. Madsen, and J. de Vries



Notes

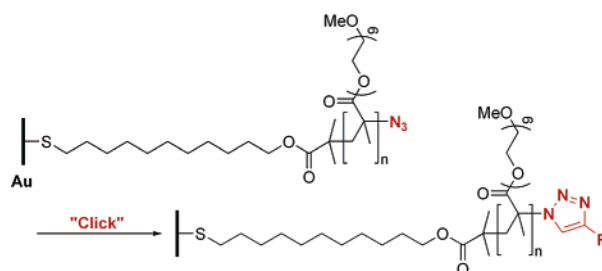
737 Structural Characterization of Isomeric Dimers from the Oxidative Oligomerization of Catechol with a Biomimetic Catalyst

Daniela Šmejkalová, Pellegrino Conte, and Alessandro Piccolo*



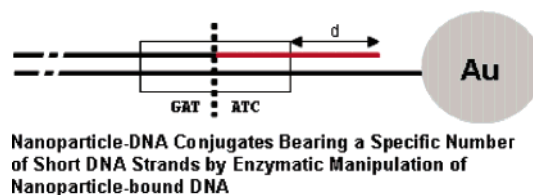
744 Surface-Initiated, Atom Transfer Radical Polymerization of Oligo(ethylene glycol) Methyl Ether Methacrylate and Subsequent Click Chemistry for Bioconjugation

Bong Soo Lee, Jungkyu K. Lee, Wan-Joong Kim, Young Hwan Jung, Sang Jun Sim, Jeewon Lee, and Insung S. Choi*



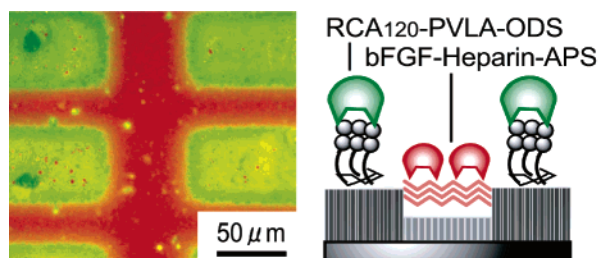
**750 Difference in “Base Pair to Termini” Affects
the Enzymatic Digestion of
Nanoparticle-Bonded DNA**

Wei Ling Tan, Weijie Qin, and
Lin Yue Lanry Yung*



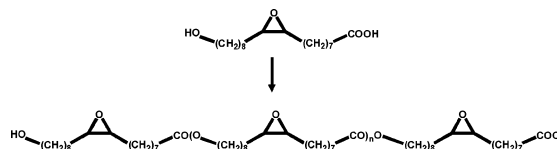
**753 A Micropatterned Multifunctional
Carbohydrate Display by an Orthogonal
Self-Assembling Strategy**

Hajime Sato, Yoshiko Miura,* Nagahiro Saito,
Kazukiyo Kobayashi, and Osamu Takai



**757 Lipase-Catalyzed Synthesis of an
Epoxy-Functionalized Polyester from the
Suberin Monomer
cis-9,10-Epoxy-18-hydroxyoctadecanoic
Acid**

Ann Olsson, Mikael Lindström, and
Tommy Iversen*



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