

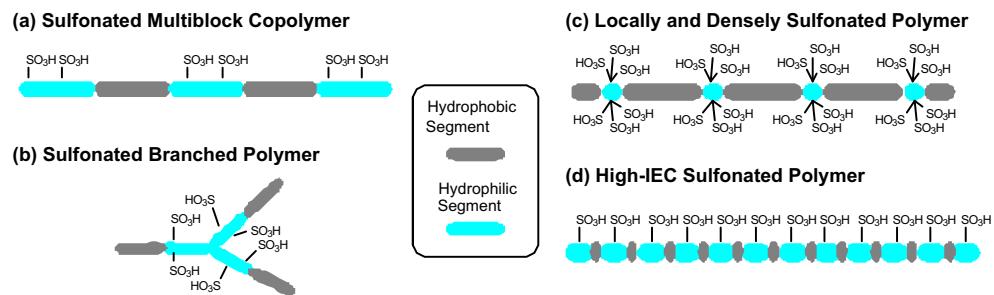
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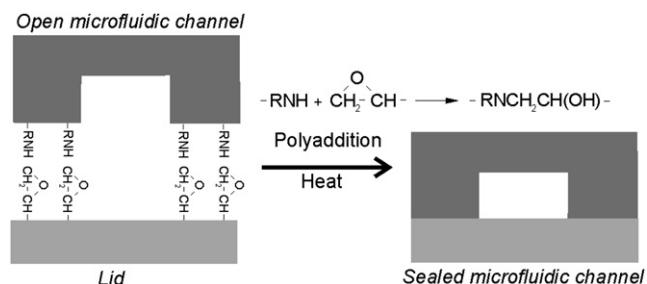
Tomoya Higashihara,
Kazuya Matsumoto, Mitsuhiro Ueda*Department of Organic and Polymeric
Materials, Graduate School of Science and
Engineering, Tokyo Institute of Technology,
2-12-1 H-120, O-okayama, Meguro-ku,
Tokyo 152-8552, Japan

POLYMER COMMUNICATION

The fabrication of polymer microfluidic devices using a solid-to-solid interfacial polyaddition

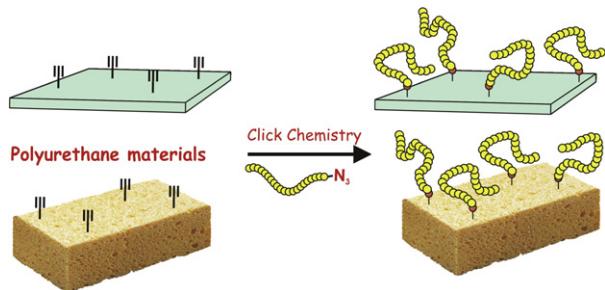
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Zhiyi Zhang*, Ping Zhao, Gaozhi Xiao

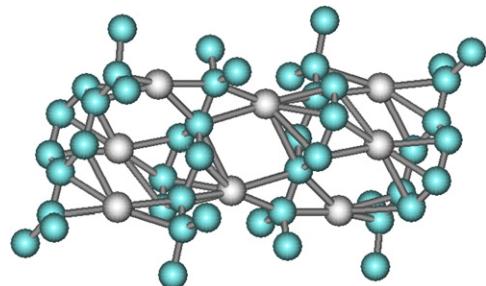
Institute for Microstructural Science, National Research Council Canada,
1200 Montreal Road, Ottawa, Ontario K1A 0R6, Canada

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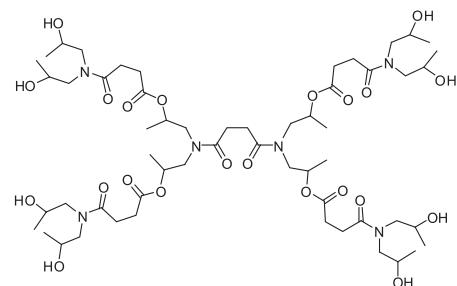
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David Fournier^{a,b}, Bruno G. De Geest^c, Filip E. Du Prez^{a,*}^a Department of Organic Chemistry, Polymer Chemistry Research Group, Ghent University, Krijgslaan 281, S4-bis, B-9000 Ghent, Belgium^b Laboratoire de Chimie Organique et Macromoléculaire (UMR 8009), Université des Sciences et Technologies de Lille, 59655 Villeneuve d'Ascq Cedex, France^c Department of Pharmaceutics, Laboratory of Pharmaceutical Technology, Ghent University, Harelbekestraat 72, B-9000 Ghent, Belgium**Kinetic study of the initiation reaction by a dilithium initiator used for the preparation of ABA triblock copolymers in non-polar medium**

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Kristof Janssens^a, Els Loozen^a, Alexander Yakimansky^{b,*}, Marcel Van Beylen^a^a Laboratory of Macromolecular and Physical Organic Chemistry, Catholic University of Leuven, Celestijnenlaan 200F, B-3001 Leuven, Belgium^b Laboratory of Polymer Nanomaterials and Compositions for Optical Media, Institute of Macromolecular Compounds of the Russian Academy of Sciences, Bolshoi pr. 31, 199004 St. Petersburg, Russian Federation**New improved thermosets obtained from DGEBA and a hyperbranched poly(ester-amide)**

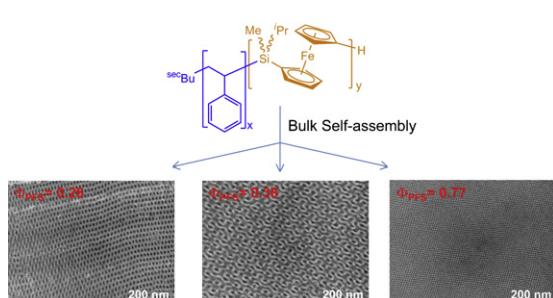
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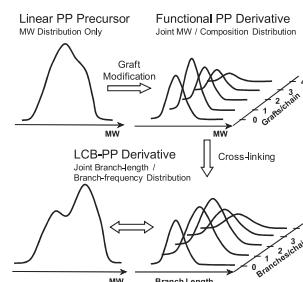
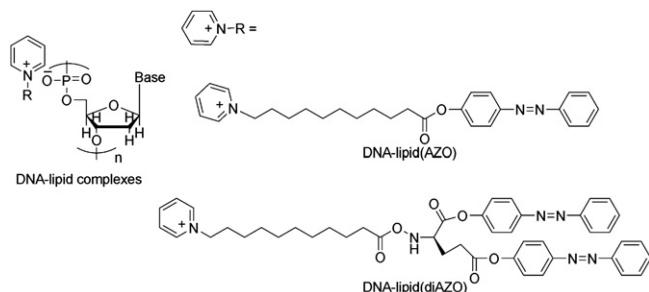
Mireia Morell^a, Xavier Ramis^b, Francesc Ferrando^c, Yingfeng Yu^{a,d}, Angels Serra^{a,*}^a Department of Analytical and Organic Chemistry, University Rovira i Virgili, C/Marcel·li Domingo s/n, 43007 Tarragona, Spain^b Thermodynamics Laboratory, ETSEIB University Politècnica de Catalunya, C/Av. Diagonal 647, 08028 Barcelona, Spain^c Department of Mechanical Engineering, University Rovira i Virgili, C/Països Catalans 26, 43007 Tarragona, Spain^d The Key Laboratory of Molecular Engineering of Polymers, Ministry of Education, Department of Macromolecular Science, Fudan University, Shanghai 200433, China**Diblock copolymers with an amorphous, high glass transition temperature, organometallic block: synthesis, characterisation and self-assembly of polystyrene-*b*-poly(ferrocenylisopropylmethylsilane) in the bulk state**

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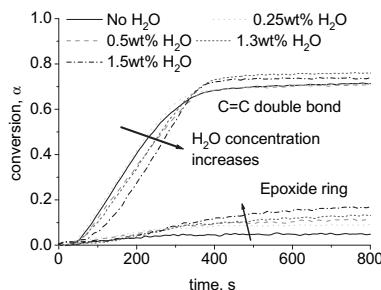
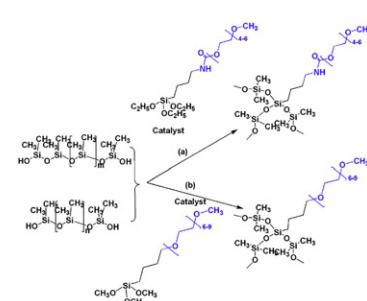
School of Chemistry, University of Bristol, Bristol BS8 1TS, United Kingdom



Chemical modification of PP architecture: Strategies for introducing long-chain branching**pp 5390–5397**Khalil El Mabrouk^a, J. Scott Parent^{a,*}, Bharat I. Chaudhary^b, Ronjuan Cong^c^a Department of Chemical Engineering Queen's University, Kingston, ON, Canada K7L 3N6^b The Dow Chemical Company, 171 River Road, Piscataway, NJ 08854, USA^c The Dow Chemical Company, 2301 Brazosport Blvd, Freeport, TX 77541-3257, USA**DNA-lipid complexes carrying azobenzene moieties: Preparation, characterization, and photoisomerization****pp 5398–5405**Jinqing Qu^{a,*}, Zhiming Qiu^a, Huanqin Chen^a, Naoya Ogata^b, Toshio Masuda^c^a School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510640, China^b Ogata Research Laboratory Limited, Kashiwa-dai Minami 1-3-1, Chitose 066-0009, Japan^c Faculty of Engineering, Department of Environmental and Biological Chemistry, Fukui University of Technology, 3-6-1 Gakuen, Fukui 910-8505, Japan**Effect of water concentration on photopolymerized acrylate/epoxide hybrid polymer coatings as demonstrated by Raman spectroscopy****pp 5406–5413**

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Department of Chemical and Biochemical Engineering, University of Iowa, 4133 Seamans Center, Iowa City, IA 52242, USA

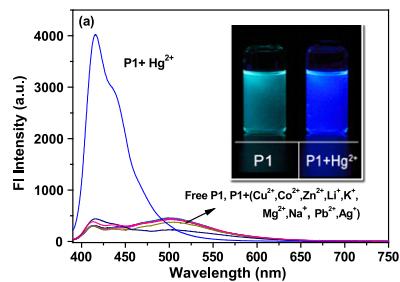
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Linna Zhu, Mian Yang, Cheng Zhong, Chuluo Yang*, Jingui Qin

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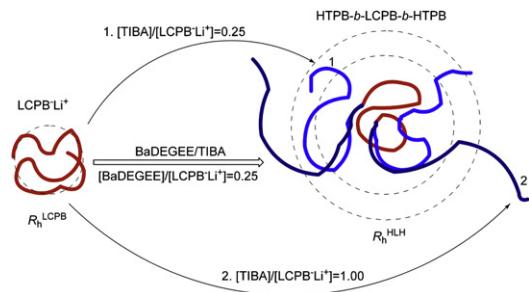


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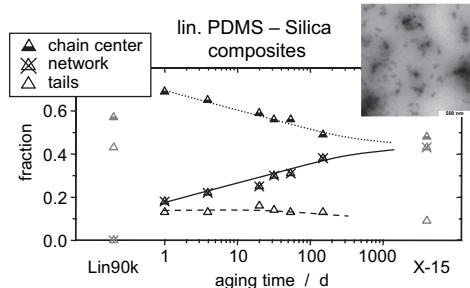
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State Key Laboratory of Fine Chemicals, Department of Polymer Science and Engineering, Dalian University of Technology, Dalian, 116012, China



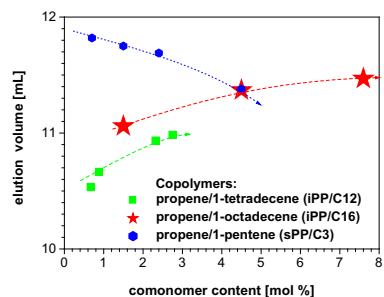
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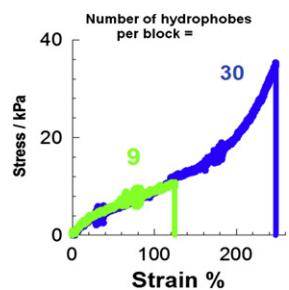
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Anca S^a, Kay Saalwächter^{b,*}^a Institut für Makromolekulare Chemie, Universität Freiburg, Stefan-Meier-Str. 31, D-79104 Freiburg, Germany^b Institut für Physik – NMR, Martin-Luther-Universität Halle-Wittenberg, Betty-Heimann-Str. 7, D-06120 Halle, Germany

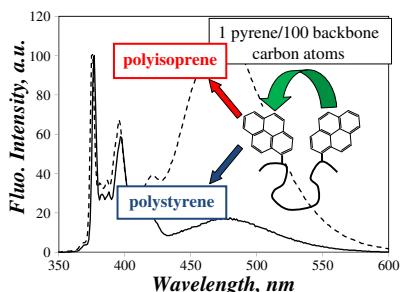
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T. Macko^{a,*}, R. Brüll^a, R.G. Alamo^b, Y. Thomann^c, V. Grumel^d^a German Institute for Polymers, Schlossgartenstr. 6, 64289 Darmstadt, Germany^b Department of Chemical and Biomedical Engineering, FAMU/FSU College of Engineering, 2525 Pottsdamer St., Tallahassee FL 32310, USA^c Freiburg Materials Research Center and Institute for Macromolecular Chemistry, Stefan-Meier-Str. 31, D-79104, Freiburg, Germany^d Department of Chemistry and Polymer Science, University of Stellenbosch, 7602 Matieland, South Africa

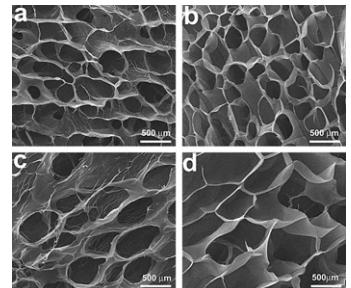
Design of high-toughness polyacrylamide hydrogels by hydrophobic modification**pp 5449–5455**Suzan Abdurrahmanoglu^b, Volkan Can^a, Oguz Okay^{a,*}^a Istanbul Technical University, Department of Chemistry, 34469 Maslak, Istanbul, Turkey^b Marmara University, Department of Chemistry, Kadikoy, Istanbul, Turkey**Comparison of the long range polymer chain dynamics of polystyrene and cis-polyisoprene using polymers randomly labeled with pyrene****pp 5456–5466**

Steven J. Teertstra, Wai Yau Lin, Mario Gauthier, Mark Ingratta, Jean Duhamel*

Institute for Polymer Research, Department of Chemistry, University of Waterloo,
200 University Avenue West, Waterloo, ON N2L 3G1, Canada**Fabrication and characterization of novel macroporous cellulose-alginate hydrogels****pp 5467–5473**

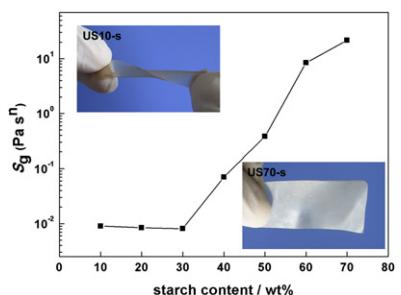
Chunyu Chang, Bo Duan, Lina Zhang*

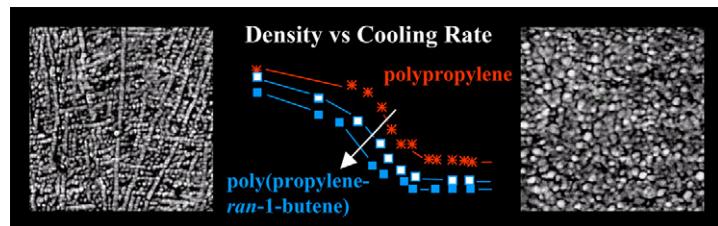
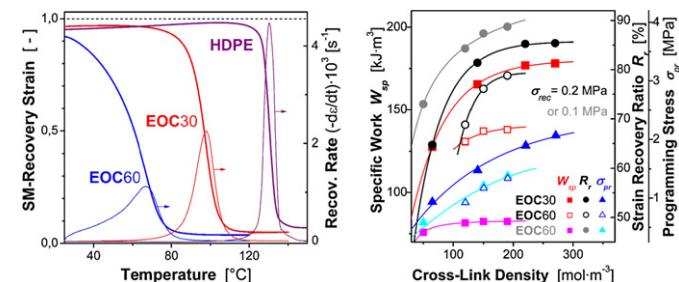
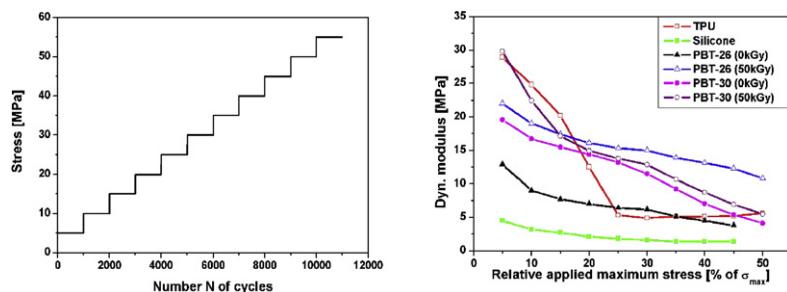
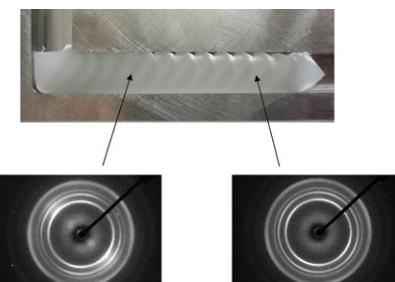
Department of Chemistry, Wuhan University, Wuhan 430072, China

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Yixiang Wang, Ang Lue, Lina Zhang*

Department of Chemistry, Wuhan University, Wuhan 430072, China



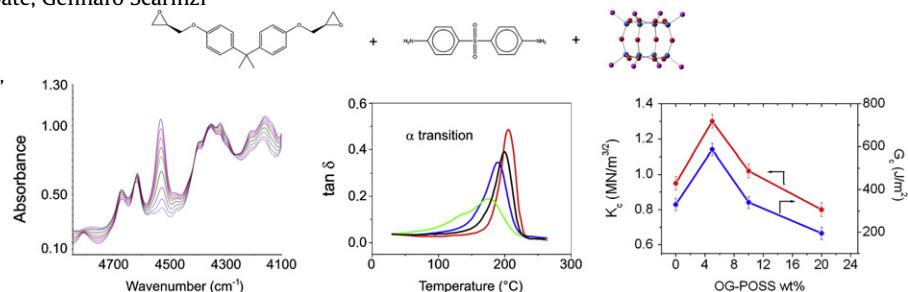
Mesophase formation in poly(propylene-ran-1-butene) by rapid cooling**pp 5482–5489**Daniela Mileva^a, Qamer Zia^a, René Androsch^{a,*}, Hans-Joachim Radusch^a, Stefano Piccarolo^b^a Martin-Luther-University Halle-Wittenberg, Center of Engineering Sciences, 06099 Halle/Saale, Germany^b University of Palermo, Department of Chemical Engineering, 90128 Palermo, Italy**Kinetics and dynamics of thermally-induced shape-memory behavior of crosslinked short-chain branched polyethylenes****pp 5490–5498**Igor S. Kolesov^a, Karl Kratz^b, Andreas Lendlein^b, Hans-Joachim Radusch^{a,*}^a Martin Luther University Halle-Wittenberg, Center of Engineering Sciences, D-06099 Halle (Saale), Germany^b Institute of Polymer Research, GKSS Research Center, Kant Str. 55, 14513 Teltow, Germany**Influence of e-beam irradiation on the dynamic creep and fatigue properties of poly(aliphatic/aromatic-ester) copolymers for biomedical applications****pp 5499–5507**C. Götz^a, U.A. Handge^a, M. Piatek^b, M. El Fray^b, V. Altstädt^{a,*}^a Department of Polymer Engineering, Faculty of Engineering Sciences, University of Bayreuth, Universitätsstrasse 30, 95447 Bayreuth, Germany^b Division of Biomaterials and Microbiological Technologies, Szczecin, West Pomeranian University of Technology, ul. Pulaskiego 10, 70-32 Szczecin, Poland**Deformation behaviour and mechanical properties of polypropylene processed by equal channel angular extrusion: Effects of back-pressure and extrusion velocity****pp 5508–5517**R. Boulahia^{a,b}, J.M. Gloaguen^c, F. Zaïria^{a,*}, M. Naït-Abdelaziz^a, R. Seguela^c, T. Boukharouba^b, J.M. Lefebvre^c^a Université Lille 1 Sciences et Technologies, Laboratoire de Mécanique de Lille (UMR CNRS 8107), Avenue P. Langevin, 59655 Villeneuve d'Ascq Cedex, France^b Laboratoire de Mécanique Avancée, USTHB, BP32 El-Alia Bab-Ezzouar, 16111 Alger, Algeria^c Université Lille 1 Sciences et Technologies, Laboratoire de Structure et Propriétés de l'Etat Solide (UMR CNRS 8008), Bâtiment C6, 59655 Villeneuve d'Ascq Cedex, France

Reactivity, viscoelastic behaviour and mechanical performances of hybrid systems based on epoxy resins and reactive polyhedral oligosilsesquioxanes

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Giuseppe Ragosta*, Pellegrino Musto, Mario Abbate, Gennaro Scarinzi

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National Research Council of Italy, via Campi Flegrei, 34,
Olivetti Building, Pozzuoli (NA) 80078, Italy



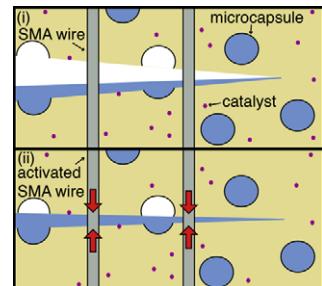
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E.L. Kirkby^a, V.J. Michaud^a, J.-A.E. Månsen^{a,*}, N.R. Sottos^b, S.R. White^b

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^b Autonomic Materials Systems Group, Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA



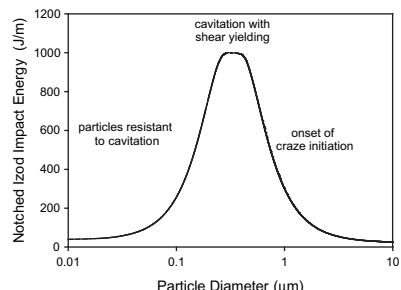
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Synthesis and thermomechanical behavior of (qua)ternary thiol-ene(acrylate) copolymers

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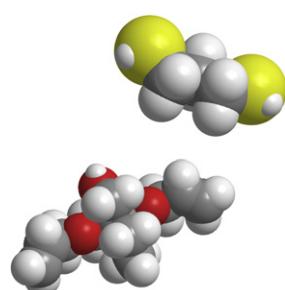
Scott E. Kasprzak^{a,*}, Blanton Martin^b, Tulika Raj^c, Ken Gall^{a,d}

^a G.W.W. School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA 30332, USA

^b Dept. of Chemistry & Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332, USA

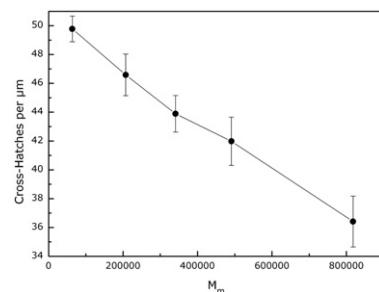
^c W.H.C. Dept. of Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA 30332, USA

^d Materials Science & Engineering, Georgia Institute of Technology, Atlanta, GA 30332, USA



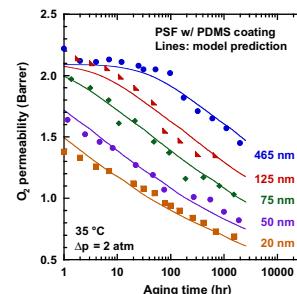
A quantitative electron-microscopic investigation of α -phase lamellae in isotactic polypropylene fractions**pp 5559–5564**H.M. White^a, D.C. Bassett^{a,*}, P. Jääskeläinen^b

^a J.J. Thomson Physical Laboratory, University of Reading, Whiteknights, Reading RG6 6AF, UK
^b Borealis Polymers Oy, Porvoo, Finland

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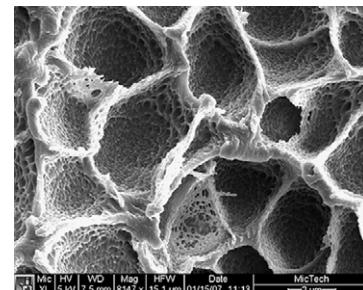
Brandon W. Rowe, Benny D. Freeman, Donald R. Paul*

Department of Chemical Engineering, Texas Materials Institute and Center for Energy and Environmental Resources, The University of Texas at Austin, Austin, Texas 78712, United States, USA

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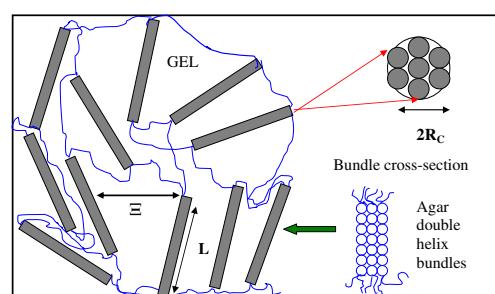
Dustin Miller, Pavee Chatchaisucha, Vipin Kumar*

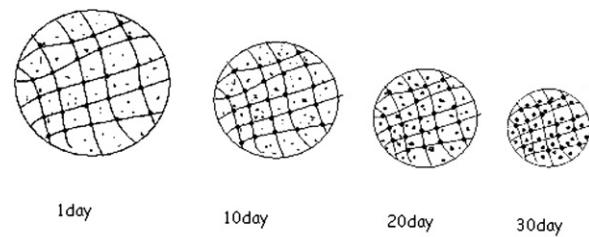
Department of Mechanical Engineering, University of Washington, Seattle, WA 98195, USA

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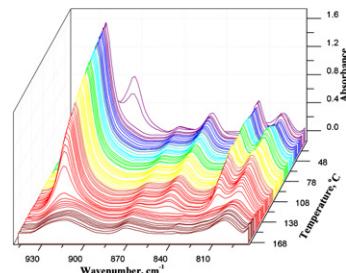
Shilpi Boral, H.B. Bohidar*

Polymer and Biophysics Laboratory, School of Physical Sciences, Jawaharlal Nehru University, New Delhi-110 067, India

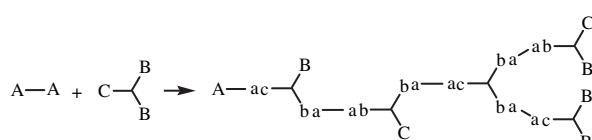


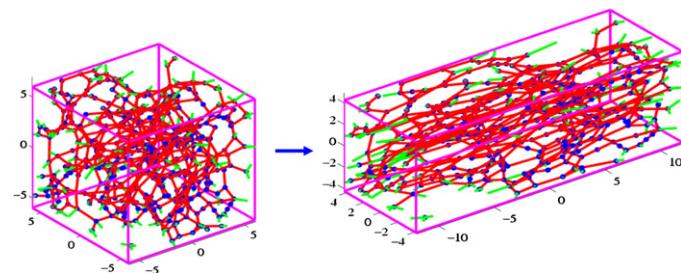
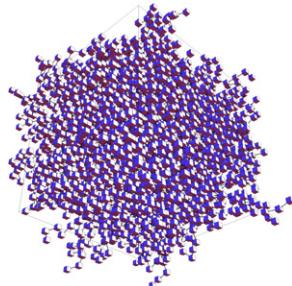
Structural evolution of aging agar-gelatin co-hydrogels**pp 5589–5597**S. Santinath Singh^a, V.K. Aswal^b, H.B. Bohidar^{a,*}^a *Polymer and Biophysics Lab, School of Physical Sciences, Jawaharlal Nehru University, New Delhi-110 067, India*^b *Solid State Physics Division, Bhabha Atomic Research Centre, Mumbai-400 085, India*

Agar gel shrinks whereas agar gelatin complex is swelling

Crystalline transformation of isotactic polybutene-1 in supercritical CO₂ studied by in-situ fourier transform infrared spectroscopy**pp 5598–5604**Jingya Shi^a, Peiyi Wu^{a,*}, Lei Li^b, Tao Liu^b, Ling Zhao^b^a *The Key Laboratory of Polymer Engineering Science(Ministry of Education) and Department of Macromolecular Science and Laboratory for Advanced Materials, Fudan University, Shanghai 200433, PR China*^b *State Key Laboratory of Chemical Engineering, East China University of Science and Technology, Shanghai 200237, PR China***Determination of molecular weight and molecular radius of the polyamido carboxylic acid dendrimer using generation numbers****pp 5605–5607**

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Chemistry Department, Payame Noor University, Iran**Theoretical investigation on the polyaddition of A₂ and CB₂ monomers with non-equal reactivity****pp 5608–5612**Zhiping Zhou^{a,*}, Zhengwei Jia^a, Deyue Yan^b^a *School of Materials Science and Engineering, Jiangsu University, 301 Xuefu Road, Zhenjiang 212013, China*^b *The State Key Laboratory of Metal Matrix Composites, Shanghai Jiao Tong University, 800 Dongchuan Road, Shanghai 200240, China*

A mesoscopic network model for permanent set in crosslinked elastomers**pp 5613–5617**Todd H. Weisgraber^{a,*}, Richard H. Gee^a, Amitesh Maiti^a, David S. Clague^b, Sarah Chinn^a, Robert S. Maxwell^a^a Lawrence Livermore National Laboratory, 7000 East Avenue L-184, Livermore, CA 94551, USA^b Department of Biomedical Engineering, California Polytechnic State University, San Luis Obispo, CA 93407, USA**The distribution of the relaxation times as seen by bond fluctuation model****pp 5618–5622**J. Molina-Mateo^a, J.M. Meseguer Dueñas^{a,b}, J.L. Gómez Ribelles^{a,b,c}, C. Torregrosa Cabanilles^{a,*}^a Center for Biomaterials and Tissue Engineering, Universidad Politécnica de Valencia, Camino de Vera s/n, 46022, Valencia, Spain^b CIBER en Bioingeniería, Biomateriales y Nanomedicina, Valencia, Spain^c Regenerative Medicine Unit, Centro de Investigación Príncipe Felipe, Autopista del Saler 16, 46013 Valencia, Spain

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