

Polymer Vol. 50, No. 24, 16 November 2009

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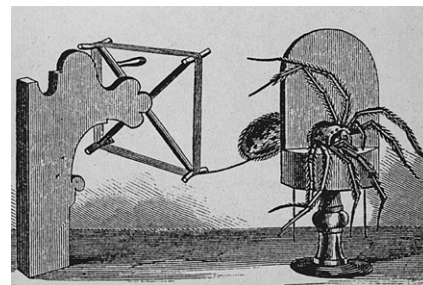
FEATURE ARTICLE

Silks as ancient models for modern polymers

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POLYMER PAPERS

Synthesis and characterization of a plant cutin mimetic polymer

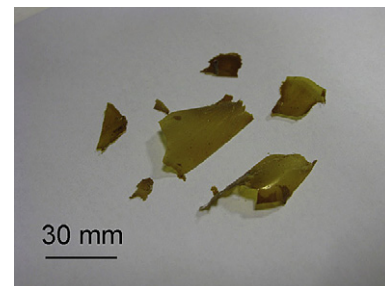
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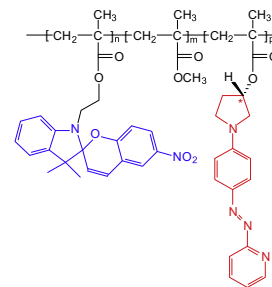
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^c *Departamento de Bioquímica, Biología Molecular y Química Orgánica, Facultad de Ciencias, Universidad de Málaga, E-29071 Málaga, Spain*

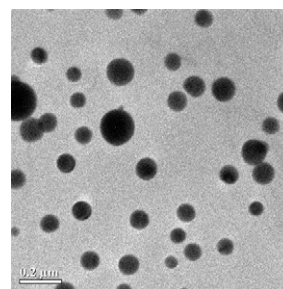


Optical and chiroptical switches based on photoinduced photon and proton transfer in copolymers containing spiropyran and azopyridine chromophores in their side chains

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L. Angiolini^{a,*}, T. Benelli^a, L. Giorgini^a, F.M. Raymo^b^a Dipartimento di Chimica Industriale e dei Materiali and INSTM UdR-Bologna, University of Bologna, Viale Risorgimento 4, 40136 Bologna, Italy^b Department of Chemistry, University of Miami, 1301 Memorial Drive, Coral Gables, FL 33146-0431, USA**Scratch resistant tough nanocomposite epoxy coatings based on hyperbranched polyesters**

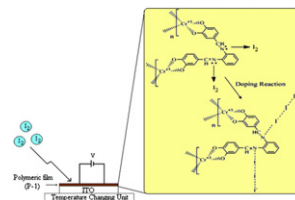
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M. Sangermano^{a,b,*}, M. Messori^{b,c,**}, M. Martin Galleco^a, G. Rizza^d, B. Voit^e^a Politecnico di Torino, Dipartimento di Scienza dei Materiali e Ingegneria Chimica, C.so Duca degli Abruzzi 24, 10129 Torino, Italy^b Consorzio Interuniversitario per la Scienza e la Tecnologia dei Materiali (INSTM), Firenze, Italy^c Università degli Studi di Modena e Reggio Emilia, Dipartimento di Ingegneria dei Materiali e dell'Ambiente, Via Vignolesse 905/A, 41125, Modena, Italy^d Laboratoires des Solides Irradies, Ecole Polytechnique/CEA (DSM-DRECAM)/CNRS (UMR 7642), 91128 Palaiseau Cedex, France^e Leibniz Institute of Polymer Research Dresden, Hohe Strasse 6, D-01069 Dresden, Germany**Soluble semi-conductive chelate polymers containing Cr(III) in the backbone: Synthesis, characterization, optical, electrochemical, and electrical properties**

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Mehmet Yıldırım, İsmet Kaya*

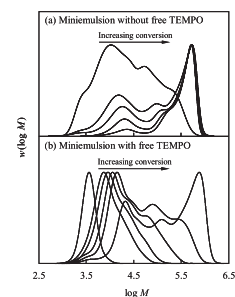
Çanakkale Onsekiz Mart University, Faculty of Sciences and Arts, Department of Chemistry, TR-17020 Çanakkale, Turkey

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Per B. Zetterlund^{1*}, Nur Alam, Masayoshi Okubo^{**}

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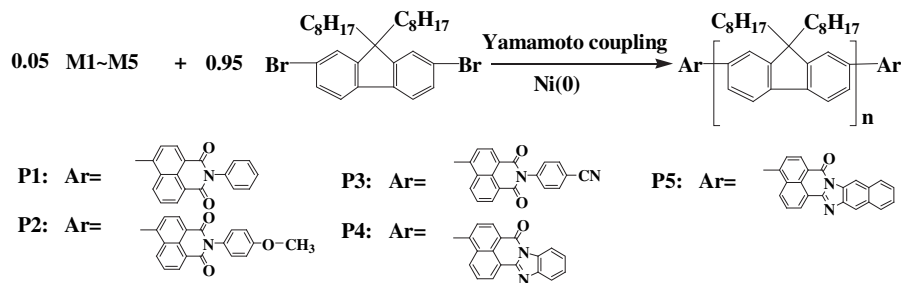


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Frontier Material and Micro/Nano Science and
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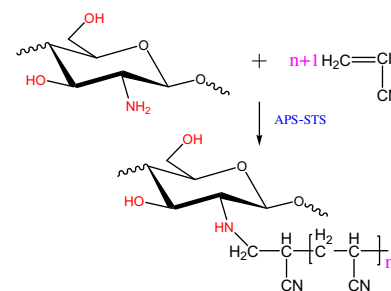
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Pengju Lv^a, Yuezhen Bin^{a,*}, Yongqiang Li^a, Ru Chen^a, Xuan Wang^b, Baoyan Zhao^b

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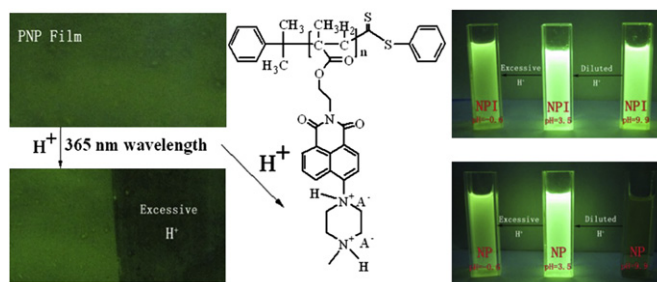


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Jianbing Jiang, Bing Leng, Xiao Xiao, Ping Zhao, He Tian*

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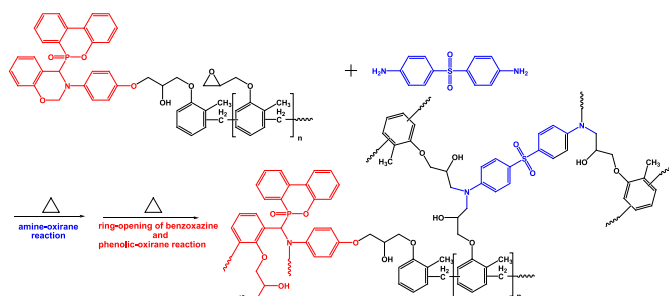
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Hong Tze Lin^a, Ching Hsuan Lin^{a,*}, Yu Ming Hu^a, Wen Chiung Su^b

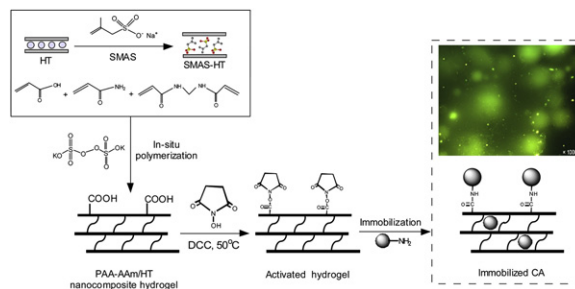
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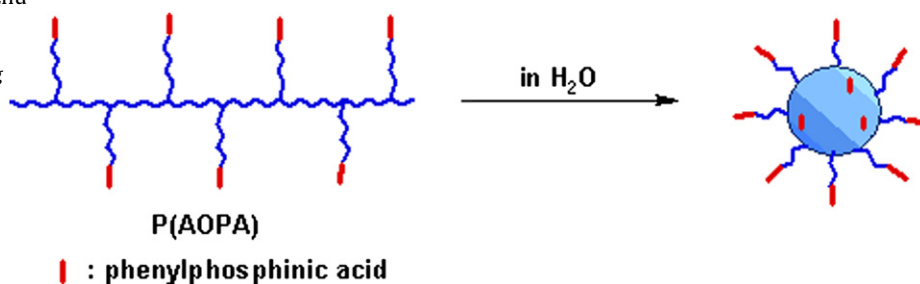
Ya-Tao Zhang^{a, b}, Tian-Tian Zhi^a, Lin Zhang^{a, *}, He Huang^c, Huan-Lin Chen^a^a College of Chemical and Biochemical Engineering, Zhejiang University, Hangzhou 310027, People's Republic of China^b School of Chemical Engineering and Energy, Zhengzhou University, Zhengzhou 450001, People's Republic of China^c College of Life Science and Pharmaceutical Engineering, Nanjing University of Technology, Nanjing 21009, People's Republic of China

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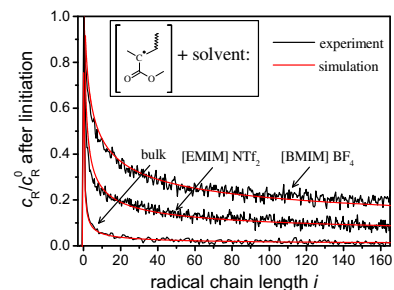
Daoben Hua^{*}, Jing Tang, Jianlin Jiang, Xiulin Zhu

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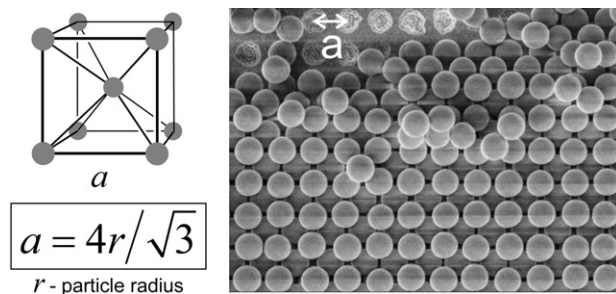
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Johannes Barth^a, Michael Buback^{a, *}, Gudrun Schmidt-Naake^b, Inga Woecht^b^a Institute for Physical Chemistry, University of Göttingen, Tammannstraße 6, D-37077 Göttingen, Germany^b Institute of Technical Chemistry, Clausthal University of Technology, Erzstraße 18, D-38678 Clausthal-Zellerfeld, Germany

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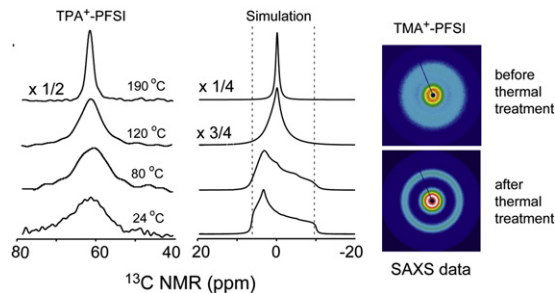
Nina V. Dziomkina, Mark A. Hempenius, G. Julius Vancso^{*}Materials Science and Technology of Polymers, MESA⁺ Institute for Nanotechnology, University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands

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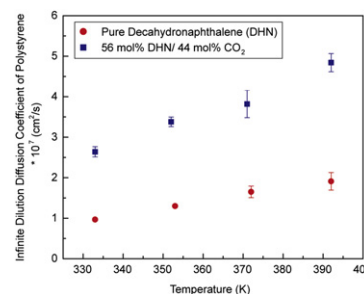
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Laura Beth Dong^a, Ruben G. Carbonell^a, George W. Roberts^{a,*}, Douglas J. Kiserow^{a,b}

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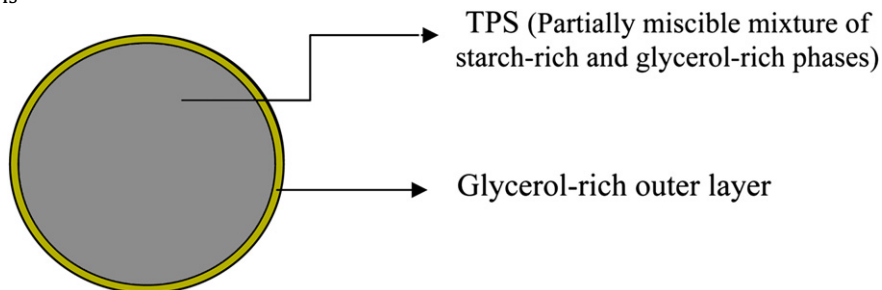
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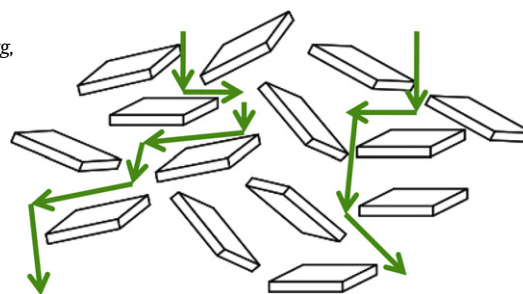
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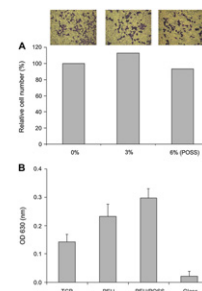
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^b Department of Civil and Environmental Engineering, Virginia Polytechnic Institute and State University Blacksburg, VA 24061-0246, USA



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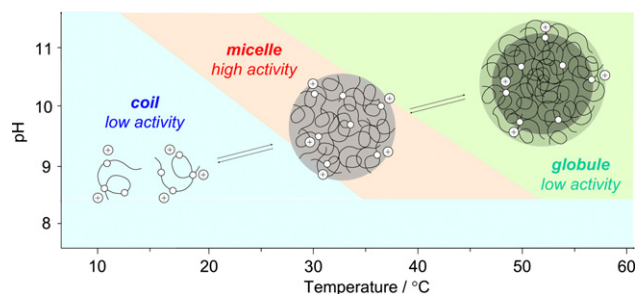
Wenshou Wang^a, Yan-lin Guo^b, Joshua U. Otaigbe^{a,*}^a School of Polymers & High Performance Materials, The University of Southern Mississippi, Hattiesburg, MS 39406-0076, United States^b Department of Biological Sciences, The University of Southern Mississippi, Hattiesburg, MS 39406-0076, United States

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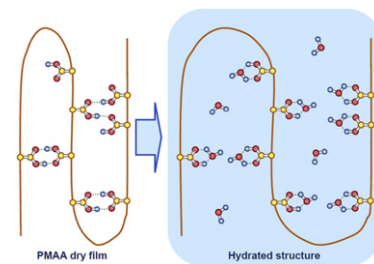
Yasuhiro Shiraishi^{*}, Takeshi Suzuki, Takayuki Hirai

Research Center for Solar Energy Chemistry, and Division of Chemical Engineering, Graduate School of Engineering Science, Osaka University, 1-3 Machikaneyama-cho, Toyonaka 560-8531, Japan



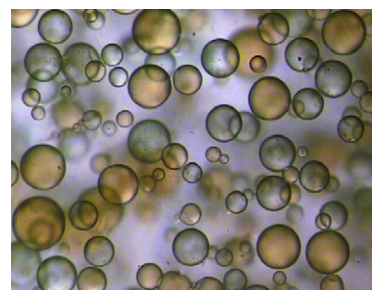
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Tomokazu Tajiri^{a,b}, Shigeaki Morita^c, Yukihiro Ozaki^{a,*}^a Department of Chemistry, School of Science and Technology, Kwansai-Gakuin University, Sanda, Hyogo 669-1337, Japan^b Pharmaceutical Analysis, Pharmaceutical Research & Technology Laboratories, Technology, Astellas Pharma Inc., Yaizu, Shizuoka 425-0072, Japan^c EcoTopia Science Institute, Nagoya University, Nagoya, Aichi 464-8603, Japan

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Yan Chao Yuan^{a,b}, Min Zhi Rong^b, Ming Qiu Zhang^{b,*}, Gui Cheng Yang^b^a Key Laboratory for Polymeric Composite and Functional Materials of Ministry of Education, DSAPM Lab, School of Chemistry and Chemical Engineering, Zhongshan University, Guangzhou 510275, PR China^b Materials Science Institute, Zhongshan University, Guangzhou 510275, PR China

In situ FTIR spectroscopic study of the conformational change of syndiotactic polypropylene during the isothermal crystallization

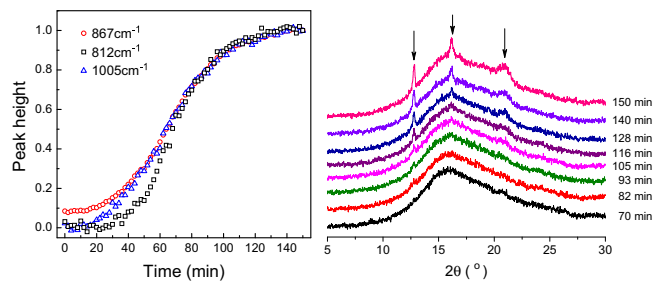
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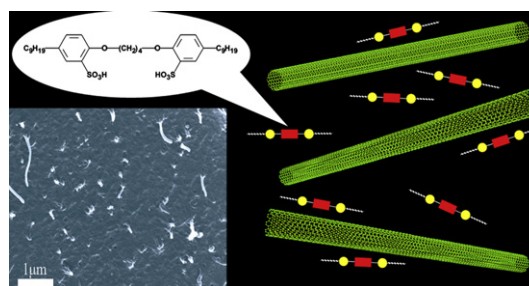
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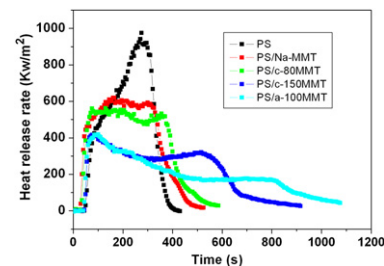
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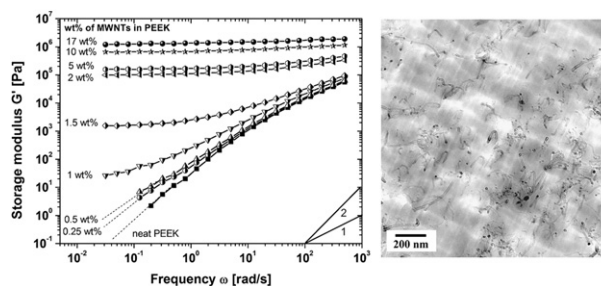
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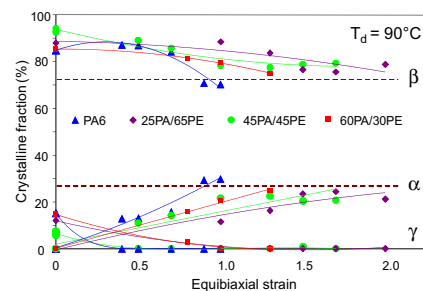
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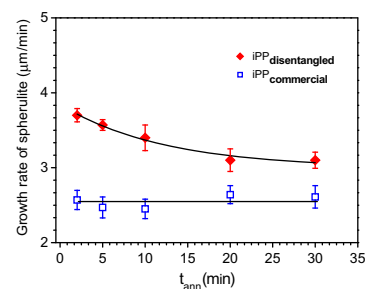
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Xuehui Wang^a, Ruigang Liu^a, Min Wu^a, Zhigang Wang^{b,*}, Yong Huang^{a,*}

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Electrospinning nanoribbons of a bioengineered silk-elastin-like protein (SELP) from water

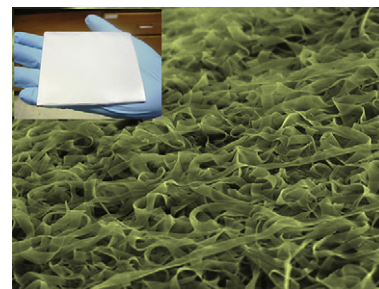
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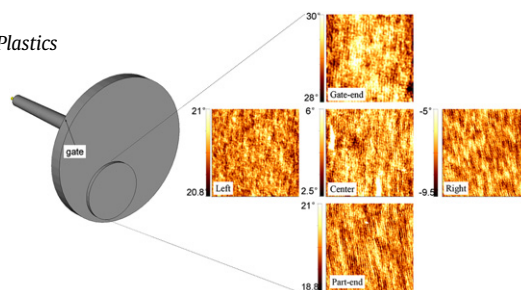


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Liang Fang, Ming Wei, Yingrui Shang, Lady Jimenez, David Kazmer, Carol Barry, Joey Mead^{*}

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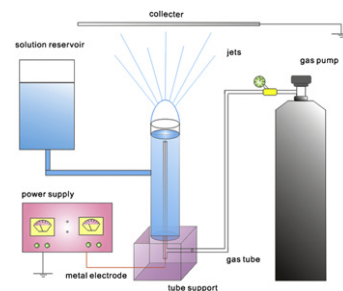


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Ruirui Yang, Jihuan He*, Lan Xu, Jianyong Yu

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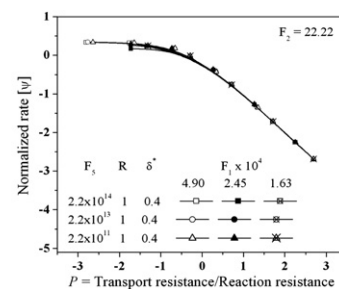
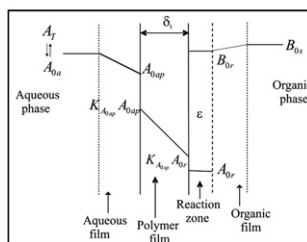


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Sunil S. Dhumal, A.K. Suresh*

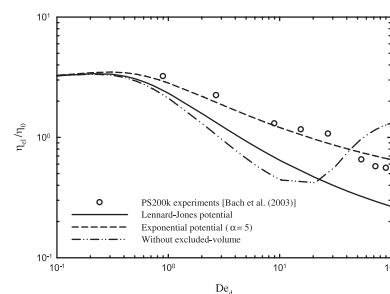
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Dynamics of monodisperse linear entangled polymer melts in extensional flow: The effect of excluded-volume interactions

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