

**Polymer Vol. 50, No. 7, 20 March 2009**

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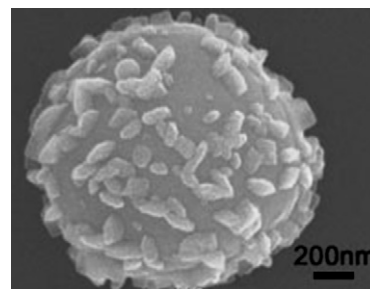
**FEATURE ARTICLE**

**Composite colloids and patterning**

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Shujiang Ding, Wei Wei, Zhenzhong Yang\*

*State Key Laboratory of Polymer Physics and Chemistry, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China*



**POLYMER COMMUNICATIONS**

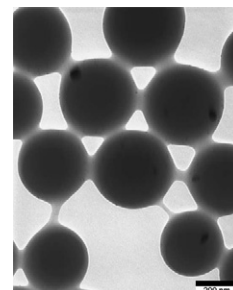
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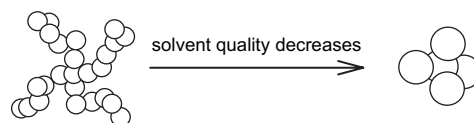
<sup>a</sup> *University of Ulm, Department of Macromolecular Chemistry and Organic Materials, Albert Einstein Allee 11, D-89069 Ulm, Germany*

<sup>b</sup> *Max Planck Institute for Polymer Research, Ackermannweg 10, 55128 Mainz, Germany*

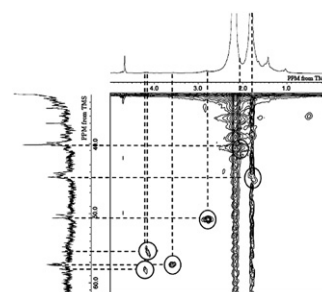


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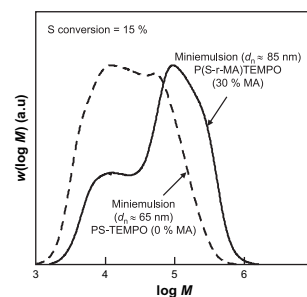
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Lech Gmachowski<sup>a, b</sup><sup>a</sup> *Warsaw University of Technology, Institute of Chemistry, 09-400 Plock, Poland*<sup>b</sup> *Institute of Physical Chemistry, Polish Academy of Sciences, 01-224 Warsaw, Poland***Crosslinking junctions of vulcanized natural rubber analyzed by solid-state NMR spectroscopy equipped with field-gradient-magic angle spinning probe**

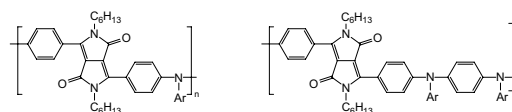
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Md. Nur Alam, Per B. Zetterlund, Masayoshi Okubo<sup>\*</sup>*Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, Kobe 657-8501, Japan***POLYMER PAPERS****Purple red and luminescent polyiminoarylenes containing the 1,4-diketo-3,6-diphenylpyrrolo[3,4-c]pyrrole (DPP) chromophore**

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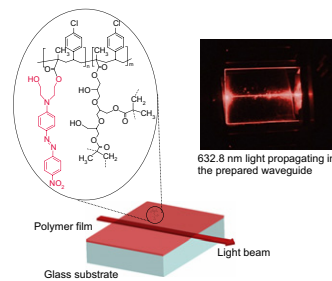
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<sup>c</sup> Institute of Cybernetics Eduardo Caianiello, CNR, Via Campi Flegrei 34, 80078 Pozzuoli (Naples), Italy

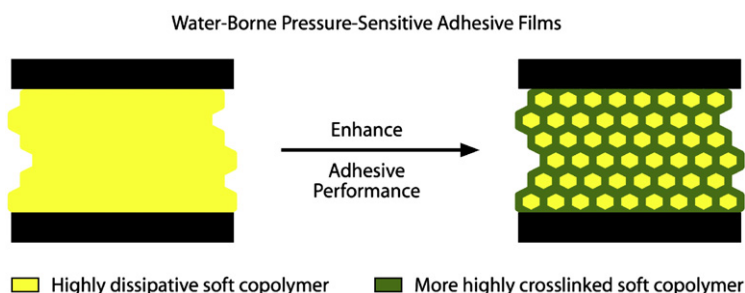


**Control of adhesive properties through structured particle design of water-borne pressure-sensitive adhesives**

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Andrew B. Foster, Peter A. Lovell<sup>\*</sup>, Michael A. Rabjohns

Materials Science Centre, School of Materials, The University of Manchester, Grosvenor Street, Manchester M1 7HS, United Kingdom



**Degradation of a sulfonated aryl ether ketone model compound in oxidative media (sPAEK)**

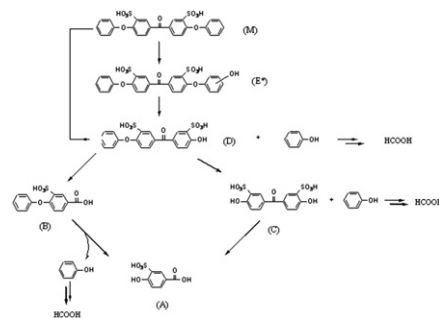
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<sup>b</sup> Laboratoire des Matériaux Organiques à Propriétés Spécifiques, UMR 5041, CNRS, Chemin du Canal, 69360, Solaize, France

<sup>c</sup> Institut Nanosciences et Cryogénie, SCIG, Laboratoire de Résonances Magnétiques, 17 rue des Martyrs, 38054 Grenoble, France

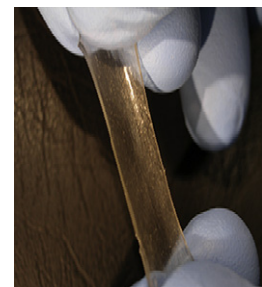
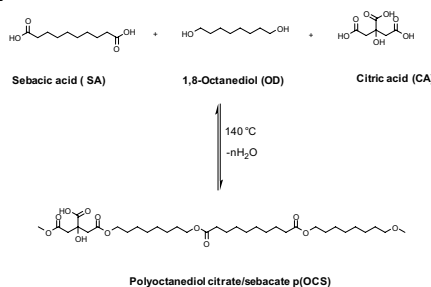


**Synthesis and characterization of novel citric acid-based polyester elastomers**

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Ivan Djordjevic, Namita Roy Choudhury<sup>\*</sup>, Naba K. Dutta, Sunil Kumar

Ian Wark Research Institute, University of South Australia, Mawson Lakes Campus, Mawson Lakes, SA 5095, Australia

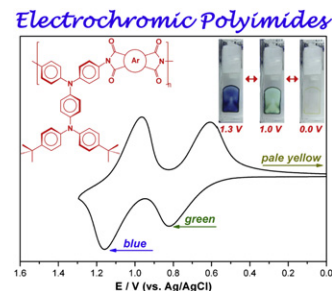


### Electrochemically and electrochromically stable polyimides bearing *tert*-butyl-blocked *N,N,N',N'*-tetraphenyl-1,4-phenylenediamine units

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Hui-Min Wang, Sheng-Huei Hsiao\*

Department of Chemical Engineering and Biotechnology, National Taipei University of Technology,  
1 Chungshiao East Road, Section 3, Taipei 10608, Taiwan, ROC



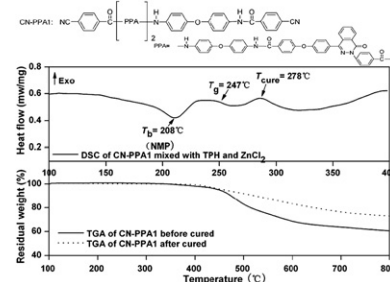
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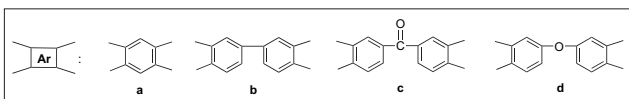
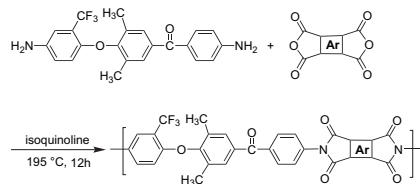


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Chen-Yi Wang, Guang Li\*, Jian-Ming Jiang

State Key Laboratory for Modification of Chemical Fibers and Polymer Materials,  
College of Material Science and Engineering, Donghua University,  
Shanghai 201620, China



### Newly UV-curable polyurethane coatings prepared by multifunctional thiol- and ene-terminated polyurethane aqueous dispersions mixtures: Preparation and characterization

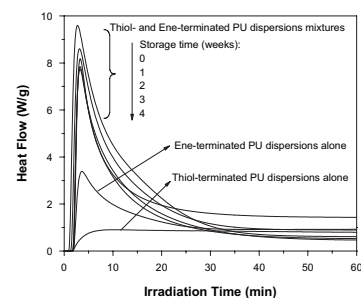
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Zhenglong Yang<sup>a, b, \*</sup>, Douglas A. Wicks<sup>b, \*</sup>, Charles E. Hoyle<sup>b</sup>, Hongting Pu<sup>a</sup>, Junjie Yuan<sup>a</sup>, Decheng Wan<sup>a</sup>, Yongsheng Liu<sup>c</sup>

<sup>a</sup> Institute of Functional Polymer Materials, Key Laboratory of Advanced Civil Engineering Materials, College of Materials Science and Engineering, Tongji University, 1239 Siping Road, Shanghai 200092, PR China

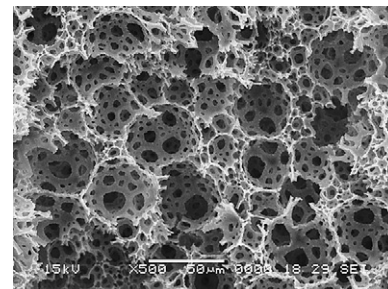
<sup>b</sup> School of Polymers and High Performance Materials, The University of Southern Mississippi, Hattiesburg, MS 39406, USA

<sup>c</sup> Institute of Solar Energy, Department of Mathematics and Physics, Shanghai University of Electric Power, Shanghai 200090, PR China

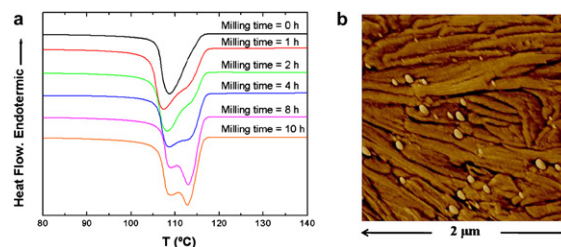


**Stability of high internal phase emulsions with sole cationic surfactant and its tailoring morphology of porous polymers based on the emulsions**

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Shengmiao Zhang<sup>a</sup>, Jianding Chen<sup>a,\*</sup>, V. Tamara Perchyonok<sup>b,\*\*</sup><sup>a</sup> Key Laboratory for Ultrafine Materials of Ministry of Education, School of Materials Science and Engineering, East China University of Science and Technology, 130 Meilong Road, P.O. Box 289, Shanghai 200237, China<sup>b</sup> School of Chemistry, Monash University, Clayton Road, Clayton 3080, Australia**Crystallization and final morphology of HDPE: Effect of the high energy ball milling and the presence of TiO<sub>2</sub> nanoparticles**

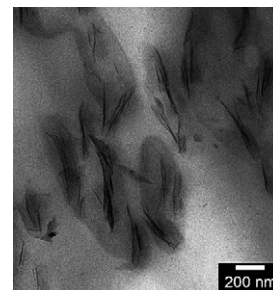
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D. Olmos<sup>a</sup>, C. Domínguez<sup>b</sup>, P.D. Castrillo<sup>a</sup>, J. Gonzalez-Benito<sup>a,\*</sup><sup>a</sup> Dpto. de Ciencia e Ingeniería de Materiales e Ingeniería Química, Universidad Carlos III de Madrid, Avda Universidad 30, 28911 Leganés, Spain<sup>b</sup> LATEP-GIQA, Universidad Rey Juan Carlos, 28933 Móstoles, Spain

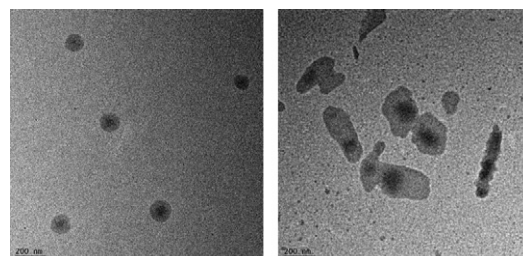
(a) Non-isothermal crystallization curves for the neat HDPE at different milling times; (b) AFM phase contrast image of the 10h milling time TiO<sub>2</sub>-HDPE.

**Nanocomposites formed from polypropylene/EVA blends**

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C.G. Martins<sup>a</sup>, N.M. Larocca<sup>a</sup>, D.R. Paul<sup>b</sup>, L.A. Pessan<sup>a,\*</sup><sup>a</sup> Department of Materials Engineering, Universidade Federal de São Carlos, Via Washington Luiz, Km 235, 13565-905, São Carlos SP, Brazil<sup>b</sup> Department of Chemical Engineering, University of Texas at Austin, Austin, TX 78712, USA**Synthesis and self-assembly of comb-like amphiphilic Doxifluridine-poly-(ε-caprolactone)-graft-poly(γ-glutamic acid) copolymer**

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Kuo-Yung Chang<sup>a</sup>, Chia-Chun Lin<sup>a</sup>, Guan-Huei Ho<sup>b</sup>, Yun-Peng Huang<sup>b</sup>, Yu-Der Lee<sup>a,\*</sup><sup>a</sup> Department of Chemical Engineering, National Tsing Hua University, 101, Section 2, Kuang Fu Road, Hsin Chu 300, Taiwan, ROC<sup>b</sup> Vedan Enterprise Corporation, 65, Hsin-An Road, Shalu, Taichung 300, Taiwan, ROC

5'DFUR-PCL-γ-PGA micelles

### Morphology and properties of Nafion membranes prepared by solution casting

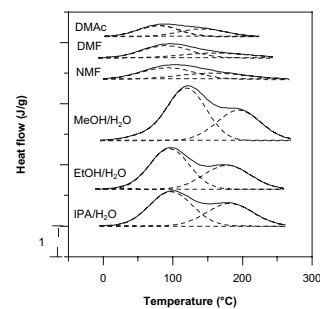
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Chia-Hung Ma<sup>a</sup>, T. Leon Yu<sup>a,b,\*</sup>, Hsiu-Li Lin<sup>a,b</sup>, Yu-Ting Huang<sup>a</sup>, Yi-Ling Chen<sup>a</sup>, U-Ser Jeng<sup>c</sup>, Ying-Huang Lai<sup>c</sup>, Ya-Sen Sun<sup>c</sup>

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<sup>b</sup> Fuel Cells Center, Yuan Ze University, Chung-Li, Taoyuan 32003, Taiwan

<sup>c</sup> National Synchrotron Radiation Research Center, Hsinchu 30076, Taiwan



### Morphology modulation of polymeric assemblies by guest drug molecules: TEM study and compatibility evaluation

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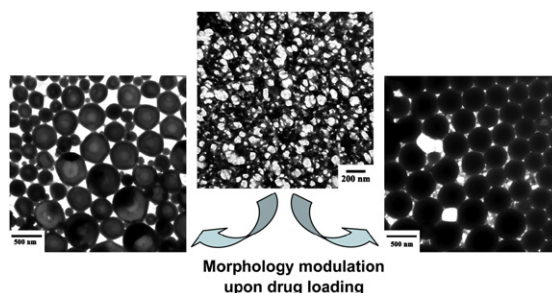
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<sup>b</sup> Institute of Polymer Science, and Key Laboratory of Macromolecule Synthesis and Functionalization (Ministry of Education), Zhejiang University, Hangzhou 310027, China

<sup>c</sup> Department of Biologic and Materials Sciences, University of Michigan, Ann Arbor, MI 48109, USA

<sup>d</sup> Affiliated Stomatology Hospital, College of Medicine, Zhejiang University, Hangzhou 310068, China



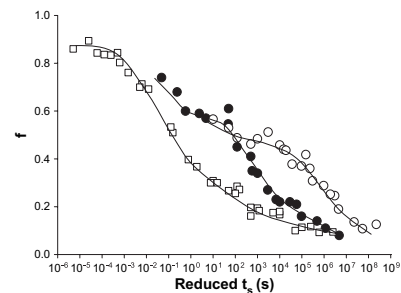
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D.R. Salem<sup>a,\*</sup>, N. Vasanthan<sup>b</sup>

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<sup>b</sup> Department of Chemistry, Long Island University, One University Plaza, Brooklyn NY 11201, USA



### Characterization of drawn monofilaments of liquid crystalline polymer/carbon nanoparticle composites correlated to nematic order

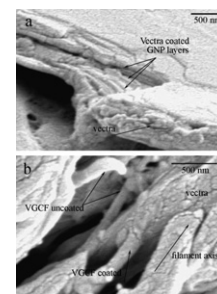
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Estelle Kalfon-Cohen<sup>a,\*</sup>, Gad Marom<sup>a</sup>, Ellen Wachtel<sup>b</sup>, Alessandro Pegoretti<sup>c</sup>

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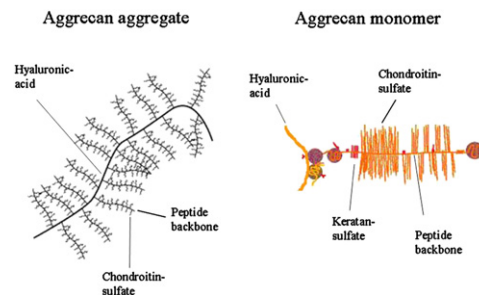
<sup>b</sup> Chemical Research Infrastructure Unit, The Weizmann Institute of Science, 76100 Rehovot, Israel

<sup>c</sup> Department of Materials Engineering and Industrial Technologies, University of Trento, Via Mesiano 77, 38100, Italy

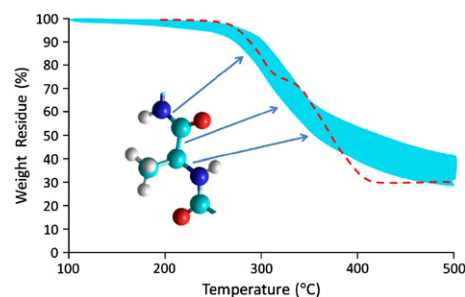


**Effect of the counterion behavior on the frictional–compressive properties of chondroitin sulfate solutions**

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S.A. Baeurle<sup>a,\*</sup>, M.G. Kiselev<sup>b</sup>, E.S. Makarova<sup>b</sup>, E.A. Nogovitsin<sup>b</sup><sup>a</sup> Department of Chemistry and Pharmacy, Institute of Physical and Theoretical Chemistry, University of Regensburg, Universitaetstrasse 31, D-93053 Regensburg, Germany<sup>b</sup> Institute of Solution Chemistry, Russian Academy of Sciences, 153045 Ivanovo, Russia**A kinetic model for thermal degradation in polymers with specific application to proteins**

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David Porter<sup>a,\*</sup>, Fritz Vollrath<sup>a</sup>, Kun Tian<sup>b</sup>, Xin Chen<sup>b</sup>, Zhengzhong Shao<sup>b</sup><sup>a</sup> Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS, UK<sup>b</sup> The Key Laboratory of Molecular Engineering of Polymers of MOE, Department of Macromolecular Science, Laboratory of Advanced Materials, Fudan University, 220 Handan Road, Shanghai 200433, People's Republic of China

\*Corresponding author

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