

**Polymer Vol. 49, No. 23, 30 October 2008**

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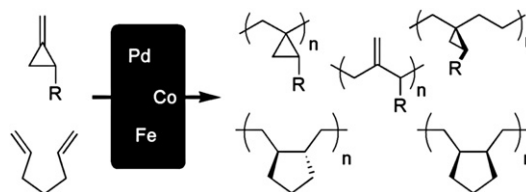
**FEATURE ARTICLE**

**New polymerization of dienes and related monomers catalyzed by late transition metal complexes**

pp 4911–4924

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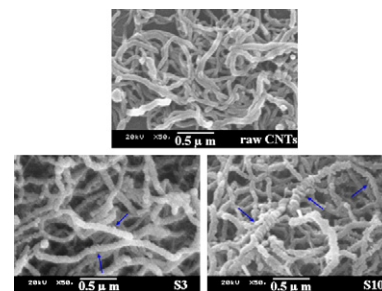
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**Shear enhanced interfacial interaction between carbon nanotubes and polyethylene and formation of nanohybrid shish–kebabs**

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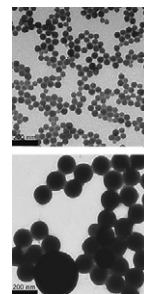
Si Liang, Ke Wang, Daiqiang Chen, Qin Zhang\*, Rongni Du, Qiang Fu\*

*Department of Polymer Science and Materials, State Key Laboratory of Polymer Materials Engineering,  
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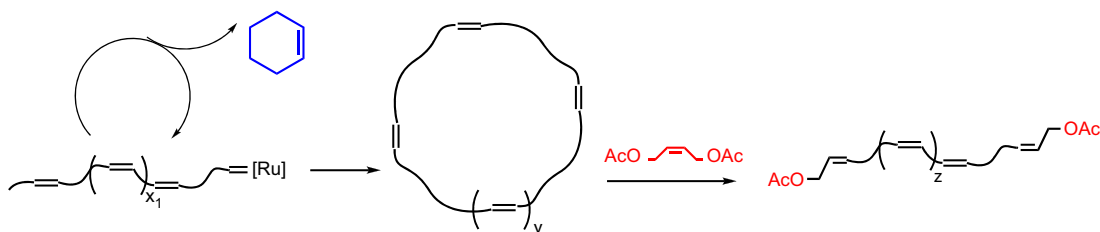


**Miniemulsion polymerization of styrene in the presence of macromonomeric initiators**Ufuk Yildiz<sup>a,\*</sup>, Katharina Landfester<sup>b</sup>

pp 4930–4934

<sup>a</sup> University of Kocaeli, Department of Chemistry, Umuttepe Campus, 41380 Kocaeli, Turkey<sup>b</sup> University of Ulm, Department of Organic Chemistry III – Macromolecular Chemistry and Organic Materials, Albert-Einstein-Allee 11, D-89081 Ulm, Germany**POLYMER PAPERS****Synthesis of dihydroxy poly(ethylene-co-butadiene) via metathetical depolymerization: Kinetic and mechanistic aspects**

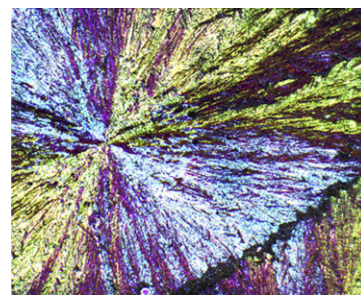
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Frédéric Lucas<sup>a</sup>, Frédéric Peruch<sup>a</sup>, Stéphane Carlotti<sup>a</sup>, Alain Deffieux<sup>a,\*</sup>, Alexandra Leblanc<sup>b</sup>, Christophe Boisson<sup>b</sup><sup>a</sup> Université Bordeaux 1, CNRS, ENSCPB, Laboratoire de Chimie des Polymères Organiques, 16 Avenue Pey Berland, 33607 PESSAC Cedex, France<sup>b</sup> C2P2 UMR5265–Equipe Chimie et Procédés de Polymérisation, CNRS/ESCEP-Lyon, 43 Bd du 11 Novembre 1918, B.P. 2077 69616 Villeurbanne Cedex, France**New photoactive oligo- and poly-alkylthiophenes**

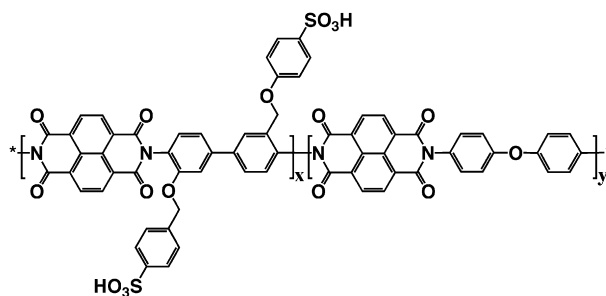
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Massimiliano Lanzi<sup>\*</sup>, Luisa Paganin, Daniele Caretti

Department of Industrial and Materials Chemistry, University of Bologna, Viale del Risorgimento, 4 I-40136 Bologna, Italy

**Structure–property relationships for a series of polyimide copolymers with sulfonated pendant groups**

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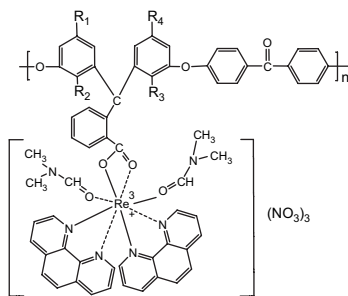
Olivier Savard<sup>a,1</sup>, Timothy J. Peckham<sup>a,b</sup>, Yunsong Yang<sup>a,2</sup>, Steven Holdcroft<sup>a,b,\*</sup><sup>a</sup> Department of Chemistry, Simon Fraser University, Burnaby, British Columbia V5A 1S6, Canada<sup>b</sup> Institute for Fuel Cell Innovation, National Research Council Canada, 4250 Wesbrook Mall, Vancouver, British Columbia V6T 1W5, Canada

**Novel polyaryletherketones bearing pendant carboxyl groups and their rare earth complexes, Part I: Synthesis and characterization**

pp 4960–4967

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Technology, Zhongshan Road 158, Dalian,  
116012, PR China



Polymer	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>
PEK-1	H	H	H	H
PEK-2	CH <sub>3</sub>	H	H	CH <sub>3</sub>
PEK-3	CH(CH <sub>3</sub> ) <sub>2</sub>	CH <sub>3</sub>	CH <sub>3</sub>	CH(CH <sub>3</sub> ) <sub>2</sub>

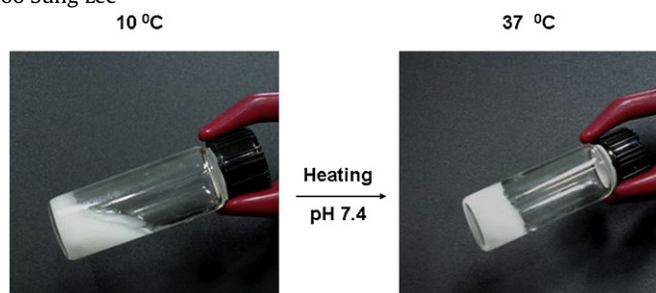
Re<sup>3+</sup> = Sm<sup>3+</sup>, Eu<sup>3+</sup>, Dy<sup>3+</sup> and Tb<sup>3+</sup>

**pH- and temperature-sensitive multiblock copolymer hydrogels composed of poly(ethylene glycol) and poly(amino urethane)**

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Kasala Dayananda<sup>a</sup>, Chaoliang He<sup>a</sup>, Dong Kuk Park<sup>b</sup>, Tae Gwan Park<sup>b</sup>, Doo Sung Lee<sup>a,\*</sup>

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<sup>b</sup> Department of Biological Sciences, Korea Advanced  
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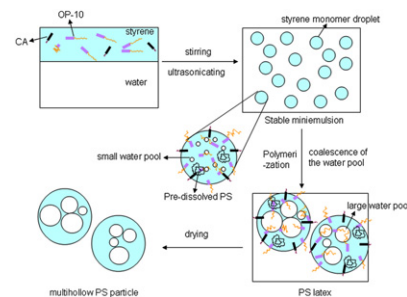


**One-step fabrication of multihollow polystyrene particles from miniemulsion system with nonionic surfactant**

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Hua Wang, Mozhen Wang\*, Xuewu Ge\*

CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering,  
University of Science and Technology of China, Hefei, Anhui 230026, China

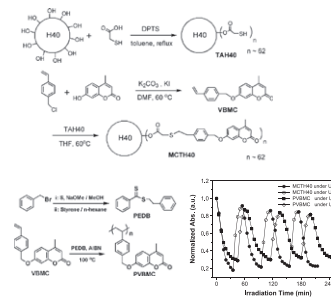


**Preparation and reversible photo-crosslinking/photo-cleavage behavior of 4-methylcoumarin functionalized hyperbranched polyester**

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Qi Fu, Liangliang Cheng, Yong Zhang, Wenfang Shi\*

Joint Laboratory of Polymer Thin Films and Solution, Department of Polymer Science and Engineering,  
University of Science and Technology of China, Hefei, Anhui 230026, PR China

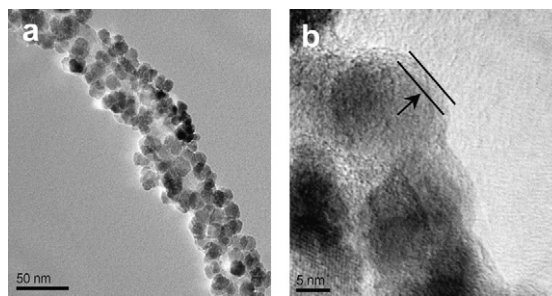


**Poly(L-lactide) brushes on magnetic multiwalled carbon nanotubes by in-situ ring-opening polymerization**

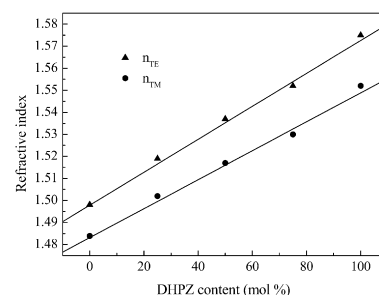
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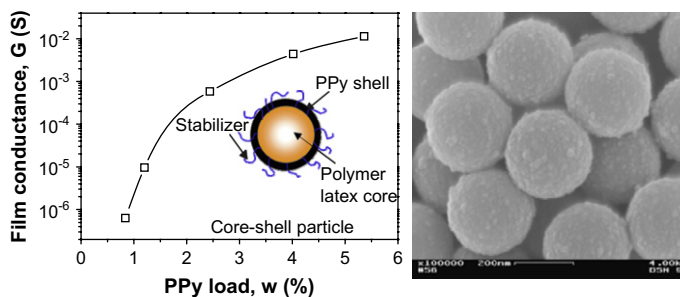
School of Material Science and Engineering, P.O. Box 405, Harbin Institute of Technology, Harbin 150001, Heilongjiang Province, PR China

**Synthesis, characterization and optical properties of fluorinated poly(aryl ether)s containing phthalazinone moieties**

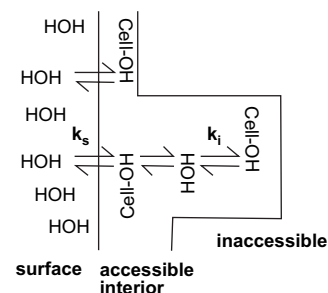
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Yuan Song<sup>a</sup>, Jinyan Wang<sup>a</sup>, Guanghui Li<sup>a</sup>, Qingmin Sun<sup>a</sup>, Xigao Jian<sup>a,c,\*</sup>, Jie Teng<sup>b,c</sup>, Hongbo Zhang<sup>a</sup><sup>a</sup> Department of Polymer Science & Materials, Dalian University of Technology, Dalian 116012, PR China<sup>b</sup> School of Physics and Optoelectronic Technology, Dalian University of Technology, Dalian 116023, PR China<sup>c</sup> Photonics Research Center, Dalian University of Technology, Dalian 116023, PR China**Composite polypyrrole-containing particles and electrical properties of thin films prepared therefrom**

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Yan Lu<sup>a</sup>, Andrij Pich<sup>b</sup>, Hans-Juergen P. Adler<sup>b</sup>, Geng Wang<sup>c</sup>, David Rais<sup>d,\*</sup>, Stanislav Nešpůrek<sup>d,e</sup><sup>a</sup> Physical Chemistry I, University of Bayreuth, D-95440 Bayreuth, Germany<sup>b</sup> Institute of Macromolecular Chemistry and Textile Chemistry, Dresden University of Technology, D-01062 Dresden, Germany<sup>c</sup> Department of Chemistry, Tsinghua University, 100084 Beijing, PR China<sup>d</sup> Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, v.v.i., 162 06 Prague 6, Czech Republic<sup>e</sup> Faculty of Chemistry, Brno University of Technology, 612 00 Brno, Czech Republic**The study of water behaviour in regenerated cellulosic fibres by low-resolution proton NMR**

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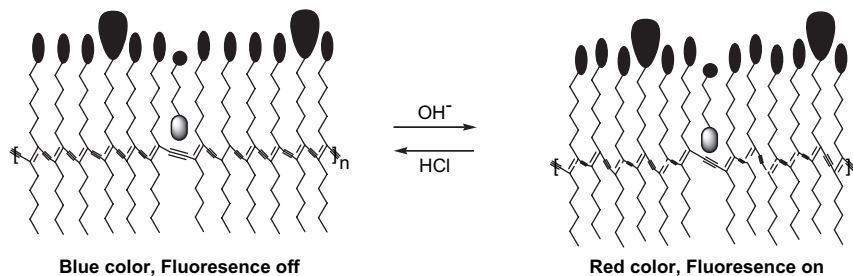
Roger N. Ibbett<sup>a,\*</sup>, K. Christian Schuster<sup>b,c</sup>, Mario Fasching<sup>d</sup><sup>a</sup> Christian Doppler Laboratory for Textile and Fibre Chemistry in Cellulosics, School of Materials, University of Manchester, Manchester M601QD, UK<sup>b</sup> Lenzing AG, 4860 Lenzing, Austria<sup>c</sup> Christian Doppler Laboratory for Textile and Fibre Chemistry in Cellulosics, Höchsterstraße 35, 6850 Dornbirn, Austria<sup>d</sup> K<sup>+</sup>, Kompetenzzentrum Holz GmbH, St.-Peter-Strasse 25, 4021 Linz, Austria

**A reversible colorimetric and fluorescent polydiacetylene vesicle sensor platform**

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Zhongzhe Yuan, Timothy W. Hanks\*

Department of Chemistry, Furman University,  
Greenville, SC 29613, United States

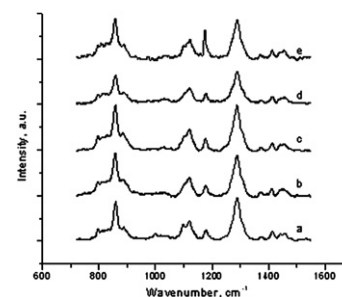


**The role of nanoclay in the generation of poly(ethylene terephthalate) fibers with improved modulus and tenacity**

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David W. Litchfield, Donald G. Baird\*

Department of Chemical Engineering, Virginia Polytechnic Institute and State University,  
Blacksburg, Virginia 24061, United States

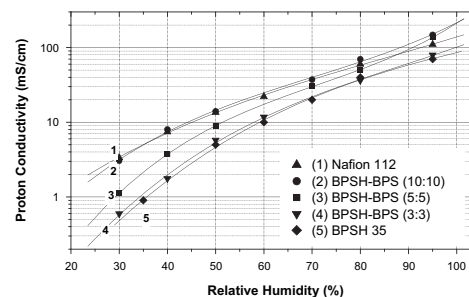


**Hydrophilic–hydrophobic multiblock copolymers based on poly(arylene ether sulfone)s as novel proton exchange membranes – Part B**

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Abhishek Roy, Hae-Seung Lee, James E. McGrath\*

Macromolecules and Interfaces Institute, Virginia Polytechnic Institute and State University,  
Blacksburg, VA 24061, United States



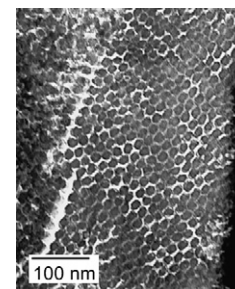
Proton conductivity under partially hydrated conditions increases with increasing block lengths for the multiblock copolymers at 80 °C.

**Morphology of poly[(*t*-butyl acrylate)-*b*-styrene-*b*-isobutylene-*b*-styrene-*b*-(*t*-butyl acrylate)] pentablock terpolymers and their thermal conversion to the acrylic acid form**

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James G. Kopchick, Robson F. Storey, William L. Jarrett, Kenneth A. Mauritz\*

Department of Polymer Science, The University of Southern Mississippi, Hattiesburg, MS 39406-0076,  
United States



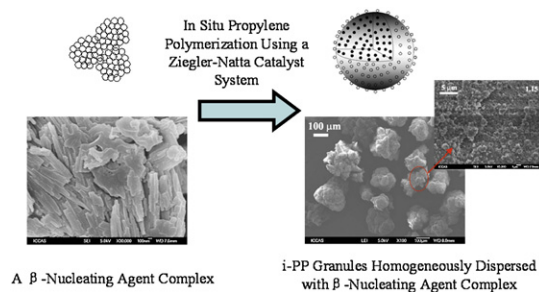
## A novel effective way of comprising a $\beta$ -nucleating agent in isotactic polypropylene (i-PP): Polymerized dispersion and polymer characterization

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Qing-Feng Yi<sup>a, b</sup>, Xiao-Jing Wen<sup>a, b</sup>, Jin-Yong Dong<sup>a, \*</sup>, Charles C. Han<sup>a, \*</sup>

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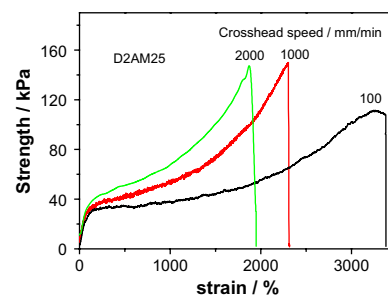
A  $\beta$ -Nucleating Agent Complexi-PP Granules Homogeneously Dispersed with  $\beta$ -Nucleating Agent Complex

## Network chain density and relaxation of *in situ* synthesized polyacrylamide/hectorite clay nanocomposite hydrogels with ultrahigh tensibility

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Lijun Xiong, Xiaobo Hu, Xinxing Liu, Zhen Tong<sup>\*</sup>

Research Institute of Materials Science, South China University of Technology, Guangzhou 510640, China



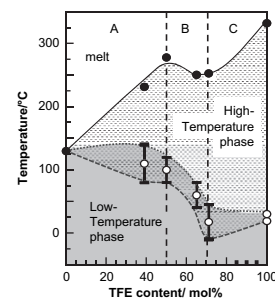
## Structural study of a series of ethylene-tetrafluoroethylene copolymers with various ethylene contents, Part 2: Phase transition behavior investigated by temperature dependent measurements of X-ray fiber diagrams

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Suttinun Phongtamrug<sup>a</sup>, Kohji Tashiro<sup>a, \*</sup>, Atsushi Funaki<sup>b</sup>, Kiyotaka Arai<sup>b</sup>

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<sup>b</sup> Research and Development Division, Asahi Glass Co., Ltd., Yokohama, Kanagawa 221-8755, Japan



## Micellization and phase transition behavior of thermosensitive

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### poly(*N*-isopropylacrylamide)–poly( $\epsilon$ -caprolactone)–poly(*N*-isopropylacrylamide) triblock copolymers

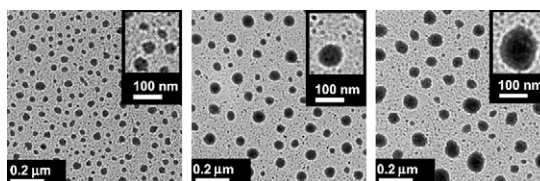
Xian Jun Loh<sup>a, b, c</sup>, Yun-Long Wu<sup>a</sup>, Wei Tat Joseph Seow<sup>c</sup>, Muhammad Nor Irzuan Norimzan<sup>c</sup>, Zhong-Xing Zhang<sup>a</sup>, Fu-Jian Xu<sup>a, d</sup>, En-Tang Kang<sup>d</sup>, Koon-Gee Neoh<sup>d</sup>, Jun Li<sup>a, b, c, \*</sup>

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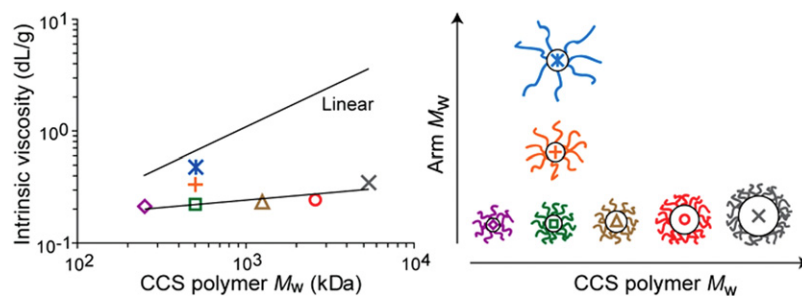


**Rheology of core cross-linked star polymers**

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Tor Kit Goh, Kristopher D. Coventry, Anton Blencowe, Greg G. Qiao\*

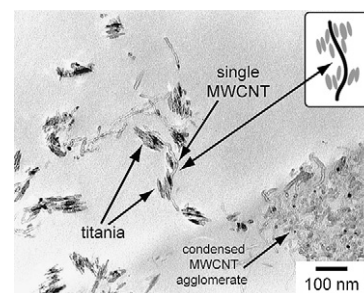
Polymer Science Group, Department of Chemical and Biomolecular Engineering, The University of Melbourne, Parkville, Victoria 3010, Australia

**Titania-doped multi-walled carbon nanotubes epoxy composites: Enhanced dispersion and synergistic effects in multiphase nanocomposites**

pp 5105–5112

Jan Sumfleth\*, Luis A.S. de Almeida Prado, Montira Sriyai, Karl Schulte

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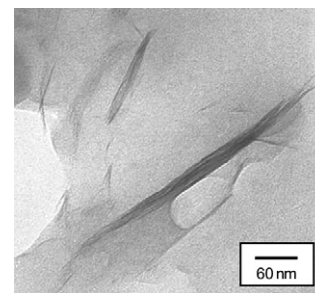
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Biqiong Chen<sup>a</sup>, Julian R.G. Evans<sup>b,\*</sup>

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**Toughening epoxies with halloysite nanotubes**

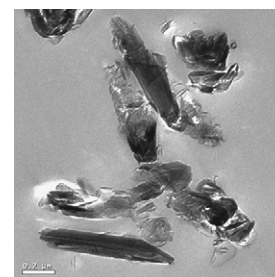
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Shiqiang Deng<sup>a</sup>, Jianing Zhang<sup>a</sup>, Lin Ye<sup>a,b,\*</sup>, Jingshen Wu<sup>c</sup>

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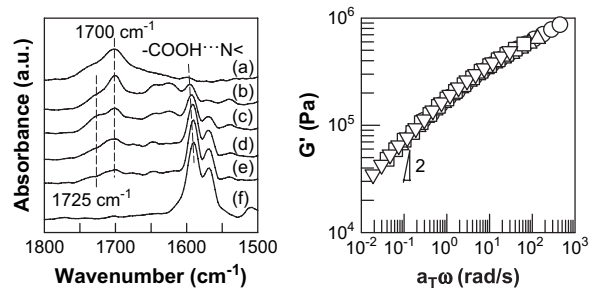


### Synthesis of hydrogenated functional polynorbornene (HFPNB) and rheology of HFPNB-based miscible blends with hydrogen bonding

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Zhiyi Yang, Chang Dae Han\*

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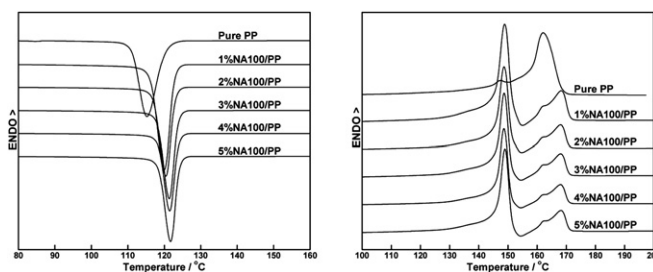


### Crystallization behavior and melting characteristics of PP nucleated by a novel supported $\beta$ -nucleating agent

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Zishou Zhang, Chunguang Wang, Zhugen Yang, Chunyan Chen, Kancheng Mai\*

Materials Science Institute, School of Chemistry and Chemical Engineering, Sun Yat-sen University, Key Laboratory of Polymeric Composites and Functional Materials, the Ministry of Education, Guangzhou 510275, People's Republic of China



### Macroscopically oriented lamellar microdomains created by “cold zone-heating” method involving OOT

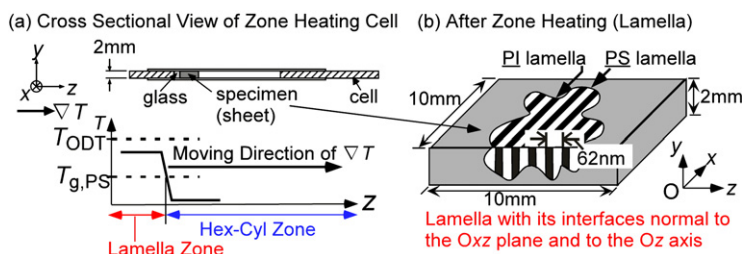
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Kazuki Mita<sup>a,1</sup>, Hirokazu Tanaka<sup>a,1</sup>, Kenji Saijo<sup>a</sup>, Mikihito Takenaka<sup>a,b</sup>, Takeji Hashimoto<sup>a,c,\*</sup>

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<sup>b</sup> Structural Materials Science Laboratory, SPring-8 Center, RIKEN Harima Institute Research, Hyogo 679-5148, Japan

<sup>c</sup> Advanced Science Research Center (ASRC), Japan Atomic Energy Agency (JAEA), Tokai-mura, Ibaraki-Pref. 319-1195, Japan

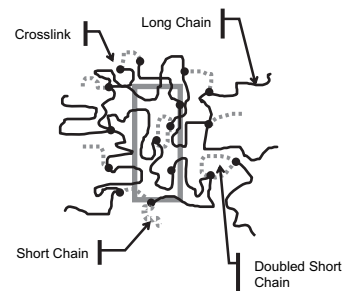


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Paris R. von Lockette

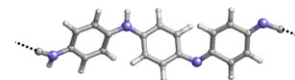
Mechanical Engineering, Rowan University, 201 Mulica Hill Road, Glassboro, NJ 08028, USA





**On the molecular properties of polyaniline: A comprehensive theoretical study**

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Carlos Alemán<sup>a,\*</sup>, Carlos A. Ferreira<sup>b</sup>, Juan Torras<sup>c</sup>, Alvaro Meneguzzi<sup>b</sup>, Manel Canales<sup>d</sup>, Marco A.S. Rodrigues<sup>b</sup>, Jordi Casanovas<sup>e,\*\*</sup><sup>a</sup> Departament d'Enginyeria Química, E.T.S. d'Enginyers Industrials de Barcelona, Universitat Politècnica de Catalunya, Diagonal 647, Barcelona E-08028, Spain<sup>b</sup> Universidade Federal do Rio Grande do Sul – DEMAT, Av. Bento Gonçalves, 9500, setor 4, prédio 74, Cep. 91501-970, Porto Alegre, RS, Brazil<sup>c</sup> Departament d'Enginyeria Química, EUETII, Universitat Politècnica de Catalunya, Pça Rei 15, Igualada 08700, Spain<sup>d</sup> Departament de Física i Enginyeria Nuclear, Facultat d'Informàtica, Universitat Politècnica de Catalunya, Jordi Girona 1-3, Barcelona E-08034, Spain<sup>e</sup> Departament de Química, Escola Politècnica Superior, Universitat de Lleida, c/Jaume II no. 69, Lleida E-25001, Spain

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