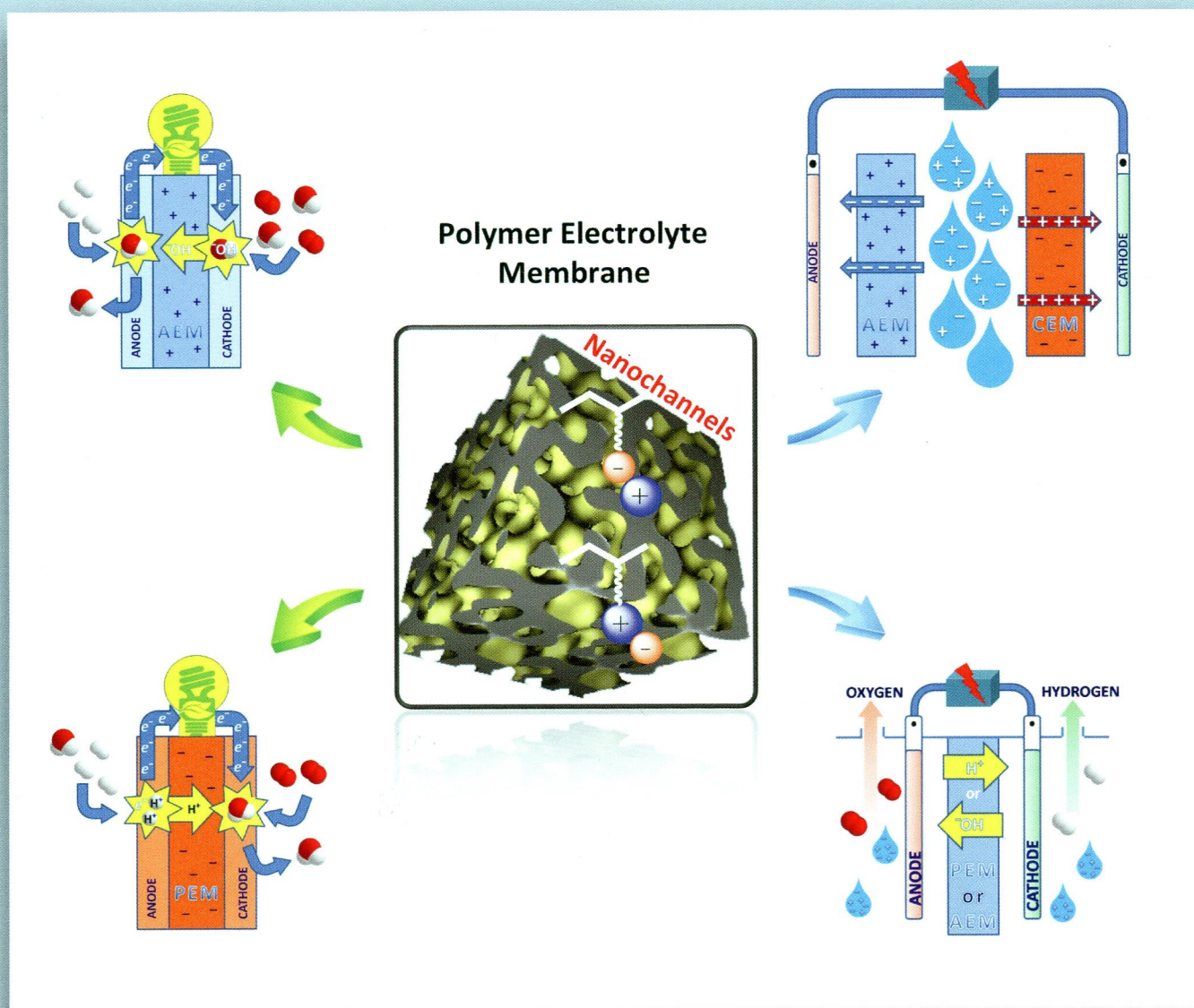


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Volume 47  
Number 7

# Macromolecules

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# Macromolecules

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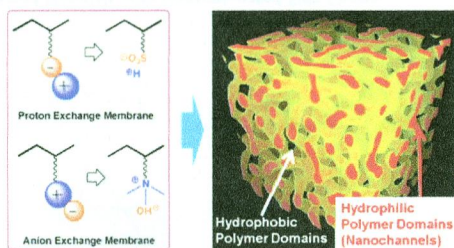
**ON THE COVER:** Polymers with nanochannels for efficient ion conduction provide membranes that are effective in fuel cells for clean power (left), electro dialysis for clean water (right) and hydrogen production by electrolysis for energy storage. See page 2175.

## Perspective

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**Ion Transport by Nanochannels in Ion-Containing Aromatic Copolymers**  
Nanwen Li and Michael D. Guiver\*

[dx.doi.org/10.1021/ma402254h](https://doi.org/10.1021/ma402254h)



## Articles

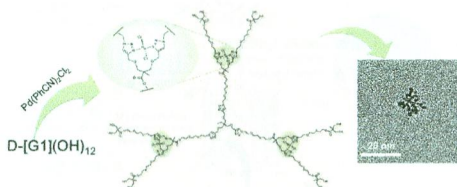
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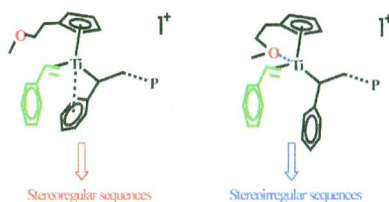
**"Click" Synthesis of Intrinsically Hydrophilic Dendrons and Dendrimers Containing Metal Binding Moieties at Each Branching Unit**

Lili Wang, David J. Kiemle, Connor J. Boyle, Eoghan L. Connors, and Ivan Gitsov\*

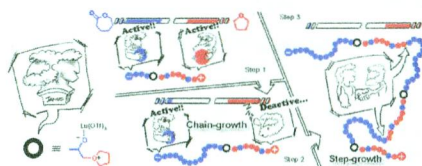
[dx.doi.org/10.1021/ma500126f](https://doi.org/10.1021/ma500126f)



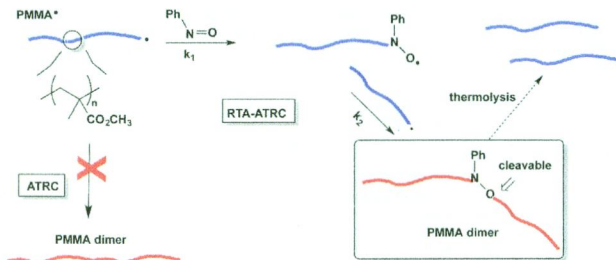
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**Janus Polymerization**  
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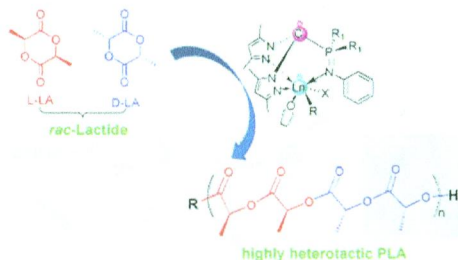


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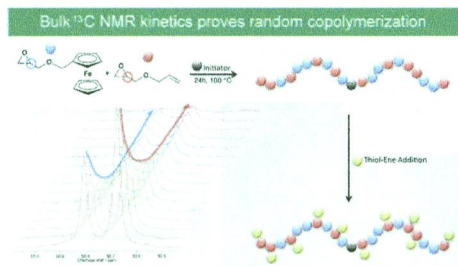
### Efficient and Heteroselective Heteroscorpionate Rare-Earth-Metal Zwitterionic Initiators for ROP of *rac*-Lactide: Role of $\sigma$ -Ligand

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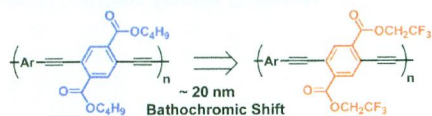
### Ferrocene-Containing Multifunctional Polyethers: Monomer Sequence Monitoring via Quantitative $^{13}\text{C}$ NMR Spectroscopy in Bulk

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### Bandgap Engineering of Conjugated Materials with Nonconjugated Side Chains

Robert H. Pawle, Ankita Agarwal, Stephanie Malveira, Zachary C. Smith, and Samuel W. Thomas III\*



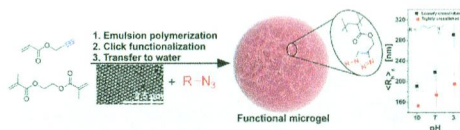
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dx.doi.org/10.1021/ma402530y

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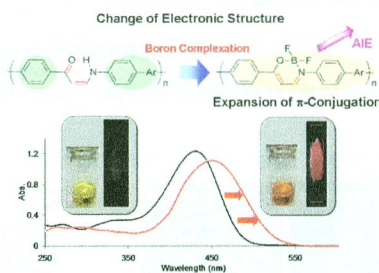
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dx.doi.org/10.1021/ma500082e

## Conjugated Polymers Based on Tautomeric Units: Regulation of Main-Chain Conjugation and Expression of Aggregation Induced Emission Property via Boron-Complexation

Ryosuke Yoshii, Kazuo Tanaka, and Yoshiki Chujo\*



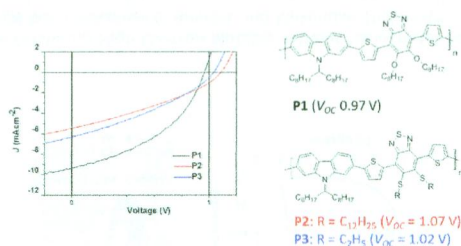
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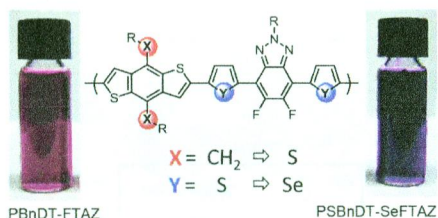
## Thioalkyl-Substituted Benzothiadiazole Acceptors: Copolymerization with Carbazole Affords Polymers with Large Stokes Shifts and High Solar Cell Voltages

Abby Casey, Raja Shahid Ashraf, Zhuping Fei, and Martin Heeney\*



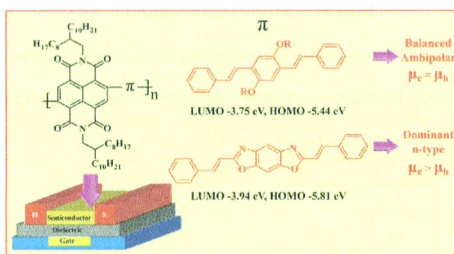
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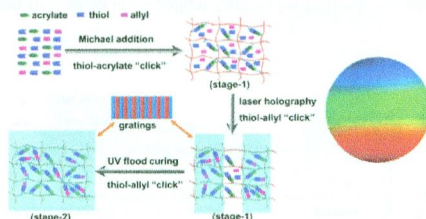
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### High Performance Graded Rainbow Holograms via Two-Stage Sequential Orthogonal Thiol-Click Chemistry

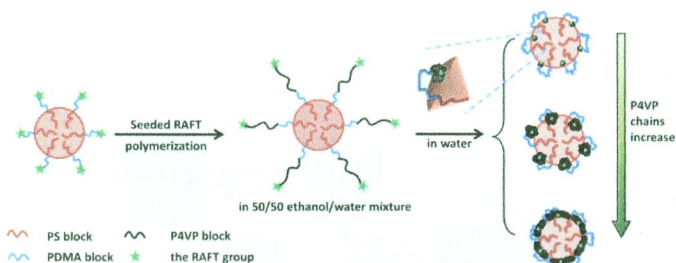
Haiyan Peng, Devatha P. Nair, Benjamin A. Kowalski, Weixian Xi, Tao Gong, Chen Wang, Michael Cole, Neil B. Cramer, Xiaolin Xie, Robert R. McLeod, and Christopher N. Bowman\*





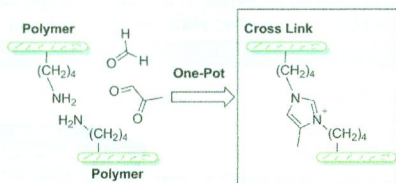
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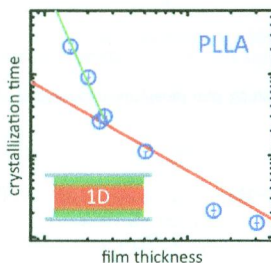
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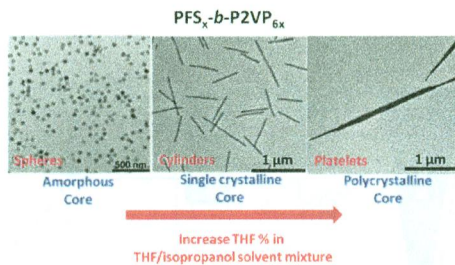
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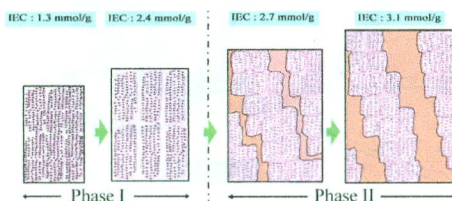


**Crystallization-Driven Self-Assembly of Block Copolymers with a Short Crystallizable Core-Forming Segment: Controlling Micelle Morphology through the Influence of Molar Mass and Solvent Selectivity**  
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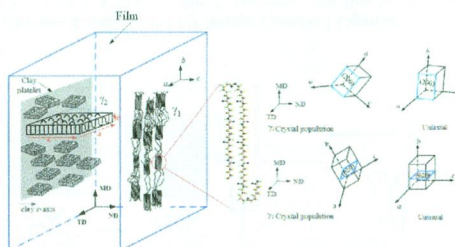


**Hierarchical Structure–Property Relationships in Graft-Type Fluorinated Polymer Electrolyte Membranes Using Small- and Ultrasmall-Angle X-ray Scattering Analysis**

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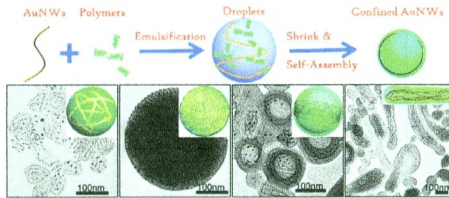


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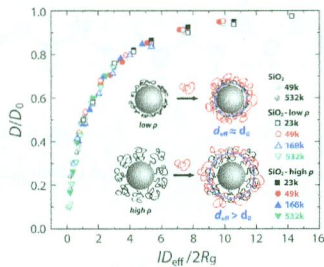
### Confinement of Polymer-Tethered Gold Nanowires in Polymeric Colloids

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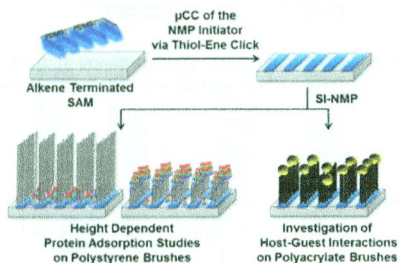
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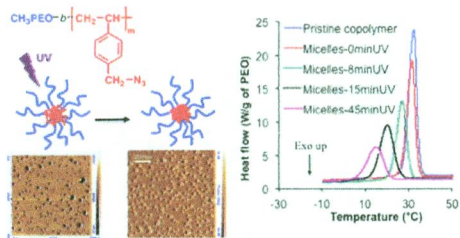
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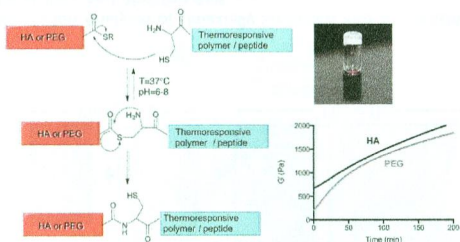
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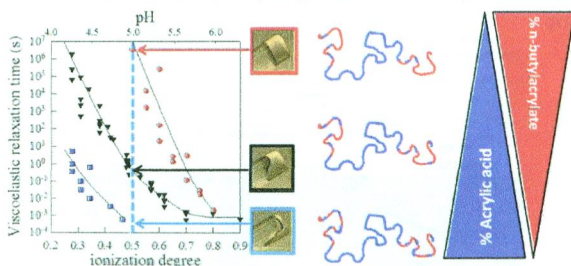
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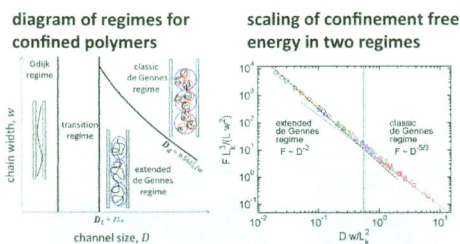
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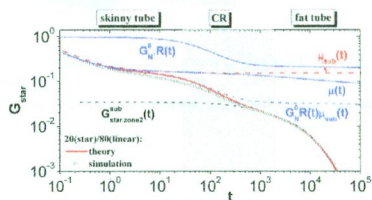
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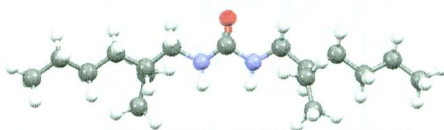
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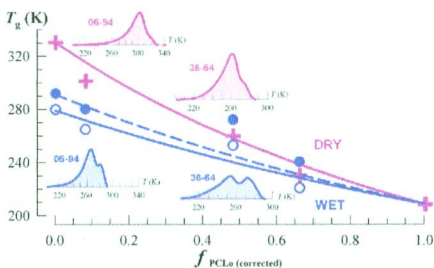
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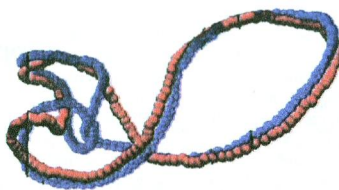
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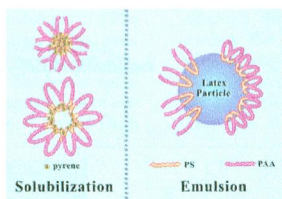
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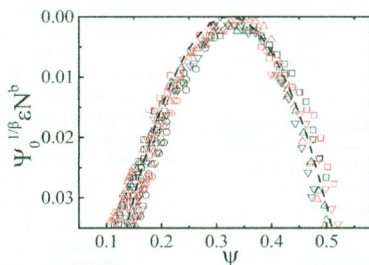
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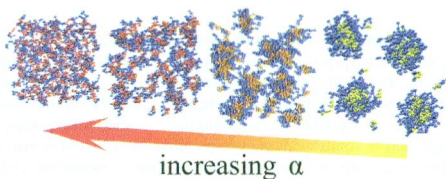
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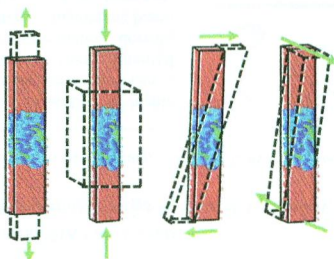
### Dissipative Particle Dynamics Study of the pH-Dependent Behavior of Poly(2-vinylpyridine)-*block*-poly(ethylene oxide) Diblock Copolymer in Aqueous Buffers

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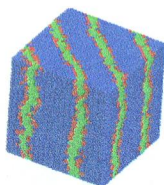


### Plastic Deformation of Semicrystalline Polyethylene under Extension, Compression, and Shear Using Molecular Dynamics Simulation

Jun Mo Kim, Rebecca Locker, and Gregory C. Rutledge\*

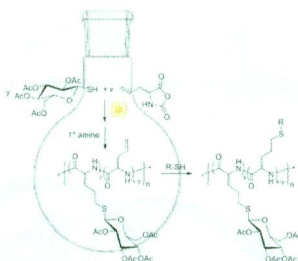


Effect of Composition on the Phase Behavior of Ion-Containing Block Copolymers Studied by a Minimal Lattice Model  
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Bencai Lin, Lihua Qiu, Bo Qiu, Yu Peng, and Feng Yan\*