

JOURNAL OF POLYMER SCIENCE | PART A

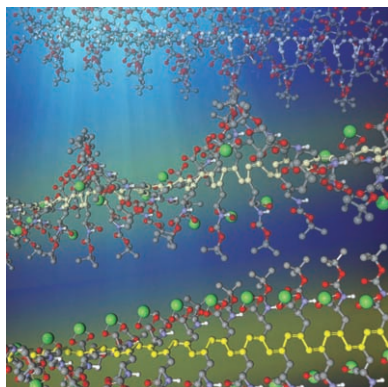
Polymer Chemistry

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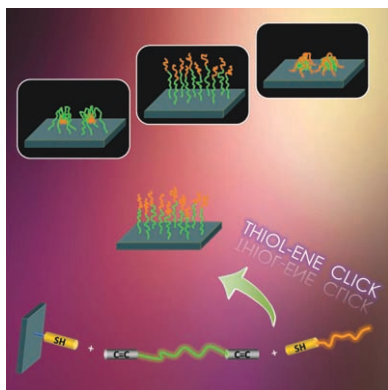
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Polymer Chemistry



HELICAL POLYMERS

α -Propargyl amino acid derived polyacetylenes containing unprotected carboxy groups adopt predominantly one-handed helical conformations, as presented by H. Sogawa, M. Shiotsuki, and F. Sanda on page 2008. The helical structures of the polymers are extended upon addition of alkali hydroxides (LiOH, NaOH, KOH) and tetrabutylammonium fluoride, wherein the degree of extension agrees with the order of the cation size. The existence of cations close to the carboxylate moieties results in helix loosening accompanying the extension of conjugation of the polyacetylene backbone. The polymers are expected to function as cation sensors since this ion-responsive conformational transition causes the color change of the polymer solutions that is detectable by the naked eye.



COPOLYMER BRUSHES

PDMS-*b*-PEG diblock copolymer brushes are grafted on a silicon substrate via a two-step photo-initiated "thiol-ene" click chemistry, as presented by Muquan Yang, Jun Mao, Wei Nie, Zhixin Dong, Dapeng Wang, Ziliang Zhao, and Xiangling Ji on page 2075. The image shows that the PDMS-*b*-PEG diblock copolymer brushes exhibit variable responsive behavior to different solvent treatments, i.e., "onion-like" morphologies after water treatment, pinned micelles after toluene treatment, and swollen to a smooth surface after DMF treatment. This is a new example of "thiol-ene" click chemistry used in macromolecular addition.

Coming soon Look for these important papers in upcoming issues of JPS: Polymer Chemistry

Zhongfan Jia and Michael J. Monteiro

Cyclic Polymers: Methods and Strategies

DOI: 10.1002/pola.25999

Jae-Eun Park, Jae-Hoon Eom, Taehoon Lim, Do-Hoon Hwang, and Seungmoon Pyo

Electrical Bistability of Organic Devices with a Polymeric Thin Film for Nonvolatile Data Storage

DOI: 10.1002/pola.25987

Yongrong Li and Tsuyoshi Michinobu

Click Synthesis and Reversible Electrochromic Behaviors of Novel Polystyrenes Bearing Aromatic Amine Units

DOI: 10.1002/pola.25990

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