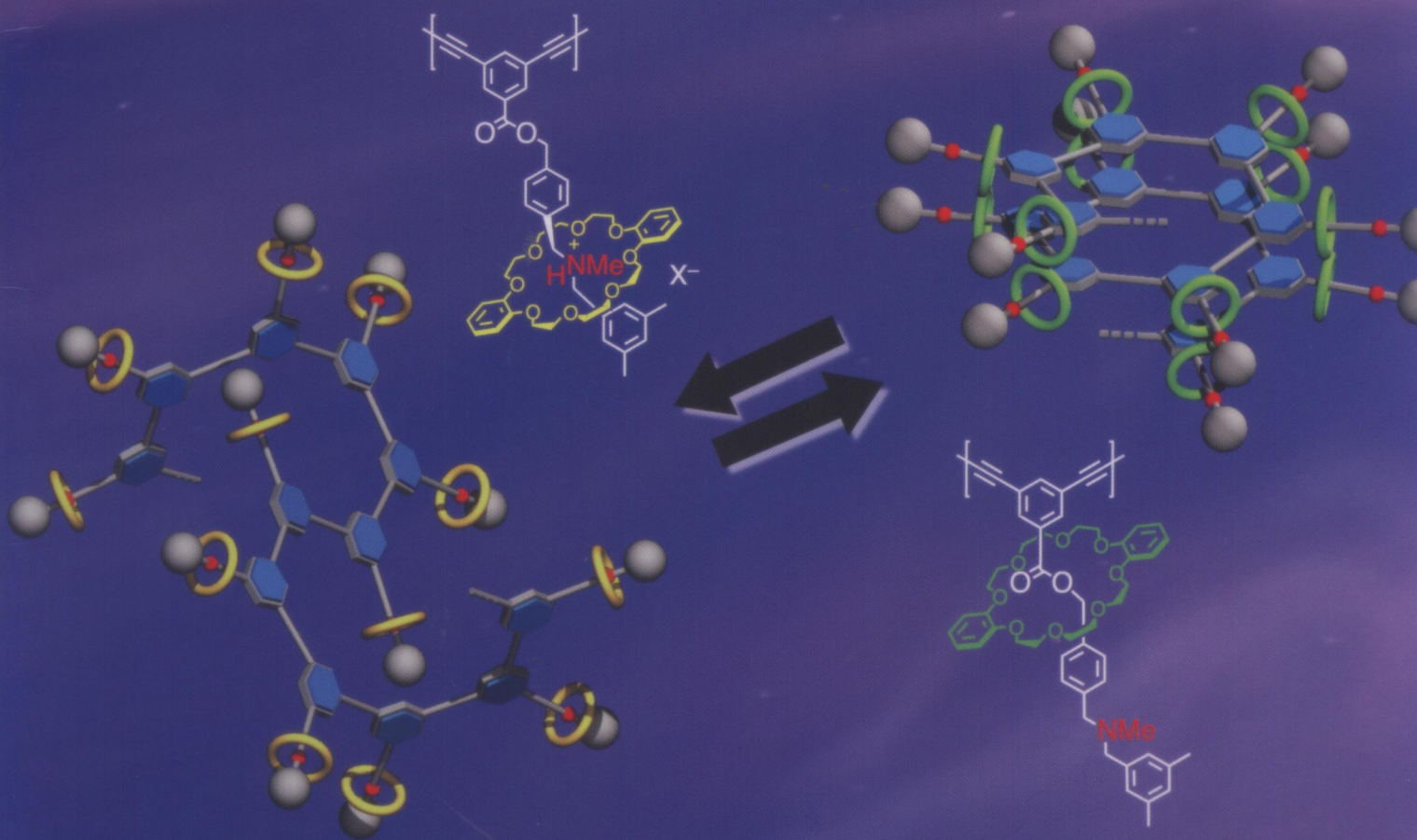


# Polymer Journal

Volume 46 Number 6

June 2014

[www.nature.com/pj](http://www.nature.com/pj)



Investigating side chain-type polyrotaxane structures

Synthesis of rotaxane-cross-linked polymers



The Society of Polymer Science, Japan

nature publishing group



# Polymer Journal

Volume 46, Number 6, June 2014

## EDITORIAL

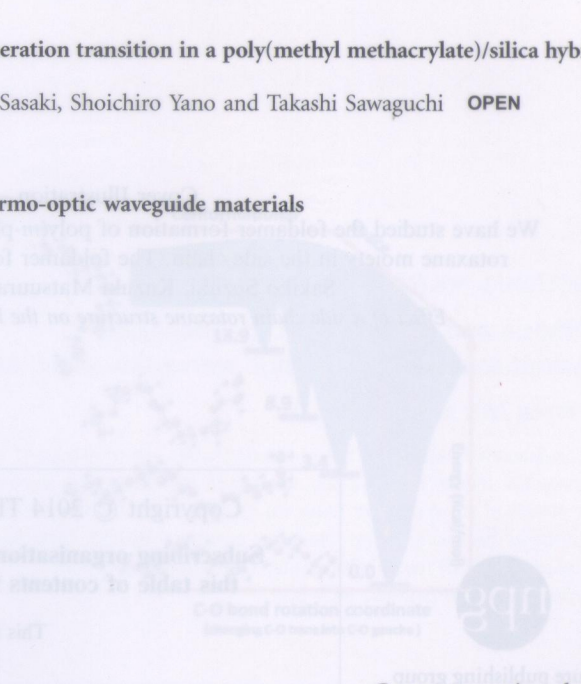
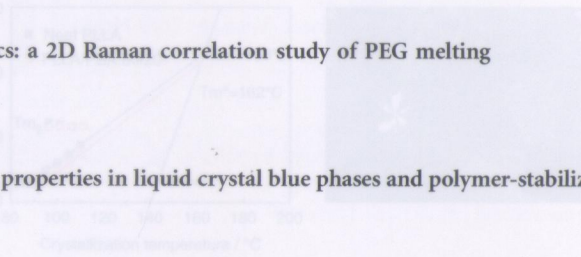
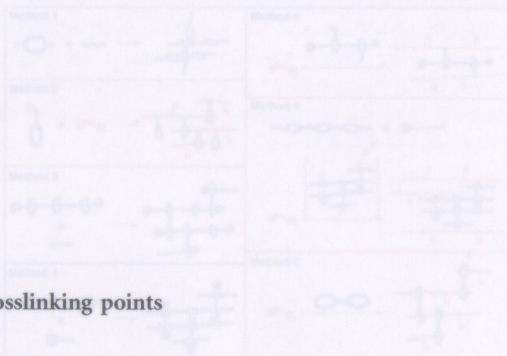
- 313 **PJ ZEON Award for outstanding papers in *Polymer Journal* 2013**  
Takashi Kato

## FOCUS REVIEW

- 315 **Synthesis of topologically crosslinked polymers with rotaxane-crosslinking points**  
Yasuhito Koyama

## ORIGINAL ARTICLES

- 323 **Isothermal crystallization of poly(L-lactide) and poly(butylene adipate) crystalline/crystalline blends**  
Lifen Zhao, Junjun Kong, Xiujuan Tian, Jun Zhang and Shengxue Qin
- 330 **Energy funneling and macromolecular conformational dynamics: a 2D Raman correlation study of PEG melting**  
Ashok Zachariah Samuel and Siva Umopathy
- 337 **Effect of cyanobiphenyl homologue molecules on electro-optical properties in liquid crystal blue phases and polymer-stabilized blue phases**  
Gihwan Lim, Hirotsugu Kikuchi and Sung-Kyu Hong
- 342 **A new mechanism for the silica nanoparticle dispersion–agglomeration transition in a poly(methyl methacrylate)/silica hybrid suspension**  
Tsuyoshi Tadano, Rui Zhu, Yoshio Muroga, Toru Hoshi, Daisuke Sasaki, Shoichiro Yano and Takashi Sawaguchi **OPEN**
- 349 **Synthesis and evaluation of thermoplastic polyurethanes as thermo-optic waveguide materials**  
Jae Young Jang and Jung Yun Do



Contents continued ...

- 355 **Supramolecular Polymers**  
**Effect of a side chain rotaxane structure on the helix-folding of poly(*m*-phenylene diethynylene)**  
Sakiko Suzuki, Kazuki Matsuura, Kazuko Nakazono and Toshikazu Takata
- 366 **Biopolymers, Bio-related Polymer Materials**  
**Selective accumulation of rare earth metal and heavy metal ions by a DNA-inorganic hybrid material**  
Masanori Yamada and Kazuhide Abe

Cover Illustration – Volume 46, No. 6 (June 2014)

We have studied the foldamer formation of poly(*m*-phenylene diethynylene)s possessing a mobile component-tethering rotaxane moiety in the side chain. The foldamer formation was reversibly controlled by the side chain rotaxane.

Sakiko Suzuki, Kazuki Matsuura, Kazuko Nakazono and Toshikazu Takata,

*Effect of a side chain rotaxane structure on the helix-folding of poly(*m*-phenylene diethynylene)* on page 355

Copyright © 2014 The Society of Polymer Science, Japan

Subscribing organisations are encouraged to copy and distribute this table of contents for internal, non-commercial purposes

This issue is now available at:  
[www.nature.com/pj](http://www.nature.com/pj)

