

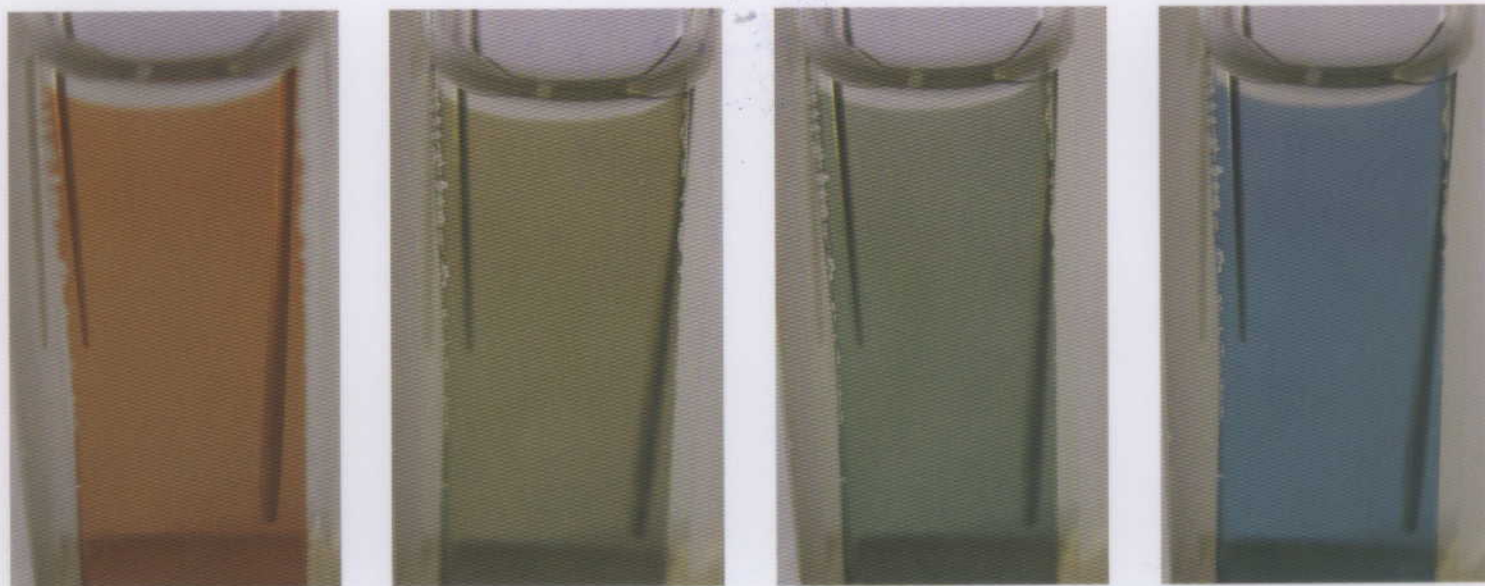
ISSN 0032-3896
EISSN 1349-0540

Polymer Journal

The Society of Polymer Science, Japan celebrates its 60th anniversary in 2012

Volume 44 Number 10 October 2012

www.nature.com/pj



The world's first 700nm, ultra-fine high-strength polyester nanofiber

Development of a single retardation film with wide-band birefringence properties

Structural development of polyester fibers during laser-heated drawing



The Society of Polymer Science, Japan



nature publishing group



Polymer Journal

Volume 44, Number 10, October 2012

INVITED REVIEWS

- Physical Properties of Polymers
987 **Development and application of high-strength polyester nanofibers**
Mie Kamiyama, Tsuyoshi Soeda, Suguru Nagajima and Kengo Tanaka
- Functional Polymers
995 **Copoly carbonate optical films developed using birefringence dispersion control**
Akihiko Uchiyama, Yuhei Ono, Yoshinori Ikeda, Hiroshi Shuto and Kazuo Yahata

ORIGINAL ARTICLES

- Polymer Synthesis and Reactions
1009 **Synthesis and characterization of calcium-containing polyurethane using calcium lactate as a chain extender**
Priya A Nair and Parameswaran Ramesh
- 1015 **Thermal luminescence spectroscopy of γ -irradiated elastomers using a multichannel Fourier-transform chemiluminescence spectrometer**
Takayuki Hironiwa, Taishi Yamada, Hiroshi Ishii, Chikahiro Satoh, Keith R Millington and Munetaka Nakata
- 1022 **1-(Arylmethoxy)anthracenes: how substituents affect their photoreactivity and ability to initiate radical and cationic polymerizations**
Taka-aki Kageyama, Yuhta Koizumi, Tetsutaro Igarashi and Tadamitsu Sakurai *Open*
- Polymer Structures
1030 ***In situ* study of fiber structure development of poly(butylene terephthalate) in a continuous laser-heated drawing process**
Kyoung-Hou Kim, Young-Ah Kang, Aki Yokoyama, Toshifumi Ikaga, Yutaka Ohkoshi, Isao Wataoka and Hiroshi Urakawa
- Polymer Surface and Interfaces
1036 **Morphology of nanoimprinted polyimide films fabricated via a controlled thermal history**
Sudu Siqing, Hui Wu and Atsushi Takahara
- Functional Polymers
1042 **The microstructure and dielectric properties of modified poly(aryl ether ketone)/metallophthalocyanine composites**
Xu Yang, Qitong Wang, Yunhe Zhang and Zhenhua Jiang
- 1048 **Electrosynthesis and characterization of a novel electrochromic copolymer of *N*-methylpyrrole with cyclopenta[2,1-b:3,4-b']dithiophene**
Yunzhi Fu, Xinfeng Cheng, Jinsheng Zhao, Tianyu Kong, Chuansheng Cui and Xianxi Zhang

Contents continued ...

- 1056 Polymer Engineering
Poly(vinyl alcohol)/graphene oxide nanocomposites prepared by a simple eco-process
Seira Morimune, Takashi Nishino and Takuya Goto
- 1064 A direct method for the vulcanization of acrylate rubber through *in situ* coordination crosslinking
Haiyan Mou, Pengfei Xue, Qingfeng Shi, Weihong Guo, Chifei Wu and Xiaowei Fu

Cover Illustration – Volume 44, No. 10 (October 2012)

Preparation of multichromic polymer by electrochemical copolymerization of *N*-methylpyrrole and cyclopenta[2,1-*b*:3,4-*b'*]dithiophene. Effect of monomer ratios on spectroelectrochemistry of the polymer. See the article by Yunzhi Fu, Xinfeng Cheng, Jinsheng Zhao, Tianyu Kong, Chuansheng Cui and Xianxi Zhang, *Electrosynthesis and characterization of a novel electrochromic copolymer of N-methylpyrrole with cyclopenta[2,1-*b*:3,4-*b'*]dithiophene* on page 1048.

Copyright © 2012 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

