

Professor Koichi Ute/Department of Chemical Science and Technology, The University of Tokushima, Tokushima 770-8501, JAPAN E-mail: u t e (@) c h e m. t o k u s h i m a - u . a c . j p Web site: http://pub2.db.tokushima-u.ac.jp/ERD/person/151610/profile-en.html

Background and Educations:

- 1981. 3. 大阪大学 基礎工学部 合成化学科 卒業
- 1983. 3. Master Degree, Graduate School of Engineering Science, Osaka University
- 1985. 8. Assistant Professor, Faculty of Engineering Science, Osaka University 1991.1 Ph. D (Osaka University) (Jan. 1991)
- 1996.4. Associate Professor, Faculty of Engineering Science, Osaka University
- 1997.4. Associate Professor, Graduate School of Engineering Science, Osaka University
- 2007.1. Professor, Department of Chemical Science and Technology, The University of Tokushima
- 2007.3. Visiting Professor, Center for Advanced Science and Innovation, Osaka University
- 2011.4.広島大学非常勤講師(兼任) 大学院工学研究院
- 2011.4.大阪市立大学非常勤講師(兼任) 大学院工学研究科
- 2011.4. Visiting Professor, Office for University-Industry Collaboration (UIC), Osaka University

Subject of study:

Polymer Characterization by NMR Spectroscopy and Chromatography (Pulsed Field Gradient NMR Spectroscopy, LC-NMR, Chromatography at Critical Adsorption Point), Control of Distribution of Chemical Composition in Vinyl Copolymers (Precision Polymerization, Molecular Design of Polymer Materials), Preparation and Structural Chemistry of Uniform Polymers (Supercirtical Fluid Chromatography, X-ray Single Cryrstal Determination, Mass Spectrometry, Thermal Analysis)

Major Awards and Honors

List of Recent Selected Publications

1. **Hisatomi Hirotaka**, **Nishimoto Yukari**, **Kawakaki Hideya**, **Momose Hikaru**, **Koichi Ute** *and* **Arakawa Ryuichi**: Correlations between Chemical Compositions and Retention Times of Methacrylate Random Copolymers Using LC-ESI-MS, *Mass Spectrometry*, Vol.1, No.2, p.A0012, 2012.

2. Tomohiro Hirano, Takahiro Furutani, Tatsuya Saito, Tadashi Segata, Miyuki Oshimura *and* Koichi Ute:

Isotactic-specific anionic polymerization of N-isopropylacrylamide with dilithium tetra-tert-butylzincate in the presence of a fluorinated alcohol or Lewis acid, *Polymer*, Vol.53, No.22, pp.4961--4966, 2012.

3. **Hikaru Momose**, **Maeda Tomoya**, **Hattori Kosuke**, **Tomohiro Hirano** *and* **Koichi Ute**: Statistical Determination of Chemical Composition and Monomer Sequence Distribution of Poly(methyl methacrylate-co-tert-butyl methacrylate)s by Multivariate Analysis of 13C NMR Spectra,

4. Tomohiro Hirano, Takuya Anmoto, Nao Umezawa, Hikaru Momose, Yukiteru Katsumoto, Miyuki Oshimura *and* Koichi Ute:

Application of Multivariate Analysis of NMR Spectra of Poly(N-isopropylacrylamide) to Assignment of Stereostructures and Prediction of Tacticity Distribution, *Polymer Journal*, Vol.44, No.8, pp.815--812, 2012.

5. **Sogabe Keisuke** and **Koichi Ute**:

Polymer Journal, Vol.44, No.8, pp.808--814, 2012.

Analysis of Acrylic Copolymers Containing Croboxyl Groups by the Derivatization Technique and DOSY, *Japanese Journal of Polymer Science and Technology*, Vol.69, No.7, pp.382--386, 2012.

6. **Tomohiro Hirano**, **Takahiro Furutani**, **Miyuki Oshimura** and **Koichi Ute**: Syndiotactic- and Heterotactic-Specific Radical Polymerizations of N-n-Propyl-α-fluoroacrylamide and Phase-Transition Behaviors of Aqueous Solutions of Poly(N-n-propyl-α-fluoroacrylamide), *Journal of Polymer Science Part A: Polymer Chemistry*, Vol.50, No.12, pp.2471--2483, 2012.

- 7. **Tomohiro Hirano**, **Takahiro Kamikubo** *and* **Koichi Ute**: Syndiotactic specific radical polymerization of N-isopropylacrylamide in toluene at low temperatures in the presence of silyl alcohols, *Polymer International*, Vol.61, No.6, pp.966--970, 2012.
- 8. **Kaneko Fumitoshi**, **Sasaki Keita**, **Kawaguchi Tatsuya**, <u>Koichi Ute</u> *and* **Hester James**: Neutron Diffraction and IR Spectroscopy Study on Crystalline Complexation of Syndiotactic Polystyrene with 15-Crown-5 and 18-Crown-6, *Chemistry Letters*, Vol.41, No.3, pp.284--286, 2012.
- 9. **Tomohiro Hirano**, **Hiroaki Yamamoto** *and* **Koichi Ute**: Effects of chemical composition and stereoregularity on phase-transition behaviors of aqueous solutions of copolymers composed of N-isopropylacrylamide and N-n-propylacrylamide, *Polymer*, Vol.52, No.23, pp.5277--5281, 2011.