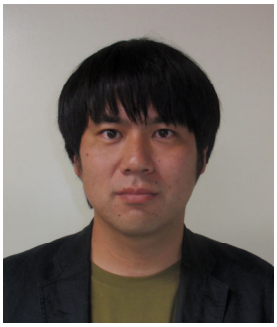
Curriculum Vitae



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Date of Birth: Oct 17, 1983
Place of Birth: Saga, Japan

Education:

2006. 3 Bachelor of Engineering, Kyushu University (Prof. A. Takahara and Prof. H. Otsuka)
2008. 3 Master of Engineering, Kyushu University (Prof. A. Takahara and Prof. H. Otsuka)
2011. 3 Doctor of Engineering, Kyushu University (Prof. A. Takahara and Prof. H. Otsuka)

Work experience:

2008.4-2011.3	JSPS Research Fellow (DC1)
	Kyushu University, Japan (Prof. Atsushi Takahara)
2011.4-2012.9	JSPS Postdoctoral Fellow for Research Abroad
	Carnegie Mellon University, USA (Prof. Krzysztof Matyjaszewski)
2012.10-present	Postdoctoral Fellow
	The University of Tokyo, Japan (Prof. Motomu Kanai)

Research Fields:
Polymer Reaction, Polymer Synthesis, Polymer Structure

Publication List

Original Papers

1) Hideyuki Otsuka, Koichiro Aotani, Yuji Higaki, Yoshifumi Amamoto, Atsushi Takahara
"Thermal Reorganization and Molecular Weight Control of Dynamic Covalent Polymers Containing Alkoxyamines in Their Main Chains",
Macromolecules (American Chemical Society), **40**, 1429-1434 (2007).

2) Yoshifumi Amamoto, Yuji Higaki, Yasuhiro Matsuda, Hideyuki Otsuka, Atsushi Takahara
"Programmed Formation of Nanogel via a Radical Crossover Reaction of Complementarily Reactive Diblock Copolymer"
Chem. Lett. (The Chemical Society of Japan), **36**, 774-775 (2007).

3) Yoshifumi Amamoto, Yuji Higaki, Yasuhiro Matsuda, Hideyuki Otsuka, Atsushi Takahara
"Programmed Thermodynamic Formation and Structure Analysis of Star-like Nanogel with Core Cross-linked by Thermally Exchangeable Dynamic Covalent Bonds"
J. Am. Chem. Soc. (American Chemical Society), **129**, 13298-13304 (2007).

4) Yoshifumi Amamoto, Takeshi Maeda, Kikuchi Moriya, Hideyuki Otsuka, Atsushi Takahara
"Star-like Nanogels with Different Arm Lengths: Formation by Dynamic Covalent Exchange and Their Molecular Imaging"
Chem. Commun. (Royal Society of Chemistry), 689-691 (2009).

5) Yoshifumi Amamoto, Moriya Kikuchi, Hiroyasu Masunaga, Sono Sasaki, Hideyuki Otsuka, Atsushi Takahara
"Reorganizable Chemical Polymer Gels Based on Dynamic Covalent Exchange and Controlled Monomer Insertion"
Macromolecules (American Chemical Society), **42**, 8733-8738 (2009).

6) Yoshifumi Amamoto, Moriya Kikuchi, Hiroyasu Masunaga, Sono Sasaki, Hideyuki Otsuka, Atsushi Takahara
"Intelligent Build-Up of Complementarily Reactive Diblock Copolymers via Dynamic Covalent Exchange toward Symmetrical and Miktoarm Star-like Nanogels"
Macromolecules (American Chemical Society), **43**, 1785-1791 (2010).

7) Yoshifumi Amamoto, Moriya Kikuchi, Hideyuki Otsuka, Atsushi Takahara
"Solvent-Controlled Formation of Star-like Nanogels via Dynamic Covalent Exchange of PSt-*b*-PMMA Diblock Copolymers with Alkoxyamine Units in the Side Chain"
Macromolecules (American Chemical Society), **43**, 5470-5473 (2010).

8) Yoshifumi Amamoto, Moriya Kikuchi, Hideyuki Otsuka, Atsushi Takahara
"Arm-Replaceable Star-Like Nanogels: Arm Detachment and Arm Exchange Reactions by Dynamic Covalent Exchanges of Alkoxyamine Units"
Polym. J. (The Society of Polymer Science, Japan), **42**, 860-867 (2010).

9) Tomoya Sato, Yoshifumi Amamoto, Hiroki Yamaguchi, Hideyuki Otsuka, Atsushi Takahara
"Substitutable" Polymer Brushes: Reactive Poly(methacrylate) Brushes with Exchangeable Alkoxyamine Units in the Side Chain"
Chem. Lett. (The Chemical Society of Japan), **39**, 1209-1211 (2010).

10) Yoshifumi Amamoto, Jun Kamada, Hideyuki Otsuka, Atsushi Takahara, Krzysztof Matyjaszewski
"Repeatable Photoinduced Self-Healing of Covalently Cross-Linked Polymers via Reshuffling of Trithiocarbonate Units"
Angew. Chem. Int. Ed. (Wiley VCH), **50**, 1660-1663 (2011).

11) Yoshifumi Amamoto, Moriya Kikuchi, Hiroyasu Masunaga Hiroki Ogawa Sono Sasaki, Hideyuki Otsuka and Atsushi Takahara
"Mesh-Size Control and Functionalization of Reorganizable Chemical Gels by Monomer Insertion into Their Cross-linking Points"
Polym. Chem. (Royal Society of Chemistry), **2**, 957-962 (2011).

12) Jing Su, Yoshifumi Amamoto, Masamichi Nishihara, Atsushi Takahara and Hideyuki Otsuka
"Reversible cross-linking of hydrophilic dynamic covalent polymers with radically exchangeable alkoxyamines in aqueous media"
Polym. Chem. (Royal Society of Chemistry), **2**, 2021-2026 (2011).

13) Keiichi Imato, Masamichi Nishihara, Takeshi Kanehara, Yoshifumi Amamoto, Atsushi Takahara, Hideyuki Otsuka
"Self-Healing of Chemical Gels Cross-Linked by Diarylbibenzofuranone-Based Trigger-Free Dynamic Covalent Bonds at Room Temperature"
Angew. Chem. Int. Ed. (Wiley VCH), **51**, 1138-1142 (2012).

14) Yoshifumi Amamoto, Hideyuki Otsuka, Atsushi Takahara, and Krzysztof Matyjaszewski
"Changes in Network Structure of Chemical Gels Controlled by Solvent Quality through Photoinduced Radical Reshuffling Reactions of Trithiocarbonate Units"
ACS Macro Lett. (American Chemical Society), **1**, 478-481 (2012).

15) Yoshifumi Amamoto, Hideyuki Otsuka, Atsushi Takahara, and Krzysztof Matyjaszewski
"Self-Healing of Covalently Cross-Linked Polymers by Reshuffling Thiuram Disulfide Moieties in Air under Visible Light"
Adv. Mater. (Wiley VCH), **24**, 3975–3980 (2012).

16) Tomoya Sato, Yoshifumi Amamoto, Hiroki Yamaguchi, Tomoyuki Ohishi, Atsushi Takahara and Hideyuki Otsuka
"Dynamic Covalent Polymer Brushes: Reversible Surface Modification of Reactive Polymer Brushes with Alkoxyamine-based Dynamic Covalent Bonds"
Polym. Chem. (Royal Society of Chemistry), **3**, (2012), *accepted*.

Peer-reviewed Proceeding, Books and Review

1) Yoshifumi Amamoto, Hideyuki Otsuka, and Atsushi Takahara
"Formation of Polystyrene/Poly(methyl methacrylate) Heteroarm Star-Like Nanogels from Complementarily Reactive Well-Defined Diblock Copolymers"
Journal of Physics: Conference Series (Institute of Physics), **184,** 012019 (2009).

2) Hideyuki Otsuka, Yoshifumi Amamoto, Yasuhiro Matsuda, Takeshi Maeda, Atsushi Takahara
"Synthesis and Reaction of Well-defined Copolymers with Thermally Exchangeable Dynamic Covalent Bonds in the Side Chains"
ACS symposium series book, 1024, 319-330 (2009).

3) Yoshifumi Amamoto, Hideyuki Otsuka, and Atsushi Takahara
"Synthesis and Characterization of Polymeric Nanogels"
Nanomaterials for Life Sciences, Volume 10, Polymeric Nanomaterials (Wiley VCH), 27-58.
Boschstr. 12, 69469 Weinheim, Germany.

4) 天本義史・大塚英幸 (Yoshifumi Amamoto, Hideyuki Otsuka)
「構造再編成可能な動的共有結合ポリマー」 (Recent Developments in Reorganizable Dynamic Covalent Polymers)
高分子、60 巻、324-328 (2011).

Awards

1)「九州地区高分子若手研究会・夏の講演会、修士学生講演賞」、2007 年 7 月
2)「九州大学学生後援会学術研究賞」、2008 年 4 月
3)「GelSympo 2009, Poster Award」、2009 年 12 月
4)「九州大学学生表彰」、2011 年 3 月
5)「Polymer Journal 論文賞 –日本ゼオン賞-」、2011 年 5 月

Invited Lectures

1) 天本 義史

「Arm-replaceable Star-like Nanogels: Arm Detachment and Arm Exchange Reactions by Dynamic Covalent Exchanges of Alkoxyamine Units」

『第 60 回高分子年次大会』、大阪、2011 年 5 月

2) 天本 義史

「動的共有結合の結合組み換え反応により調製した多成分系高分子ナノゲルの小角 X 線散乱測定による分子鎖形態解析」

『大型放射光施設 SPring-8 萌芽的研究支援課題利用説明会』、福岡、2012 年 6 月

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