

EDITORIAL

SPSJ Award for the outstanding papers in *Polymer Journal* 2010 sponsored by ZEON

Polymer Journal (2011) 43, 581–582; doi:10.1038/pj.2011.56

The winners of the 2010 PJ ZEON Award have been announced by the Society of Polymer Science Japan (SPSJ). SPSJ selects three young authors of the outstanding papers published in *Polymer Journal* as the winners every year, through the selection committee and board of directors of SPSJ. For 2010, the winners are:

Dr Yoshifumi Amamoto (Kyushu University, Japan (now Carnegie Mellon University, USA)) for the contribution of 'Arm-replaceable star-like nanogels: arm detachment and arm exchange reactions by dynamic covalent exchanges of alkoxyamine units' Vol. 42, No. 11, 2010.

Dr Kiyoka Okada (Hiroshima University, Japan) for the contribution of 'Elongational crystallization of isotactic polypropylene forms nano-oriented crystals with ultra-high performance' Vol. 42, No. 6, 2010.

Dr Daisuke Suzuki (Shinshu University, Japan) for the contribution of 'Self-oscillating core-shell microgels: effect of a crosslinked nanoshell on autonomous oscillation of the core' Vol. 42, No. 6, 2010.

Details of the winners follow this announcement.

Dr Amamoto, Dr Okada and Dr Suzuki were invited to receive the award diploma and a medal at the award ceremony held in conjunction with SPSJ annual meeting in May 2011 in Osaka. A prize money of 300 000 yen was offered to each winner and they were invited to give a talk based on the award paper.

On behalf of the *Polymer Journal* and the editorial board of the journal, I congratulate Dr Amamoto, Dr Okada and Dr Suzuki on their well-deserved honor, and their excellent papers. I hope the award will provide good encouragement to these young researchers and lead them to further success.

The Award is open to all *Polymer Journal* first authors who are under the age of 38 years at the time of paper submission. I hope this award will help drive submissions from eligible authors to *Polymer Journal*, and look forward to seeing many applications for the 2011 PJ ZEON Award. Those interested should go to the SPSJ website (<http://www.spsj.or.jp>) for further information. Finally, let me acknowledge our sincere appreciation to Zeon Corporation for their generous sponsorship of this Award.

Toshikazu Takata
Editor-in-Chief

ABOUT THE WINNERS



Yoshifumi Amamoto

Dr Amamoto graduated from Kyushu University with a BS degree in 2006, and received a doctorate of engineering, Kyushu University in 2011 under Professor Atsushi Takahara and Professor Hideyuki Otsuka. During 2008–2011, he was a Research Fellow of the Japan Society for the Promotion of Science (JSPS), and engaged in the study of reorganizable chemical gels based on reversible covalent bonds. At present, he works with Professor Krzysztof Matyjaszewski in Carnegie Mellon University, as a JSPS Postdoctoral Fellow for Research Abroad. His current interest is in functional materials based on controlled radical polymerizations and polymer reactions.

About the award article: The author accomplished arm replacements of star-like nanogels by means of dynamic covalent exchange processes. The star-like nanogels with alkoxyamine units at its branching points were synthesized by atom transfer radical polymerization and nitroxide-mediated radical polymerization, and arm detachment and arm exchange reactions were carried out through radical exchange reactions by heating the star-like nanogels with an excess of small alkoxyamine compounds and higher-molecular-weight linear polymers, respectively.

**Kiyoka Okada**

Dr Okada graduated from Hiroshima University with a Master degree in physics in 2005 and received her PhD degree from the same university in 2007. She worked at Hiroshima University as a researcher from 2007 to 2010. She became an assistant professor at the same university from 2011, working with Professor Masamichi Hikosaka. Her current research interests are the crystallization mechanism, structure and physical properties of crystalline polymers.

About the award article: The authors investigated the crystallization by extreme melt elongation of isotactic polypropylene (iPP). They found that morphology and structure changed discontinuously from well-known stacked lamellar crystals to the novel morphology of 'nanooriented crystals (NOCs)', the crystallinity of which was about unity when the elongational strain rate became larger than a critical one. NOCs of iPP showed high performances, such as high tensile strength, high thermal resistance and high transparency, compared with traditional iPP sheets. NOCs will become useful in a wide variety of applications and will contribute to the efforts to construct a sustainable society.

**Daisuke Suzuki**

Dr Daisuke Suzuki received his BS degree in 2003 and PhD in 2007 from Keio University, working under the guidance of Professor Haruma Kawaguchi. He worked as research fellow of the Japan Society for the Promotion of Science at Keio University (DC1, 2005–2007) and at the University of Tokyo (PD, 2007–2009). He then became tenure-track assistant professor of the International Young Researchers Empowerment Center at Shinshu University in 2009. His current research interests include design, synthesis and characterization of functional polymer particles.

About the award article: The authors have shown the effect of a crosslinked nanoshell covering oscillating microgels on their oscillatory behaviors. They successfully obtained the core/shell structures by seeded precipitation polymerization of acrylamide derivatives using preformed, oscillating microgels as cores. Oscillatory behaviors (that is, induction period, oscillating period and waveform) of the core/shell microgels were compared with those of the parent core microgel to clarify the effect of the addition of a nanoshell on the autonomous oscillating behaviors of microgels.