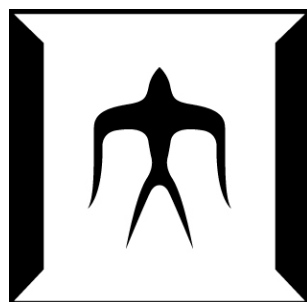


Eleventh Japan - Belgium Symposium on Polymer Science

November 8-11, 2009

Tokyo Institute of Technology





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on
Polymer Science**

November 8 -11, 2009

Tokyo Institute of Technology,



Tokyo, Japan

Organized by

International Research Center of Macromolecular Science,

Tokyo Institute of Technology

History of Japan – Belgium Symposium on Polymer Science

This series of symposia was organized on the original initiative of Professor G. Smets (Katholieke Universiteit Leuven) and Professor K. Hayashi (Osaka University)

	Year	Place	Chairman
1st	1982	Osaka (Japan)	Prof. K. Hayashi
2nd	1984	Brussels (Belgium)	Prof. G. Smets
3rd	1986	Sapporo (Japan)	Prof. J. Sohma
4th	1989	Brussels (Belgium)	Prof. M. Van Beylen
5th	1991	Sendai (Japan)	Prof. M. Matsuda
6th	1994	Namur (Belgium)	Prof. J.-M. André
7th	1997	Hayama (Japan)	Prof. M. Irie
8th	2000	Ghent (Belgium)	Prof. E. Goethals
9th	2003	Suita (Japan)	Prof. A. Matsumoto
10th	2006	Liege (Belgium)	Prof. R. Jérôme
11th	2009	Tokyo (Japan)	Prof. Y. Tezuka

Eleventh Japan - Belgium Symposium on Polymer Science

November 8 (Sunday)

17:00 – 18:00 **Registration** (Hotel Princess Garden)

18:00 – 20:00 **Welcome mixer** (Hotel Princess Garden)

November 9 (Monday)

9:00 - 9:30 **Registration** (Tokyo Tech Front, Royal-Blue Hall)

9:30 – 9:45 **Opening Remarks and Addresses**

Prof. Ken Okazaki (Dean, Graduate School of Engineering, TIT)

Prof. Mitsuo Sawamoto (President, Society of Polymer Science, Japan)

Session 1: Chairperson: Prof.'s Sawamoto/Goethals

9:45 – 10:15

Chip calorimetry for the investigation of transformations in thin polymer films

N. Gotzen, G. Van Assche, B. Van Mele* (VUB)

10:15 -10:45

Organic nano-electronics based on polymer nano-sheet assemblies

T. Miyashita (Tohoku U.)

10:45 – 11:15 **Coffee Break**

Session 2: Chairperson: Prof.'s Miyashita/Berghmans

11: 15 – 11: 45

Co-continuous polymer blend morphology tailored by nanofillers : from nanostructures to mechanical performances

O. Persenaire, J.-M. Raquez, L. Bonnaud, Ph. Dubois* (UMH)

11:45 – 12:15

Fabrication of tissues chips using a layer-by-layer technique

M. Matsusaki, K. Kadowaki, K. Sakaue, M. Akashi* (Osaka U.)

12:15 -13:30 **Lunch** (Conference Room-L, Tokyo Tech Front , 2F)

Session 3: Chairperson: Prof.'s Matsumoto/Dubois

13:30 – 14:00

Cobalt-mediated radical coupling (CMRC); a powerful route to the preparation of novel ABA triblock copolymers

C. Detrembleur*, C. Jérôme, A. Debuigne (ULg)

14:00 – 14:30

Metal catalysis and precision synthesis in living radical polymerization

M. Sawamoto (Kyoto U.)

14:30 – 15:00

'Clicked' polymeric microcapsules and beads: azide-alkyne versus thiol-ene and thiol-yne approach

F. Du Prez*, W. Van Camp, A. Prasath, T. Dispinar, T. Gokmen, B. G. De Geest (RUG)

15:00 -15:30

Topological polymer chemistry in pursuit of elusive polymer rings

Y. Tezuka*, T. Yamamoto (TIT)

15:30 – 16:00 **Coffee Break**

Session 4: Chairperson: Prof.'s Akashi/Du Prez

16:00 – 16:30

Nanopatterned smart polymer surfaces

A. Jonas (UCL)

16:30 – 17:00

Precision synthesis of condensation polymers and π -conjugated polymers

T. Yokozawa (Kanagawa U.)

17:00 – 17:30

Smart drug delivery systems based on pH-sensitive block copolymers

Ch. Jerome* (ULg)

17:30 – 18:00

Structure-property relationship of stereoblock polylactides with controlled sequences

Y. Kimura (KIT)

18:00 – 18:30

Multifunctional nanostructures for controlled and targeted drug delivery

L. Leprince, C. Roy, D. Magnin, A. M. Jonas, S. Demousier-Champagne* (UCL)

November 10 (Tuesday)

Session 5: Chairperson: Prof.'s Masuhara/Hofkens

9:30 – 10:00

Magneto-optical properties of polymers and nanoparticle/polymer blends

Th. Verbiest (KUL)

10:00 – 10:30

Liquid crystal polymers for photonic devices

H. Takezoe (TIT)

10:30 – 11:00 **Coffee Break**

Session 6: Chairperson: Prof.'s Vacha(TIT)/Lazzaroni

11:00 – 11:30

Visualizing dynamics of polymers by single molecule fluorescence microscopy

E. Braeken, A. Deres, H. Uji, J. Hofkens* (KUL)

11:30 – 12:00

Laser-induced crystallization and crystal growth of amino acids and proteins in solution

H. Masuhara*, T. Sugiyama, K. Yuyama, Th. Rungamanon, A. Miura, T. Uwada, A. Usman (NAIST, NCTU)

12:00 -12:30

Theoretical modeling of structure and properties of extended systems – unraveling the structure of polymers by vibrational Raman optical activity spectroscopy

B. Champagne (FUNDP)

12:30 – 14:00 **Lunch** (Conference Room-L, Tokyo Tech Front , 2F)

Session 7: Chairperson: Prof.'s Iwai/Jonas

14: 00 – 14:30

Organic semiconducting nanostructures from conjugated polymer self-assembly

R. Lazzaroni (UMH)

14:30 – 15:00

New functions related to the helical structures of substituted polyacetylenes prepared using a [Rh(nbd)Cl]₂ catalyst

M. Tabata*, Y. Mawatari (Muroran Institute of Technology)

15:00 – 15:30

The lifetime of organic photovoltaic cells: A critical problem with a strong need for a fundamental solution

D. Vanderzande*, B. Campo, S. Bertho, L. Lutsen, J. Manca, T. Cleij, T. Aernouts, A. Hadipour (U Hasselt)

15:30 – 16:00 **Coffee Break**

Session 8: Chairperson: Prof.'s Tabata/Vanderzande

16:00 – 16:30

Fluorescence label studies of thermo-responsive copolymers in aqueous solution

K. Iwai (Nara Women's U.)

16:30 – 17:00

Use of metal-ligands interactions to control the self-assembly of block copolymers

J.-F. Gohy (UCL)

17:00 – 17:30

Construction of crosslink-system-materials consisting of designed network-polymer-precursor modules

A. Matsumoto (Kansai U.)

17:30 – 18:00

Polymers as versatile materials for biomedical applications

P. Dubrueel*, S. van Vlierberghe, Tim Desmet, E. Schacht (RUG)

19:00 – 21:00 **Banquet** (Japanese Restaurant, "Botan")

November 11 (Wednesday)

Session 9: Chairperson: Prof.'s Saruyama/Van Mele

9:30 – 10:00

Selective removal of VOCs by polymer membranes containing ionic liquid

T. Uragami (Kansai U.)

10:00 – 10:30

Development of POSS containing block copolymers for direct patterning templates

T. Hayakawa*, T. Hirai, M. Kakimoto, M. Leolukman, P. Gopalan (TIT)

10:30 – 11:00 **Coffee Break**

Session 10: Chairperson: Prof.'s Uragami/ Jérôme

11:00 – 11:30

Application of the temperature modulation method to polymers

Y. Saruyama (KIT)

11:30 – 12:00

Chemorheology of thermosetting polymer systems studied by RheoDSC - a novel technique for simultaneous rheological and calorimetric analysis

G. Van Assche*, Ch. Block, V. Janssens, P. Van Puyvelde, B. Van Mele (VUB)

12:00 – 12:15 **Closing Remarks**

Prof. Bruno Van Mele (Vrije Universiteit Brussel)

12:30 – 14:00 **Lunch** (Restaurant Royal Blue Seiyoken, Tokyo Tech Front , 2F)