Polycondensation 2008

September 8 – September 11, 2008
At Tokyo Institute of Technology, Ookayama, Meguro, Tokyo, Japan

Program

September 8 (Mon)

9:00  Registration
10:00 Opening Remarks

**Discussion Leader: Cor E. Koning (Eindhoven Univ of Tech, Netherlands)**

10:10 Timothy E. Long (Virginia Tech, USA)
   Designing Segmented Ammonium Ionenenes: From Gene Transfer Agents to High Performance Elastomers

10:30 Moonhor Ree (POSTECH, Korea)
   Synthesis, Structure and Properties of Novel Brush Polymers

10:50-11:00 Coffee Break

11:00 Tsutomu Yokozawa (Kanagawa Univ, Japan)
   Control over Molecular Weight and Polydispersity of Hyperbranched Polyamides

11:20 Sung Chul Kim (KAIST, Korea)
   Polyurethane/Clay Nanocomposite Coating

11:40 Teruaki Hayakawa (Tokyo Tech, Japan)
   Synthesis and Morphology Studies of Polysulfone Derivatives for Proton Exchange Membranes

12:00-13:30 Lunch

**Discussion Leader: Timothy E. Long (Virginia Tech, USA)**

13:30 Cor E. Koning (Eindhoven Univ of Tech, Netherlands)
   Bio-based Polyesters and Polycarbonates for Coatings and Engineering Plastics Applications’

13:50 Sheng-Huei Hsiao (Tatung Univ, Taiwan)
   Fluorescent and Electrochromic Polyamides with Pyrenylamine Chromophore

14:10 Kenneth J. Wynne (VCU, USA)
Contrasting Nanoscale Surface Morphologies for Polyurethanes with random and block Fluorous/PEG Co-Polyoxetane Soft Blocks

14:30-14:50 Coffee Break

14:50 Tae Ho Yoon (Gwangju Institute of Sci and Tech, Korea)
Synthesis and Characterization of Polyimides with Low CTE for FPCB Applications

15:10 Philippe Desbois (BASF, Germany)
Polyamides at BASF

15:30-17:00 Poster Presentation

Discussion Leader: Frank W. Harris (The Univ of Akron, USA)

17:00 Plenary Lecture by Professor Hans R.Kricheldorf (Inst. fuer Techn. u. Makromol. Chemie, Germany)
The Law of Self-Dilution and the History of Step-Growth Polymerization

17:50 Piano Play by Mrs. Emi Hayashida (Yoneyama)

18:20 Welcome Party
September 9 (Tsu)

9:00 Registration

Discussion Leader: Kunio Kimura (Okayama Univ, Japan)

9:20 Masatoshi Hasegawa (Toho Univ, Japan)
Low-CTE and Low-CHE Poly(ester imide)s

9:40 E-Joon Choi (Kumoh National Institute of Tech, Korea)
Synthesis and Electrooptical Properties of Polymers Containing Bent-Shaped Mesogen with Acute-Subtended Angle

10:00 James L. Hedrick (IBM, USA)
High Performance Thermosets And Their Application To Probe Storage

10:20 Yakov S. Vygodskii (INEOS RAS, Russia)
The Synthesis of Polyheteroarylenes in Ionic Liquids

10:40-11:00 Coffee Break

11:00 Stefan Lundmark (Perstorp Specialty Chemicals AB, Sweden)
Polycondensation Reactions in Intumescent Systems

11:20 Loon-Seng Tan (US Air Force, USA)
In-situ Polycondensation: Solubilization of Carbon Nanofibers and Nanotubes with a Hyperbranched Poly(ether-ketone)

11:40 Hiroyoshi Kawakami (Tokyo Metropolitan Univ, Japan)
Fluorinated Polyimides as Biomaterials

12:00-13:30 Lunch

Discussion Leader: Moonhor Ree (POSTECH, Korea)

13:30 Plenary Lecture by Professor Junji Watanabe (Tokyo Tech, Japan)
Unusual Nematic Liquid Crystal with Polar Cs Symmetry Formed from Aromatic Polyesters with Head-Tail Character

14:20-14:30 Coffee Break

Discussion Leader: James L. Hedrick (IBM, USA)

14:30 Chang-Sik Ha (Pusan National Univ, Korea)
Polyimides for optoelectronic devices; from aliphatic polyimides to colorless transparent polyimides
14:50 Kenneth R. Carter (Univ of Massachusetts – Amherst, USA)
Polycondensation Brush Layers
15:10 Sam Verbrugghe (Ghent Univ, Belgium)
Functionalized Polymers by Combination of ‘Click’ Chemistry and Step Growth Polymerization
15:30-15:50 Coffee Break
15:50 Shiyong Yang (Institute of Chemistry, Chinese Academy of Sci, China)
Aromatic Polyimide Resins with High Toughness For Microelectronic Packaging Substrates
16:10 Yoshiharu Kimura (Kyoto Institute of Tech, Japan)
Synthesis of Stereoblock Polylactides by Solid-State Polycondensation
16:30 Ramaz Katsarava (Technical Univ of Georgia, Georgia)
AABB-Poly(depsipeptide)s – a New Class of Amino Acid Based Biodegradable Polymers
16:50-18:00 Poster Presentation
September 10 (Wed)

9:00  Registration

**Discussion Leader: Kohei Goto (JSR, Japan)**

9:20  Guey-Sheng Liou (National Taiwan Univ, Taiwan)
Synthesis, Electrochemical, and Electrochromic Properties of Novel Soluble Aromatic Poly(amine ketone)s

9:40  Alain Fradet (Univ P. et M. Curie, France)
Predicting Average Molar Masses And Polydispersities In Complex Hyperbranched Polycondensations.

10:00  Kunio Kimura (Okayama Univ, Japan)
Preparation of Poly(4-phthalimide) Nanoribbons and Study on Crystal Structure

10:20  Frank W. Harris (The Univ of Akron, USA)
Synthesis and Characterization of Thermoplastic Polyphenoxyquinoxalines

10:40-11:00  Coffee Break

11:00  Theo J. Dingemans (Delft Univ of Tech, Netherlands)
All-aromatic Main-chain Nematic Thermoset Polymers

11:20  Rudy R. Rulkens (DSM, Netherlands)
Formation of Higher Cyclic Oligomers in PA46

11:40  John W. Connell (NASA Langley, USA)
Preparation and Characterization of Polymer/Metal Nanoparticle Decorated Carbon Nanotube Nanocomposites

12:00-13:30  Lunch

**Discussion Leader: Shiyong Yang (Institute of Chemistry, Chinese Academy of Sci, China)**

13:30  Ben Zhong Tang (The Hong Kong Univ of Sci & Tech, Hong Kong)
Polycyclotrimerization of Arylene Bipropiolate: A Convenient Approach to Regioregular Hyperbranched Polymer

13:50  Mihye Yi (Korea Research Institute of Chemical Tech, Korea)
Aromatic Polyimide Gate Insulators with Low Temperature Processability for Pentacene Organic Thin-Film Transistors
14:10    Christopher W. Bielawski (Univ of Texas at Austin, USA)  
N-Heterocyclic Carbenes: Novel Building Blocks for Accessing  
Functional Polymeric Materials  
14:30-14:50    Coffee Break  
14:50    Regis Mercier (CNRS, France)  
Synthesis of New Polybenzimidazole Ionomers  
15:10    Kohei Goto (JSR, Japan)  
Development of Aromatic Polymer Electrolyte Membrane for Fuel Cell  
15:30    Lien-Chung Hsu (National Cheng Kung Univ, Taiwan)  
Synthesis and Properties of Polybenzimidazoles and Their  
Nanocomposite Membranes for Fuel Cell Applications  
16:00-21:00    Banquet: Yokohama Bay Cruse
September 11 (Thr)

Discussion Leader: Mitsuru Ueda (Tokyo Institute of Technology)

9:20 Der-Jang Liaw (National Taiwan Univ of Sci and Tech, Taiwan)
Organo-soluble Rigid Polymers with Pyridine and Chromophore Functional Groups by Polycondensation

9:40 Sang Youl Kim (KAIST, Korea)
Poly(arylene ether)s via Trifluoromethyl Activated Nucleophilic Aromatic Substitution Polycondensation

10:00 Dennis Smith (Clemson Univ, USA)
New Step-Growth Polyaddition and Polycondensation Reactions of Aromatic Trifluorovinyl Ethers

10:20 Yun Chen (National Cheng Kung Univ, Taiwan)
Synthesis and Optoelectronic Properties of Hyperbranched Polyfluorenes

10:40-11:00 Coffee Break

11:00 Yuichi Ishida (JAXA, Japan)
Development of Highly Soluble Addition-type Imide Oligomers Containing Fluorene Rings and Polyimide / Carbon Fiber Composites

11:20 Alexander Rusanov (INEOS RAS, Russia)
New TNT-based sulfonated monomers and polymers

11:40 Tatsuo Kaneko (JAIST, Japan)
Development of Plant-Derived High-Performance Polymers

12:00 Closing Remarks