

# **1<sup>th</sup> International Symposium on Integrated Molecular and Macromolecular Materials (ISIMMM 2006)**

## **Scientific Program**

September 26 – 28, 2006  
Beijing, CHINA

### **Organized by**

Beijing University of Chemical Technology (China)

Tokyo Institute of Technology (Japan)

## **SCOPE OF THE SYMPOSIUM**

Materials science has gained remarkable progress and is growing in broad fields. A significant tendency is that various kinds of materials in conventional categories such as organic and inorganic materials, metals and semiconductors, and macromolecules and supramolecules, now have walked together for more new and advanced applications. Therefore, “Integrated Molecular Engineering” not only represents the art of the state in material science, but also open new avenue to molecular materials, supramolecular materials, hybrid nanomaterials, metamaterials, as well as to provide new circumstances for well-motivated young scientists to develop new sciences. Especially, multi-lateral integration will be significant in the coming materials science including material choice/tailoring, syntheses, methodology, processing, and so forth, as is realized in Chinese traditional craftworks. Not only interdisciplinary fields but also exchanges of researchers should be crucial to drive such new movement. The organizing committee hopes that this symposium will kick off long-term continuous exchange programs involving collaborative research, regular international symposia, mutual visits, exchange of students and scientists, and so on.

### **Language**

English will be the official language during the Conference.

### **Symposium Venue**

The symposium will be held within the campus of Beijing University of Chemical Technology, Beijing, CHINA. The conference site is located in the Meeting Center of Yi Fu Library, Beijing University of Chemical Technology.

## ORGANIZATION

**Chairpersons:** Prof. Wantai Yang (BUCT), Prof. Tomokazu Iyoda (TIT)

### **Organizing Committee:**

#### **Chinese side:**

Prof. Wantai Yang (Beijing University of Chemical Technology)

Prof. Liqun Zhang (Beijing University of Chemical Technology)

Prof. Feng Wang (Beijing University of Chemical Technology)

Prof. Weimin Yang (Beijing University of Chemical Technology)

Prof. Sizhu Wu (Beijing University of Chemical Technology),

Prof. Xiaoping Yang (Beijing University of Chemical Technology)

#### **Japanese side:**

As. Prof. Sadayuki Asaoka (Tokyo Institute of Technology),

Prof. Tomokazu Iyoda (Tokyo Institute of Technology),

As. Prof. Kaori Kamata (Tokyo Institute of Technology),

Prof. Yoshihiro Koide (Kanagawa University),

Dr. Jingze Li (Tokyo Institute of Technology),

Prof. Masaru Nakagawa (Tokyo Institute of Technology),

Dr. Xin Qi (Tokyo Institute of Technology)

#### **Korean side:**

Prof. Seung-Kon Ryu (Chungnam National University)

### **ISIMMM website:**

<http://www.buct.edu.cn/xinwen/cailiao.htm>

## TOPICS of ISIMMM 2006

The scientific program will consist of keynote lectures, submitted oral contributions and poster presentations on science and technology of integrated Molecular and Macromolecular Materials including theoretical approach and practical applications.

### TIME TABLE

#### **September 26, 2006 [Tuesday]**

Arrivals

Registration and Welcome Party

#### **September 27, 2006 [Wednesday]**

Morning: Opening Session, Keynote Lectures and Oral Presentations

Afternoon: Keynote Lectures, Oral Presentations and Poster Sessions

Evening: Formal Reception

#### **September 28, 2006 [Thursday]**

Morning: Oral Presentations and Closing Remarks

Afternoon: Excursion

## SCIENTIFIC PROGRAM

**September 26, 2006 [Tuesday]**

**16:00 ~ 17:00** Registration; Hallway, 1<sup>st</sup> Floor, Meeting Center, Yi Fu Library

**18:00 ~ 20:00** Welcome Party (**Daheng Restaurant**)

Welcome speech by the Vice President Prof. Gui WANG, BUCT, CHINA

Speech given by Prof. Tomokazu IYODA, TIT, Japan

**September 27, 2006 [Wednesday]**

**Registration:** 7:30 ~ 8:30; 13:30 ~ 14:00;

Location: Hallway, 1<sup>st</sup> Floor, Meeting Center, Yi Fu Library

<b>Morning</b>	<b>Location: Multifunctional Hall, YiFu Library</b>
8 : 00 — 8 : 20am	Opening Ceremony 1. Speech by Prof. Feng WANG (Director of College of Materials Science and Engineering, BUCT) 2. Opening Address by Prof. Wantai YANG and Prof. Tomokazu IYODA (Chairpersons of the Symposium).
<b>Chairperson</b>	<b>Eiji YASHIMA</b>
8 : 20 — 8 : 50am	1 Keynote Speaker: Wantai Yang (BUCT)
8 : 50 — 9 : 20am	2 Keynote Speaker: Tomokazu Iyoda (TIT)
9 : 20 — 9 : 50am	3 Keynote Speaker: Lei JIANG (CAS)
9 : 50 — 10 : 20am	4 Keynote Speaker: Seung-Kon RYU (CNU)
10 : 20 — 10 : 40am	Tea break
<b>Chairperson</b>	<b>Wantai YANG</b>
10 : 40 — 11 : 00am	1 ZhaoBin QIU (BUCT)
11 : 00 — 11 : 20am	2 Jingze LI (TIT)
11 : 20 — 11 : 40am	3 Xiaonong Chen (BUCT)
11 : 40 — 12 : 00am	4 Aihua CHEN (TIT)
12 : 00 — 1 : 30	<b>Lunch (University Reception Restaurant); setting up posters</b>

<b>Afternoon</b>	<b>Location: Multifunctional Hall, YiFu Library</b>
<b>Chairperson</b>	<b>Tomokazu IYODA</b>
1 : 30 — 2 : 00pm	1 Keynote Speaker: Eiji YASHIMA (NU)
2 : 00 — 2 : 30pm	2 Keynote Speaker: Jinming LIN (THU)
2 : 30 — 3 : 00pm	3 Keynote Speaker: Liqun ZhANG (BUCT)
3 : 00 — 3 : 20pm	Tea break
<b>Chairperson</b>	<b>Seung-Kon RYU</b>

3 : 20 — 3 : 25pm	1 Teng BEN ( NU)
3 : 25 — 3 : 30pm	2 Rui TAO (BUCT)
3 : 30 — 3 : 35pm	3 Lijun SONG (TIT)
3 : 35 — 3 : 40pm	4 Wentao LIAN (BUCT)
3 : 40 — 3 : 45pm	5 Natsumi AOAI (TIT)
3 : 45 — 3 : 50pm	6 Lichao LI (BUCT)
3 : 50 — 3 : 55pm	7 Hirokazu Oda (TIT)
3 : 55 — 4 : 00pm	8 Lixia LI (BUCT)
4 : 00 — 4 : 05pm	9 Fang REN (BUCT)
4 : 05 — 4 : 10pm	10 Hongzhen LIN (NU)
4 : 10 — 5 : 40pm	<b>Poster Presentation Time</b>
6 : 10pm	<b>Formal Banquet (Daheng Restaurant)</b> Speech by Prof. Weimin YANG (Director of International Exchange and Cooperation Department, BUCT) Speech by Prof. Wantai YANG ( BUCT) Speech by Prof. Seung-Kon RYU (CNU)

### September 28, 2006 [Thursday]

**Registration:** 7:30 ~ 8:30; 13:30 ~ 14:00;

Location: Hallway, 1<sup>st</sup> Floor, Meeting Center, Yi Fu Library

<b>Morning</b>	<b>Location: Multifunctional Hall, YiFu Library</b>
<b>Chairperson</b>	<b>Jinming LIN</b>
8 : 00 — 8 : 20am	1 Wencai WANG (BUCT)
8 : 20 — 8 : 40am	2 Masaru NAKAGAWA (TIT)
8 : 40 — 9 : 00am	3 Huaihe SONG (BUCT)
9 : 00 — 9 : 20am	4 Sizhu WU (BUCT)
9 : 20 — 9 : 40am	5 Yunhua YU (BUCT)
9 : 40 — 10 : 00am	Tea break
<b>Chairperson</b>	<b>Masaru NAKAGAWA</b>
10 : 00 — 10 : 20am	1 Kaori KAMATA (TIT)
10 : 20 — 10 : 40am	2 Sheng ZHANG (BUCT)
10 : 40 — 11 : 00am	3 Xin QI (TIT)
11 : 00 — 11 : 20am	4 Ryoko WATANABE (TIT)
11 : 20 — 11 : 40am	5 Yoshihiro KOIDE (KU)
11 : 40 — 12 : 00am	6 Sasayuki ASAOKA (TIT)
12 : 00 — 12 : 10am	<b>Closing Remarks: Prof. Liqun ZHANG</b>

**Abbreviations:** BUCT= Beijing University of Chemical Technology; TIT= Tokyo Institute of Technology; NU= Nagoya University; CAS= China Academy of

**Science; THU= Tusinghua University; CNU= Chungnam National University; KU= Kanagawa University**

## ISIMMM 2006 Oral Presentations List

Time Schedule	Allotted Time	Given Name	Family Name	Affiliation	Presentation Title
<b>Chairperson: Eiji YASHIMA (NU)</b>					
8: 20 – 8: 50am	30mins	Wantai	YANG	BUCT	Constructing Micro/Nano Structures by Surface Molecular Integrated Engineering
8: 50 – 9: 20am	30mins	Tomokazu	IYODA	TIT	Orientation-controlled Hexagonal Nanocylinder Array structures in PEO- LC Block Copolymer Films as Reliable Templates
9: 20 – 9: 50am	30mins	Lei	JIANG	CAS	Design and Creation of Bioinspired Surfaces with Special Wettability
9:50 – 10:20am	30mins	Seung-Kon	Ryu	CNU	Platinum-loading on porous carbons
<b>Chairperson: Wantai YANG (BUCT)</b>					
10: 40 – 11: 00am	20mins	Zhaobin	QIU	BUCT	Crystallization Behaviour of Biodegradable Polymer Blends
11: 00 – 11: 20am	20mins	Jingze	LI	TIT	Block copolymer photolithography to fabricate ordered Ag nanoparticle array
11: 20 – 11: 40am	20mins	Xiaonong	CHEN	BUCT	Thermally Responsive Polymers: Adsorption on Surfaces, Reversible Flocculation and Bio-fouling Resistance
11: 40 – 12: 00am	20mins	Aihua	CHEN	TIT	Fabrication of Highly Ordered SiO <sub>2</sub> Nanopost Array from Films of Block Copolymers



<b>Chairperson: Tomokazu IYODA (TIT)</b>					
1: 30 – 2: 00pm	30mins	Eiji	YASHIMA	NU	Synthesis of Isotactic and Syndiotactic C <sub>60</sub> -End-Capped PMMAs and Their Nanosphere and Nanonetwork Formations
2: 00 – 2: 30pm	30mins	Jinming	LIN	THU, CAS	Monitoring and Kinetics Study of Single Particle on a Simple Microfluidic Chip
2: 30 – 3: 00pm	30mins	Liqun	ZHANG	BUCT	Highly-Filled Rubber/Clay Nanocomposites with Excellent Performance Prepared by Melt Blending
<b>Chairperson: Seung-Kon RYU (CNU)</b>					
3: 20 – 3: 25pm	5mins	Teng	BEN	NU	Synthesis and Chiroptical Properties of Oligo(binaphthalene)s
3: 25 – 3: 30pm	5mins	Rui	TAO	BUCT	Inhibition of Protein Adhesion on Colloidal Particle Surfaces by Pre-adsorption of PNIPAM-based Comb-block Copolymer
3: 30 – 3: 35pm	5mins	Lijun	SONG	TIT	Molecular self-assembly and spin manipulation based on $\beta$ -diketone pyridinium ligands
3: 35 – 3: 40pm	5mins	Wentao	LIAN	BUCT	Hollow carbon onions catalytically synthesized from carbon black
3: 40 – 3: 45pm	5mins	Natsumi	AOAI	TIT	Nanoimprint of poly(styrene)-block- poly(4-vinylpyridine) thin films
3: 45 – 3: 50pm	5mins	Lichao	LI	BUCT	Novel Carbon Beads Prepared from Different Crosslinking Degree Polystyrene Microspheres

3: 50 – 3: 55pm	5mins	Hirokazu	ODA	TIT	Au electroless deposition on magnetic NiP hollow microfibers
3: 55 – 4: 00pm	5mins	Lixia	LI	BUCT	Direct synthesis of ordered mesoporous carbons from F108/RF composite obtained in basic media of nonaqueous solution
4: 00 – 4: 05pm	5mins	Fang	REN	BUCT	Temperature and pH Sensitivities of Poly(N,N-Dimethylaminoethyl methacrylate) Aqueous Solution and Their Effect on Latex Stability
4: 05 – 4: 10pm	5mins	Hongzhen	LIN	NU	Helix-Helix Transition and Fluorescence Response of a Poly(phenylacetylene) Derivative Bearing an Optically Active Fluorophore
4: 10 – 5: 40pm	90mins	<b>Poster Presentation Time</b>			
<b>Chairperson: Jinming LIN (THU, CAS)</b>					
8: 00 – 8: 20am	20mins	Wencai	WANG	BUCT	Surface Functionalization of Fe <sub>3</sub> O <sub>4</sub> Magnetic Nanoparticles via RAFT-mediated Graft Polymerization
8: 20 – 8: 40am	20mins	Masaru	NAKAGAWA	TIT	Magnetic Ni-P Hollow Microfibers Molded from Recyclable and Morphology-Tunable Hydrogen-Bonded Fibrous Molecular Aggregates
8: 40 – 9: 00am	20mins	Huaihe	SONG	BUCT	Large-scale synthesis of hollow carbon onions by carbonization of phenolic resin
9: 00 – 9: 20am	20mins	Sizhu	WU	BUCT	Electrospun poly(L-lactic acid) with multi-walled carbon nanotubes and hydroxyapatite nanofibrous membranes for guided tissue regeneration

9: 20 – 9: 40am	20mins	Yunhua	YU	BUCT	Hygrothermal Aging and Electrochemical Corrosion Behaviors of Pultruded Carbon Fiber/Vinyl Ester Resin Composites Used for Sucker Rods
<b>Chairperson: Masaru NAKAGAWA (TIT)</b>					
10: 00 – 10: 20am	20mins	Kaori	KAMATA	TIT	Nanotemplating Process of Phase-Segregated Structure in Amphiphilic Diblock Copolymer
10: 20 – 10: 40am	20mins	Sheng	ZHANG	BUCT	Enhancing polymer char formation by reaction with phosphorylated polyols.
10: 40 – 11: 00am	20mins	Xin	QI	TIT	Living polymerization of Aryl Isocyanides Initiated by a Solid Phase Based Pd-Pt $\mu$ -Ethyndiyl Complex
11: 00 – 11: 20am	20mins	Ryoko	WATANABE	TIT	Nanopattern Transcription by Wet Chemical Etching Utilizing Block Copolymer Thin Films as Etching Masks
11: 20 – 10: 40am	20mins	Yoshihiro	KOIDE	KU	Synthesis and Characterization of Aluminum Coordination Compounds for the Preparation of Functional Materials
11: 40 – 12: 00am	20mins	Sadayuki	ASAOKA	TIT	Regiospecific accumulation of photofunctional units at microphase segregation interface of amphiphilic diblock copolymer
<b>Closing Remarks</b>					
12: 00 – 12: 10am	10 mins	Liqun	ZHANG	BUCT	

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## ISIMMM 2006 Poster Presentations List

Poster Number	Family Name	Given Name	Affiliation	Title
P-1	Teng	BEN	NU	Synthesis and Chiroptical Properties of Oligo(binaphthalene)s
P-2	Rui	TAO	BUCT	Inhibition of Protein Adhesion on Colloidal Particle Surfaces by Pre-adsorption of PNIPAM-based Comb-block Copolymer
P-3	Lijun	SONG	TIT	Molecular self-assembly and spin manipulation based on $\beta$ -diketone pyridinium ligands
P-4	Wentao	LIAN	BUCT	Hollow carbon onions catalytically synthesized from carbon black
P-5	Hirokazu	ODA	TIT	Precipitate microstructures of high strength Mg-Gd-Y-Zn-Zr alloys
P-6	Lixia	LI	BUCT	Direct synthesis of ordered mesoporous carbons from F108/RF composite obtained in basic media of nonaqueous solution
P-7	Fang	REN	BUCT	Temperature and pH Sensitivities of Poly(N,N-Dimethylaminoethyl methacrylate) Aqueous Solution and Their Effect on Latex Stability
P-8	Hongzhen	LIN	NU	Helix-Helix Transition and Fluorescence Response of a Poly(phenylacetylene) Derivative Bearing an Optically Active Fluorophore
P-9	Hirokazu	ODA	TIT	Precipitate microstructures of high strength Mg-Gd-Y-Zn-Zr alloys
P-10	Lixia	LI	BUCT	Direct synthesis of ordered mesoporous carbons from F108/RF composite obtained in basic media of nonaqueous solution

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