

IABS2013 (Sep 28 – 30, 2013)

September 28

Registration (8:00 – 22:00)

September 29

Morning

Afternoon

8:00 - 8:30	8:30 - 9:15	9:15 - 10:00	10:00 - 10:30	10:30 - 11:15	11:15 - 12:00	12:00-14:00	14:00-14:25	14:25-14:50	14:50-15:15	15:15-15:40	15:40-16:00	16:00-16:25	16:25-16:50	16:50-17:15	18:00-21:00
Opening Remarks	PL-1	PL-2	Photography	PL-3	PL-4	Lunch	IL-1	IL-2	IL-3	IL-4	Coffee Break	IL-5	IL-6	IL-7	Reception

September 30

Morning

Afternoon

8:00-8:25	8:25-8:50	8:50-9:15	9:15-9:40	9:40-10:05	10:05-10:25	10:25-10:50	10:50-11:15	11:15-11:40	11:40-12:05	12:05-14:00	14:00-14:25	14:25-14:50	14:50-15:15	15:15-15:40	15:40-16:00	16:00-16:25	16:25-16:50	16:50-17:15	18:00-21:00
IL-8	IL-9	IL-10	IL-11	IL-12	Coffee Break	IL-13	IL-14	IL-15	IL-16	Lunch	IL-17	IL-18	IL-19	IL-20	Coffee Break	IL-21	IL-22	IL-23	Banquet

Scientific Program

September 28, 2013 / Saturday

8:00 – 22:00, **Registration**, Lobby of the Redbuds Hotel

September 29, 2013 / Sunday (Morning)

Conference Room: 6040, Education Complex (教育大厦), Changchun Institute of Applied Chemistry

8:00 – 8:30, **Opening Remarks**

Chair: Prof. Xuesi Chen (Changchun Institute of Applied Chemistry, China)

Prof. Doo Sung Lee (Sungkyunkwan University, Korea)

Prof. Hiroyuki Nishide (Waseda University, Japan)

Prof. Kinam Park (Purdue University, USA)

Plenary Lectures

Chair: Prof. Hiroyuki Nishide (Waseda University, Japan)

8:30 – 9:15, Prof. Ann-Christine Albertsson, (Royal Institute of Technology, Sweden)

Macromolecular Architecture and Advanced Synthesis as a Platform for Degradable Polymers with Tailor made Properties

9:15 – 10:00, Prof. Jan Feijen (University of Twente, The Netherlands)

Biodegradable Nanosystems for Drug Delivery

10:00 – 10:30, **Coffee Break / Photography**

Chair: Prof. Doo Sung Lee (Sungkyunkwan University, Korea)

10:30 – 11:15, Prof. Kinam Park (Purdue University, USA)

The Missing Components of Current Drug Delivery Systems and New Approaches

11:15 – 12:00, Prof. Ernst Wagner (University of Munich, Germany)

Sequence-defined Carriers for Targeted Nucleic Acid and Protein Delivery

Invited Lectures

September 29, 2013 / Sunday (Afternoon)

Conference Room: 6040, Education Complex (教育大厦), Changchun Institute of Applied Chemistry

Chair: Prof. Chih-Chang Chu (Cornell University, USA)

14:00 – 14:25, **Prof. Hiroyuki Nishide** (Waseda University, Japan)

Radical Polymers Toward Organic-based Rechargeable Batteries

14:25 – 14:50, **Prof. Yunfeng Lu** (University of California, Los Angeles, USA)

Engineered Protein Nanocapsules for Therapeutics

14:50 – 15:15, **Prof. Yuanyuan Zhang** (Wake Forest University, USA)

Urine-derived Stem Cells: Biological Characterization and Potential Cell-based Therapy

15:15 – 15:40, **Prof. Won Jong Kim** (Pohang University of Science and Technology, Korea)

Polymeric Biomaterials for Gene, Drug and Nitric Oxide Delivery

15:40 – 16:00, **Coffee Break**

Chair: Prof. Jun Wang (University of Science and Technology of China, China)

16:00 – 16:25, **Prof. Doo Sung Lee** (Sungkyunkwan University, Korea)

pH-sensitive Polymeric Micelles for Theranostics

16:25 – 16:50, **Prof. Atsushi Maruyama** (Tokyo Institute of Technology, Japan)

Chilling Capture of Proteins Using Functionalized UCST Polymers

16:50 – 17:15, **Prof. Yubin Huang** (Changchun Institute of Applied Chemistry, CAS, China)

A Polymer-(Tandem Drugs) Conjugate for Enhanced Cancer Treatment

September 30, 2013 / Monday (Morning)

Conference Room: 6040, Education Complex (教育大厦), Changchun Institute of Applied Chemistry

Chair: Prof. You Han Bae (University of Utah, USA)

- 8:00 – 8:25, **Prof. Zhongwei Gu** (Sichuan University, China)
Towards New-generation Biomedical Materials: Peptide Dendrimers and Their Supramolecular Self-assembly
- 8:25 – 8:50, **Prof. Yong-Hee Kim** (Hanyang University, Korea)
RNA Interference-mediated Reversal of Metallothionein-dependent Cisplatin Resistance Using Reducible Poly(oligo-D-arginine)
- 8:50 – 9:15, **Prof. Jun Wang** (University of Science and Technology of China, China)
System Delivery of Small Interfering RNA with Nanocarriers for Cancer Therapy
- 9:15 – 9:40, **Prof. Chae-Ok Yun** (Hanyang University, Korea)
Reprogrammed Viruses as Cancer Gene Therapeutics: Targeted, Armed, and Shielded
- 9:40 – 10:05, **Prof. Chong-Su Cho** (Seoul National University, Korea)
Design of Polymeric Gene Carriers for Efficient DNA Transfection or RNAi Silencing by Regulation of Cellular Uptake

10:05 – 10:25, Coffee Break

Chair: Prof. Zhongwei Gu (Sichuan University, China)

- 10:25 – 10:50, **Prof. You Han Bae** (University of Utah, USA)
Tissue Penetrating Self-assembled Nanoparticles Activated by Tumor Microenvironment
- 10:50 – 11:15, **Prof. Chih-Chang Chu** (Cornell University, USA)
Nature-inspired Design of Pseudo-protein-based Biomaterials: Their Biological Property and Biomedical Applications
- 11:15 – 11:40, **Prof. Youngro Byun** (Seoul National University, Korea)
Therapeutic Glycobiologics: Heparin Conjugates for Cancer Therapy
- 11:40 – 12:05, **Dr. Guangchen Xu** (Editor, Wiley-VCH)
Publishing in Wiley Materials Science Journals: How to Maximise Your Success

September 30, 2013 / Monday (Afternoon)

Conference Room: 6040, Education Complex (教育大厦), Changchun Institute of Applied Chemistry

Chair: Prof. Toshihiro Akaike (Tokyo Institute of Technology, Japan)

14:00 – 14:25, **Prof. Hideyoshi Harashima** (Hokkaido University, Japan)

Multifunctional Envelope-type Nano Device for Non-viral Gene Delivery
Concept and Application for Nanomedicine

14:25 – 14:50, **Prof. Yoshihiro Ito** (RIKEN Advanced Science Institute, Japan)

Bio-orthogonal and Combinatorial Designs of Binding Growth Factors

14:50 – 15:15, **Prof. Hongbin Li** (University of British Columbia, Canada)

Engineering Protein-based Biomaterials with Tailored Mechanical Properties for
Biomedical Applications

15:15 – 15:40, **Prof. Akon Higuchi** (Central University, Taiwan)

The Differentiation of Human Adipose-derived Stem Cells Isolated by Membrane
Filtration Method

15:40 – 16:00, Coffee Break

Chair: Prof. Hideyoshi Harashima (Hokkaido University, Japan)

16:00 – 16:25, **Prof. Toshihiro Akaike** (Tokyo Institute of Technology, Japan)

Design of Cell Recognition Biomaterials and Prospect for Development of
Cadherin-Marices Engineering

16:25 – 16:50, **Prof. Guoping Chen** (National Institute for Materials Science, Japan)

Preparation of Collagen Porous Scaffolds with a Pore Size Gradient to Study Pore
Size Effect on Cartilage Regeneration

16:50 – 17:15, **Prof. Xuesi Chen** (Changchun Institute of Applied Chemistry, CAS, China)

Engineered Intelligent Polypeptide Nanocarriers for Cancer Therapy

17:15 – 17:30, Closing Remarks