



The Second Asian Symposium on Advanced Materials

Chemistry of Functional Materials

FINAL PROGRAM

October 11-14, 2009
Shanghai, China

ORGANIZED BY

Department of Materials Science &
Advanced Materials Laboratory
Fudan University

SPONSORED BY

National Natural Science Foundation of China (NSFC)
Science and Technology Commission of Shanghai Municipality
China Materials Research Society

[Http://asam2009.fudan.edu.cn](http://asam2009.fudan.edu.cn)

[Http://mse.fudan.edu.cn/asam2009/index.htm](http://mse.fudan.edu.cn/asam2009/index.htm)

The Second Asian Symposium on Advanced Materials

Chemistry of Functional Materials

October 11-14, 2009
Shanghai China



Final Program

ORGANIZED BY

Department of Materials Science &
Advanced Materials Laboratory
Fudan University

SPONSORED BY

National Natural Science Foundation of China (NSFC)
Science and Technology Commission of Shanghai Municipality
China Materials Research Society

Organizing Committee

Co-Chairs: Limin Wu, Shanghai, China

Dongyuan Zhao, Shanghai, China

International Advisory Committee

Vyacheslav Bouznik (Moscow, Russia)

Li-Jen Chen (Taiwan, China)

Jianping Gong (Sapporo, Japan)

Chang-Sik Ha (Pusan, Korea)

Toyoko Imae (Yokohama, Japan)

Ming Jiang (Shanghai, China)

Jung-IL Jin (Seoul, Korea)

Alexei Khokhlov (Moscow, Russia)

Sung-Chul Kim (Taejon, Korea)

Teck-Peng Loh (Singapore, Singapore)

Valentin Parmon (Novosibirsk, Russia)

Yury Shchipunov (Vladivostok, Russia)

Atsushi Takahara (Fukuoka, Japan)

Local Organizing Committee

Jianhua Dong (Beijing, China)

Lei Jiang (Beijing, China)

Jiaping Lin (Shanghai, China)

Qinghua Lu (Shanghai, China)

Jin Ma (Beijing, China)

Zhengzhong Shao (Shanghai, China)

Yi Tang (Shanghai, China)

Bo Tu (Shanghai, China)

Peiyi Wu (Shanghai, China)

Jian Xu (Beijing, China)

Yanlei Yu (Shanghai, China)

Meifang Zhu (Shanghai, China)

General Secretary

Ying Yu (Shanghai, China)

Shuxue Zhou (Shanghai, China)

Program at a Glance

Date	Morning	Afternoon	Evening	
Oct. 11 (Sunday)	Arrival and Registration			
Oct. 12 (Monday)	Opening Remarks & Plenary Sessions 8:30-10:20	Oral Sessions (A, B, C) 10:20-12:10	Oral Sessions (A, B, C) 13:45-17:40	Banquet 18:00
Oct. 13 (Tuesday)	Plenary Sessions 8:30-9:50	Oral Sessions (A, B, C) 9:50-12:10	Oral Sessions (A, B, C) 13:45-17:40	Poster Sessions (19:00~21:00)
Oct. 14 (Wednesday)	Oral Sessions (A, B, C) 8:30-11:20			

Conference Information

1. Plenary lecture: the time of plenary lecture is 40 min. including discussion.
2. Keynote lecture: the time of keynote lecture is 30 min. including discussion.
3. Invited lecture and oral lecture: 20 min. including discussion.
Note: Please copy your PPT to the conference computer before the session (Office 2003 preferred, Microsoft only, no Macintosh). If you want to use your own laptop, please contact the secretariat in advance. The presentation sites of each section are listed in conference Final Program.
4. Poster: **19:00-21:00, Oct. 13**, Lecture Hall, 4th Floor, Fuxuan Hotel
 Poster Size: 90cm (wide) × 120cm (high)
 Poster Number: The program number corresponding to your abstract will already be posted at the top of the board. The authors must use the board with this number.
 Mounting and Removal: The mounting and the removal of the posters must be done by the author according to the following schedule:
 Mounting: Tuesday, October 13 from 16:00 pm to 17:00 pm
 Removal: Tuesday, October 13 from 21:00 pm to 21:30 pm
 The organizers are not responsible for any item, including posters, left in the room.

Conference Schedule

October 12

Morning

Opening Ceremony and Plenary Lectures (*Lecture Hall, 4th Floor, Fuxuan Hotel*)

8:30-8:50 Opening Ceremony

Chairman: Dongyuan Zhao

8:50-9:30 PL-01 Photomobile Polymer Materials - From Nano to Macro

Tomiki Ikeda, *Tokyo Institute of Technology, Japan*

9:30-10:10 PL-02 Programmed Molecular Assembly for Tailored Functional Materials

Takuzo Aida, *The University of Tokyo, Japan.*

10:10-10:30 Conference Photograph

10:30-10:40 Coffee/Tea break

Section A: Inorganic Materials (*Conference Room 1, 4th floor, Fuxuan Hotel*)

Section A1 Chairman: Junjie Zhu

10:40-11:10 A-KN-01 Mesoporous Carbon and Carbon-based Nanocomposites as Catalyst Supports for Cellulose Conversion into Polyols

Tao Zhang, *Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China*

11:10-11:30 A-IL-01 Density Functional Studies Of Nanoscale Materials: Towards Realistic Models of Catalysts and Beyond

Konstantin M. Neyman, *ICREA and Universitat de Barcelona, Barcelona, Spain*

11:30-11:50 A-IL-02 Effect of Cr Element on Nanostructure of the Bulk Nanocrystalline Fe₃Al Materials Prepared by Aluminothermic Reaction

Peiqing La, *Lanzhou University of Technology, China*

11:50-12:10 A-O-01 Structure and Physical and Mechanical Properties of Ultrafine-grained Titanium Produced by Severe Plastic Deformation

Yurii Petrovich Sharkeev, *Institute of Strength Physics and Materials Science, SB RAS, Russia*

Section B: Organic Polymeric Materials (*Conference Room 2, 4th floor, Fuxuan Hotel*)

Section B1 Chairman: Jian Ping GONG

10:40-11:10 B-KN-01 Electrosynthesis and Applications of the Nanomaterials of Conducting Polymers

Gaoquan Shi, *Department of Chemistry, Tsinghua University, China*

11:10-11:30 B-IL-01 Functional Nanomaterials based on Nanoporous Block Copolymers

Jin Kon Kim, *Pohang University of Science and Technology, Korea*

11:30-11:50 B-IL-02 Novel Conceptions and Approaches towards Optimized Morphology for High-Performance Polymer Solar Cells

Xiaoniu Yang, *Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China*

11:50-12:10 B-O-01 Structural and Electrical Investigations on Epoxy/Nano-Silica Composites for Vacuum Pressure Impregnation (V.P.I.) Insulation

Pingkai Jiang, *Shanghai Jiao Tong University, China*

Section C : Opto-electronic Materials (*Conference Room3, 4th floor, Fuxuan Hotel*)

Section C1 Chairman: A. Takahara

10:40-11:10 C-KN-01 Aggregation-Induced Emission: Phenomenon, Mechanism and Applications

Ben Zhong Tang, *The Hong Kong University of Science & Technology, China*

11:10-11:30 C-IL-01 Properties and Application Field of the Heterooxide Layers Formed on the Metals and Alloys by Plasma Electrolytic Oxidation

Sergey Vasilievich Gnedkov, *Institute of Chemistry, Far East Division, Russian Academy of Sciences, Russia*

11:30-11:50 C-IL-02 Nanoscale Ceramic Electrodes for Solid Oxide Fuel Cells

Changrong Xia, *University of Science and Technology of China, China*

11:50-12:10 C-O-01 Luminescent Soft Materials Derived from Task-Specific Ionic Liquid and Lanthanide Compounds

Huanrong Li, *Hebei University of Technolgy, China*

12:10-13:30 Lunch (*Buffet Restaurant, 3rd floor, Fuxuan Hotel*)

October 12

Afternoon

Section A: Inorganic Materials (*Conference Room 1, 4th floor, Fuxuan Hotel*)

Section A2 Chairman: Guowei Yang

13:45-14:15 A-KN-02 Intrinsic Nature of Homogeneous Catalysis of Ag Heterogeneous Catalyst in Hydrogenation of Aromatic Nitro Compounds

Zheng Xu, *Nanjing University, China*

14:15-14:45 A-KN-03 A Glycol-Directed Macroporous Nanodevice with Multi-Functions

Chengzhong Yu, *Fudan University, China*

14:45-15:05 A-IL-03 Peculiarities of Synthesis of Filamentous Carbon by Catalytic Pyrolysis of Alkanes on Supporting Ni- or Co-Nanoparticles And Application of these Composite Carbon-Mineral Adsorbents in Biocatalysis

G. A. Kovalenko, *Boraskov Institute of Catalysis, Russia*

15:05-15:25 A-O-02 Fabrication of (Ti-O)/Ti Composite Coating on NiTi Shape Memory Alloy using PIID and Coating Characterisation

Tao Sun, *The University of Hong Kong, China*

15:25-15:40 Coffee break

Section A3 Chairman: Zheng Xu

- 15:40-16:10 A-KN-04 From Nanocrystal Synthesis to Nanomanufacturing: Laser Ablation in Liquid
Guowei Yang, *Zhongshan University, China*
- 16:10-16:30 A-IL-04 Stimuli-Responsive “Smart” Membrane Materials and Processes
Liang-Yin Chu, *Sichuan University, China*
- 16:30-16:50 A-IL-05 Hierarchical Porous Structured Organophosphonate Hybrid Materials for Multifunctional Applications
Zhong-Yong Yuan, *Nankai University, China*
- 16:50-17:10 A-IL-06 Synthesis, Structures and Enhanced Properties of Platelike WO₃ Nanostructures with High Specific Areas
Deliang Chen, *Zhengzhou University, China*
- 17:10-17:30 A-O-03 The Luminescence Properties of ZnO Nanorods/MEH-PPV Heterostructure Devices
Suling Zhao, *Beijing Jiaotong University, China*

Section B: Organic Polymeric Materials (*Conference Room 2, 4th floor, Fuxuan Hotel*)

Section B2 Chairman: Li-Jen Chen

- 13:45-14:15 B-KN-02 Hydrogels: A Novel Material for the Age of Life Science
Jian Ping GONG, *Hokkaido University, Japan*
- 14:15-14:45 B-KN-03 Biomimetic Approaches to the Synthesis of Inorganic Oxides on Biopolymer Templates
Yury Shchipunov, *Institute of Chemistry, Far East Department, Russian Academy of Sciences, Russia*
- 14:45-15:05 B-IL-03 Manipulation of Conductive Network in Carbon Fillers Filled Polymer Composites
Cheng Zhang, *Zhejiang University of Technology, China*
- 15:05-15:25 B-O-02 Keggin Heteropolyacid Salt of Triphenyl(3-sulfopropyl)phosphonium as an Efficient and Reusable Catalyst for Esterifications
Yajing Wu, *Nanjing University of Technology, China*

15:25-15:40 Coffee break

Section B3 Chairman: Gaoquan Shi

- 15:40-16:10 B-KN-04 Superhydrophobic Surfaces and Contact Angle Hysteresis
Li-Jen Chen, *National Taiwan University, China*
- 16:10-16:40 B-KN-05 Self-assembly of Polypeptide-based Copolymers
Jiaping Lin, *East China University of Science And Technology, China*
- 16:40-17:00 B-IL-04 Interpolymer Complexes of Oppositely Charged Macromolecules Having Different Affinity to Water
Valentina V. Vasilevskaya, *Nesmeyanov Institute of Organoelement Compounds Russian Academy of Sciences, Russia*
- 17:00-17:20 B-IL-05 Preparation and Self-assembly of Amphiphilic Polyrotaxanes and Application as Carrier for Controlled Release of AmB
Zeng-guo Feng, *Beijing Institute of Technology, China*

17:20-17:40 B-O-03 Chitosan Functionalized Graphene Based Heterogeneous Catalysts for Regioselective [2+2+2] Cyclotrimerization Reaction
Jinsheng Cheng, *Tsinghua University, China*

Section C : Opto-electronic Materials (*Conference Room3, 4th floor, Fuxuan Hotel*)

Section C2 Chairman: **Ben Zhong Tang**

13:45-14:15 C-KN-02 Self-Assembled Multilayer Microcapsules with Tailored Structures and Properties
Changyou Gao, *Zhejiang University, China*

14:15-14:35 C-IL-03 Fabrication and Characterization of Drug-Loaded Sutures from Composite Nanofibers
Zheng-Ming Huang, *Tongji University, China*

14:35-14:55 C-IL-04 Synthesis and Characterizations of Fullerooxazoles Prepared Using Anionic Fullerenes
Xiang Gao, *Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China*

14:55-15:15 C-O-02 Sol-Gel Synthesis of Highly Luminescent Silica Glasses Activated by Lanthanides
Andrey Zdravkov, *Grebenschikov Institute of Silicate Chemistry, Russian Academy of Sciences, Russia.*

15:15-15:30 Coffee break

Section C3 Chairman: **Changyou Gao**

15:30-16:00 C-KN-03 Molecular Aggregation States and Physicochemical Properties of Soft Interfaces
A. Takahara, *Institute for Materials Chemistry and Engineering, Japan*

16:00-16:20 C-IL-05 Bioinspired Chiral Surfaces and their Stereospecific Interaction with Biosystems
Taolei Sun, *Physics Institute Muenster University, Germany*

16:20-16:40 C-IL-06 Synthesis of Luminescent Rare Earth Nanocrystals in Ionic Liquids
Ji Chen, *Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China*

16:40-17:00 C-IL-07 Self-assembled Nanoparticles of Cholesterol-Modified Carboxymethyl Curdlan Conjugate as a Novel Carrier of Epirubicin
Lei Li, *Institute of Biomedical Engineering, Chinese Academy of Medical Science, China*

17:00-17:20 C-IL-08 Preparation and Optical Limiting Properties of POSS-Based Hybrid Nanocomposites
Hongyao Xu, *Donghua University, China*

17:20-17:40 C-O-03 Synthesis of Organic-Inorganic Hybrid Optical Waveguide Materials Using Non-Hydrolytic Sol-Gel Process
Jinyan Wang, *Dalian University of Technology, China*

18:00-20:00 Banquet Buses will pick up participants at the entrance to Fuxuan Hotel at 17:50 October 12 afternoon, and will turn back to Fuxuan Hotel at 20:00.

October 13

Morning

Plenary Lectures (Lecture Hall, 4th Floor, Fuxuan Hotel)

Chairman: **Yury Shchipunov**

8:40-9:20 PL-03 Challenges And Visions For Chemists And Chemical Scientists In The 21st Century

Jung-II Jin, *Korea University, Korea*

9:20-10:00 PL-04 Bio-Inspired, Smart, Multiscale Interfacial Materials

Lei Jiang, *Institute of Chemistry, Chinese Academy of Sciences, China*

10:00-10:20 Coffee break

Section A: Inorganic Materials (Conference Room 1, 4th floor, Fuxuan Hotel)

Section A4 Chairman: **Zuwei Xie**

10:20-10:50 A-KN-05 Nanochannels for Supramolecular Organization of Photoactive Guests

Gion Calzaferri, *University of Bern, Switzerland*

10:50-11:10 A-IL-07 DNA-based Assembly Toward Hybrid Nanomaterials and Functioning Molecular Machines

Zhaoxiang Deng, *University of Science and Technology of China, China*

11:10-11:30 A-IL-08 Construction and Applications of Carbon Nanotubes-Semiconductive Oxide Hybrid Nanostructured Materials

Wei-De Zhang, *South China University of Technology, China*

11:30-11:50 A-O-04 Structure and Properties of Calcium-Phosphate Biocoatings on the Nanostructured Titanium

Elena Legostaeva, *Institute of Strength Physics and Materials Science, SB RAS, Russia*

11:50-12:10 A-O-05 Facile Synthesis and Characterization of Novel Hexagonal Lamelliform Monodisperse Mesoporous Silicate SBA-15

Yongheng Zhu, *Shanghai University, China*

Section B: Organic Polymeric Materials (Conference Room 2, 4th floor, Fuxuan Hotel)

Section B4 Chairman: **Chang-Sik Ha**

10:20-10:50 B-KN-06 Multi-Phase Polymer Membranes for Direct Methanol Fuel Cell

Sung Chul Kim, *KAIST, Korea*

10:50-11:10 B-IL-06 Fabrication and Characterization of Polymer Matrix Nanocomposites

Robert K.Y. Li, *City University of Hong Kong, China*

11:10-11:30 B-IL-07 Synthesis and Functional Properties of Bis-dendronized Arylene Amorphous Molecular Materials with High Transition Temperature

Zhong Hui Li, *Sichuan College of Education, China*

11:30-11:50 B-O-04 The Simultaneous Removal of Arsenic and Mercury From Natural-Gas-Wells

Produced Water by Hollow Fiber Supported Liquid Membrane

Sira Suren, *Chulalongkorn University, Thailand*

11:50-12:10 B-O-05 The Recovery of Praseodymium from Mix Rare Earth via Hollow Fiber Supported Liquid Membrane by Using Methyltrioctylammonium Chloride as Carrier in Kerosene

Pharannalak Wannachod, *Chulalongkorn University, Thailand*

Section C : Opto-electronic Materials (*Conference Room3, 4th floor, Fuxuan Hotel*)

Section C4 Chairman: **Yong Zhang**

10:20-10:50 C-KN-04 Nanocomposites for Human Tissue Repair and Regeneration

Min Wang, *The University of Hong Kong, China*

10:50-11:10 C-IL-09 Phase Transition of Ionic Liquid under Nano-confinement and Properties of Hybrid of Ionic Liquid and Nanomaterial

Guozhong Wu, *Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China*

11:10-11:30 C-IL-10 Strain-engineered Nanomembranes

Yongfeng Mei, *Institute for Integrative Nanosciences, Germany*

11:30-11:50 C-O-04 Nanostructured Hydrogels Formed by Chitosan with Xanthan

S. A. Sarin, *Institute of Chemistry, Far East Department, Russian Academy of Sciences, Russia*

11:50-12:10 C-O-05 Amphiphilic Chitosan Derivatives in Drug Delivery System

Can Zhang, *China Pharmaceutical University, China*

12:15-13:30 Lunch (*Buffet Restaurant, 3rd floor, Fuxuan Hotel*)

October 13

Afternoon

Section A: Inorganic Materials (*Conference Room 1, 4th floor, Fuxuan Hotel*)

Section A5 Chairman: **Chang-jun Liu**

13:45-14:15 A-KN-06 Group 4 Metallacarboranes: Robust Catalysts for Construction of C-N Bonds

Zuowei Xie, *The Chinese University of Hong Kong, Shatin NT, China*

14:15-14:45 A-KN-07 Fabrication of Biosensors Based on Three- Dimensionally Ordered Macroporous Films

Jun-Jie Zhu, *Nanjing University, China*

14:45-15:05 A-IL-09 Ultrasound-assisted Synthesis of Hollow Mesoporous Silica with Controlled Mesostructure

Tiehong Chen, *Nankai University, China*

15:05-15:25 A-IL-10 Fine Control over the Morphology and Structure of Silica Nanomaterials toward Varied Applications

Junhui He, *Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China*

15:25-15:40 Coffee break

Section A6 Chairman: **Gion Calzafferi**

- 15:40-16:10 A-KN-08 Preparation of Highly Dispersed Noble Metal Nanoparticles in the Channels of Mesoporous Materials
Changjun Liu, *Tianjin University, China*
- 16:10-16:30 A-IL-11 Pulse Current Processing of Hierarchically Porous Monoliths from Macro and Microporous Powders
Farid Akhtar, *University of Engineering and Technology Lahore, Pakistan*
- 16:30-16:50 A-IL-12 Hydrothermal Synthesis of BaZrO₃ Hollow Nanospheres via Ostwald Ripening and Its Photoluminescence Properties
Yongnan Zhao, *Tianjin Polytechnic University, China*
- 16:50-17:10 A-O-06 The Extraction of Lanthanum from Mix Rare Earth via Mixer Settler Using D2EHPA in Kerosene as Organic Solvent
Wichhirini Urat, *Silpakorn University, Thailand*
- 17:10-17:30 A-O-07 Active Catalysts for CO Oxidation and Divinyl Hydrogenation Prepared by Incorporation of Gold into SBA Materials with Various Pore Sizes
Pyrjaev P.A., *Boriskov Institute of Catalysis, Russia*

Section B: Organic Polymeric Materials (Conference Room 2, 4th floor, Fuxuan Hotel)

Section B5 Chairman: **Elodie Bourgeat-Lami**

- 13:45-14:15 B-KN-07 Polyimides for Electro-optic Applications
Chang-Sik Ha, *Pusan National University, Korea*
- 14:15-14:45 B-KN-08 New Surface Photoreactions for Advanced Materials
Wantai Yang, *Beijing University of Chemical Technology, China*
- 14:45-15:05 B-IL-08 Tribology Study of Amide-Containing Stratified Self-Assembled Monolayers
Junyan Zhang, *Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, China*
- 15:05-15:25 B-O-06 Charge Transport Active Polymers Involving Nanostructures
Alexey Tameev, *A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, RAS, Russia*

15:25-15:40 Coffee break

Section B6 Chairman: **Wantai Yang**

- 15:40-16:10 B-KN-09 Organic/Inorganic Composite Latexes Synthetic Strategies, Recent Progress And New Directions
Elodie Bourgeat-Lami, *Université de Lyon, Univ. Lyon , France.*
- 16:10-16:40 B-KN-10 The Structure and Properties of Animal Produced Silks
Zhengzhong Shao, *Fudan University, China*
- 16:40-17:00 B-IL-09 A Ph-Responsive Ceramic Composite Membrane Prepared by Chemical Graft Polymerization

Yijiang ZHAO, *Huaiyin Teachers College, China*

17:00-17:20 B-IL-10 Advanced Anticorrosion Coatings Prepared from Polymer-Clay Nanocomposite Materials

Jui-Ming Yeh, *Chung Yuan Christian University, China*

17:20-17:40 B-O-07 The Fatigue Initial Point Behavior of SUS 630 based on the Pitting Corrosion Condition

Fong Yuan Ma, *National Taiwan Ocean University, China*

Section C : Opto-electronic Materials (Conference Room3, 4th floor, Fuxuan Hotel)

Section C5 Chairman: Min Wang

13:45-14:15 C-KN-05 Core/Shell Silica Coated Nanoparticles with Strong NIR-To-Visible Upconversion Fluorescence

Yong Zhang, *National University of Singapore, Singapore*

14:15-14:45 C-KN-06 Application of Semiconductor Quantum Dots as Fluorescent Probes in Life Science

Lianhui Wang, *Fudan University, China*

14:45-15:05 C-IL-11 In Situ Synthesis of Graded or Aligned Functional Materials by High Magnetic Fields

Qiang Wang, *Northeastern University, China*

15:05-15:25 C-IL-12 Charge-transporting Polymers and Molecular Glasses for Optoelectronic Applications

Juozas Vidas Grazulevicius, *Kaunas University of Technology, Lithuania.*

15:25-15:40 Coffee break

Section C6 Chairman: Lianhui Wang

15:40-16:10 C-KN-07 Piezoelectric Materials for Advanced Applications

Jan Ma, *Nanyang Technological University, Singapore*

16:10-16:30 C-IL-13 An Attempt to Modify Nonlinear Optical Effects of Polymers by Adjusting the Structure of the Chromophore Moieties with Suitable Isolation Groups at Molecular Level

Zhen Li, *Wuhan University, China*

16:30-16:50 C-IL-14 Electrorheology of Reinforced Alumina Particles Embedded in Natural Rubber Composite Materials

Nuchnapa Tangboriboon, *Kasetsart University, Thailand*

16:50-17:10 C-O-06 First-principle Study on Novel Chemical Sensors Based upon Nano-structured Functional Materials

Mei Chi, *Institute of Mechanics, Chinese Academy of Sciences, China*

17:10-17:30 C-O-07 Hierarchically Nano/Microstructured Electrode Materials for Lithium-Ion Batteries

Yu-Guo Guo, *Institute of Chemistry, Chinese Academy of Sciences, China*

17:30-17:50 C-O-08 Formation Trends of InAs Quantum Dots on GaAs(100) Vicinal Substrates

Song Liang, *Institute of Semiconductors, Chinese Academy of Sciences, China*

18:00-19:00 Dinner (Buffet Restaurant, 3rd floor, Fuxuan Hotel)

19:00-21:00 Poster (Lecture Hall, 4th Floor, Fuxuan Hotel)

October 14

Morning

Section A: Inorganic Materials (Conference Room 1, 4th floor, Fuxuan Hotel)

Section A7 Chairman: **Giuseppe Mele**

- 8:30-8:50 A-IL-13 Chemically Converted Graphene: Functionalization and Nanocomposites
Li Niu, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China
- 8:50-9:10 A-IL-14 Design and Synthesis of Hierarchical MFI Zeolites with Tertiary Templates
Yanqin Wang, East China University of Science and Technology, China
- 9:10-9:30 A-O-08 Synthesis of Nanostructure Aluminum Borate by Sol-Gel Method with Glucose/Sucrose as Templates
Shufen Xu, Zhejiang University of Technology, China
- 9:30-9:50 A-O-09 Capillary Gas Chromatography Columns with Stationary Phase Based on Periodic Mesoporous Organosilicas
Mikhail K. Kovalev, Boreskov Institute of Catalysis, SB RAS, Russia
- 9:50-10:20 Coffee break

Section A8 Chairman: **Yongfeng Mei**

- 10:20-10:40 A-IL-15 Design of New Porphyrin-TiO₂ Based Photocatalyst for the Degradation of 4-Nitrophenol in Water
Giuseppe Mele, University of Salento, Italy
- 10:40-11:00 A-O-10 Schottky Diode of CdTe Thin Films Fabricated by Thermal Evaporation Method
Suriya Meepiemsomboon, King Mongkut's Institute of Technology Ladkrabang, Thailand
- 11:00-11:20 A-O-11 Application of Organic Modification Strategy in Hydrocarbon Selective Oxidation
Chen Chen, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China

Section B: Organic Polymeric Materials (Conference Room 2, 4th floor, Fuxuan Hotel)

Section B7 Chairman: **Yanlei Yu**

- 08:30-09:00 B-KN-11 Are Dendritic Polymers Possible to be Advanced Materials?
Toyoko Imae, National Taiwan University of Science and Technology, China
- 09:00-09:20 B-O-08 Synthesis of 1-D ZnO Nanorods and Gas Sensing Properties For NO₂
Kewei Zhang, Beijing University of Chemical Technology, China
- 09:20-09:40 B-O-09 Protuberance Pattern on Nanocomposite Hydrogel Under Ethanol/Water Mixture Solution
Qingsong Zhang, Tianjin Polytechnic University, China

09:40-10:00 B-O-10 Preparation and Properties of a Novel Azo-based Polyacrylamide hydrogels with Photoresponse
Yiping Zhao, *Tianjin Polytechnic University, China*

10:00-10:20 Coffee break

Section B8 Chairman: **Toyoko Imae**

10:20-10:40 B-O-11 Thermal Stability and Heat Absorption Simulation of Polyurethane MicroPCMs Containing n-Octadecane Synthesized by Interfacial Polycondensation
Jun-Feng Su, *Tianjin University of Commerce, China*

10:40-11:00 B-O-12 Study on the Properties of Collagen from Skin of Squid
Junjie Zhang, *Huaihai Institute of Technology, China*

11:00-11:20 B-O-13 Rapid Fabrication of Reversible Solvatochromic-Responsive Crystal Films
Lingli Duan, *Fudan University, China*

Section C : Opto-electronic Materials (*Conference Room3, 4th floor, Fuxuan Hotel*)

Section C7 Chairman: **Zhi-Kuan Chen**

08:30-09:00 C-KN-08 Surface Nano-Patterns with High Structural Regularity, Tuneable Properties, and Diverse Applications
Yong Lei, *University of Muenster, Germany*

09:00-09:20 C-IL-15 Novel Inorganic Solid State Materials for Potential Thermoelectric Application
Sheng-Qing Xia, *Shandong University, China*

09:20-09:40 C-IL-16 Conjugated Polyfluorenes with Dendronized Bifunctional Pendants as Pure Blue Emitters and Host Phosphorescent Materials
Qiang Peng, *Nanchang Hangkong University, China*

09:40-10:00 C-O-09 Assembly of Hydroxyapatite Nanocrystals into an Enamel Prism-like Structure Regulated by Silk Sericin Protein
Juming Yao, *Zhejiang Sci-Tech University, China*

10:10-10:20 Coffee break

Section C8 Chairman: **Yong Lei**

10:20-10:50 C-KN-09 Organic Semiconductors for Low Cost Electronics
Zhi-Kuan Chen, *Institute of Materials Research & Engineering 3 Research Link, Singapore*

10:50-11:10 C-O-10 Loading and Releasing of Oligodeoxynucleotide from Modified AMS-8
Minmin Chen, *China University of Mining and Technology, China*

11:10-11:30 C-O-11 Electrodeposition and Photocatalytic Selectivity of ZnO/Methyl Blue Hybrid Thin Films
Peng Liu, *Tongji University, China*

12:00-13:30 Lunch (*Buffet Restaurant, 3rd floor, Fuxuan Hote*)

Poster List

- A-P-01 **Natural Nanostructures of Gold – Keys to Searching for Mechanism of Nanopipe Synthesis**
V.P. Molchanov, E.I. Medvedev, M.A. Medkov, N.I. Steblevskaya
- A-P-02 **Electron Microscopy and Image Processing Investigation of Nanostructured Media**
Pustovalov E.V., Plotnikov V.S., Grudin B.N., Modin E.B., Voitenko O.V., Gluhov A.P.
- A-P-03 **Formation of Natural Carbon Nanotubes**
Molchanov V.P., Medvedev E.I., Medkov M.A., Steblevskaya N.I.
- A-P-04 **Obtaining of Thin Films and Powders of Functional Materials Based on Zirconium or Europium Oxides**
N.I.Steblevskaya, M.A.Medkov
- A-P-05 **Silver Nanoparticles Stabilized by Alginate**
Yulya L. Khromova, Yury A. Shchipunov
- A-P-06 **Albumin as a Structure-Driven Template for Silica**
I. V. Semiletova, Yu. A. Shchipunov
- A-P-07 **Bismuth-Containing Fluoride Glasses as the Base for Materials with High Ionic Conductivity. 1. Ionic Mobility, Structure and Ionic Transport in Glasses Studied by NMR, Raman and Impedance Spectroscopy**
Valeriy Ya. Kavun, Arseniy B. Slobodyuk, Elena I. Voit, Sergey L. Sinebrukhov
- A-P-08 **A Novel Method to Modify Imogolite Nonofibers with Alkylphosphonic Acid**
Wei Ma, Hideyuki Otsuka¹, Atsushi Takahara
- A-P-09 **Electrochemically Deposited Apatite/Collagen Composite Coating on NiTi Shape Memory Alloy**
Tao Sun, Min Wang
- A-P-10 **Synthesis of Ce_{1-x}Ti_xO₂ Hollow Nanospheres via Kirkendall Effect**
Zengpeng Wang, Yongnan Zhao, Jianguo Yu
- A-P-11 **Electrochemical Performance for PbO@C Nanocomposite Prepared from Starch**
Huiqi Wang, Yongnan Zhao, Jianguo Yu
- A-P-12 **Synthesis and Characterization of a Layered Organically Templated Uranium Phosphites**
Zhen Zhu, Jianguo Yu, Yongnan Zhao
- A-P-13 **Brownmillerite Structure Oxide Co Doped Ca₂Fe₂O₅ as Promising Cathode for Intermediate Temperature SOFCs**
Qiang Li, Hui Zhao*, Liping Sun, Lihua Huo
- A-P-14 **Novel Functional Mesoporous Materials Derived from 3d Net-Linked Sba-15**
Yu Zhou, Ling Gao, Fang Na Gu, Jia Yuan Yang, Jing Yang, Feng Wei, Ying Wang, Jian Hua Zhu
- A-P-15 **Hydrothermal Carbonization-Deposition Method for the Preparation of Activated Carbon Based C/C Composite**
Jiawen Ren, Baohua Zhang, Yanqin Wang, Guanzhong Lu
- A-P-16 **Characterization and Optical Properties of Fluorinated Cross-Linkable Poly(Phthalazinone Ether)s**
Guanghui, LiJinyan Wang, Xigao Jian, Mingshan Zhao

- A-P-17 **A Novel Chemical Route to Tungsten Micro-/Nanoparticles Using Tungstate-Based Ionorganic-Organic Hybrid Nanobelts as Precursors**
Hejing Wen, Deliang Chen, Xianxian Hou, Hailong Wang, Hongliang Xu, Hongxia Lu, Rui Zhang
- A-P-18 **Ultra-fine Silver-plated Copper Powder Prepared by Ball Milling**
Ying Yang, Wei He, Shouxu Wang, Ke Hu, Bo He, Yunqi Mo
- A-P-19 **Three Kind of Phosphorescent Iridium Complexes with Substituted Different Charge Transfer Group as the Cyclometalated Ligands**
GeYang Wang, MaoLiang Xu*, Rui zhou, ZiJun Wang
- A-P-20 **Synthesis and Electrochemical Performance of B-MnO₂ with Semi-Tubular Morphology**
Mingyang Yang, Xiuhua Tang, Xuexia He, Zong-huai Liu
- A-P-21 **Synthesis and Characterization of Ni²⁺-Fe³⁺ Layered Double Hydroxide with a Large Size**
Yan LI , Hongjuan LI, Gang ZHU, Zong-huai LIU
- A-P-22 **Facile and Fast Detemplation of ZSM-5 Zeolite Using DBD Plasma**
Yuan Liu, Chang-Jun Liu
- A-P-23 **Synthesis and Characterization of Pt Nanoparticles Confined in the Channels of Mesoporous SBA-15**
Zhou-jun Wang, Ping-yu Kuai, and Chang-jun Liu
- A-P-24 **Targeted Delivery and Controlled Release of Doxorubicin to Cancer Cells using Modified Single Wall Carbon Nanotubes**
Xiaoke Zhang, Lingjie Meng, Qinghua Lu
- A-P-25 **Synthesis and Characterization of Highly Ordered Mesoporous Carbon and Silica-Carbon Thin Films**
Dan Feng, Lingyan Song, Dong Gu, Bryan D. Vogt and Dongyuan Zhao
- A-P-26 **Design of Novel Amphiphilic ABC Triblock Copolymer PEO-B-PMMA-B-PS for Templating Synthesis of Ordered Mesoporous Carbons with Controllable Pore Wall Thickness**
Junyong Zhang, Yonghui Deng, Bo Tu, Dongyuan Zhao
- A-P-27 **Design of Amphiphilic Poly(ethylene oxide)-block-Poly(methyl methacrylate) Diblock Copolymer for Controllable Templating Synthesis of Ordered Mesoporous Carbon**
Jing Wei, Yonghui Deng, Junyong Zhang, Zhenkun Sun, Bo Tu, Dongyuan Zhao
- A-P-28 **One-Pot Synthesis of Magnetically Separable Ordered Mesoporous Carbons**
Yunpu Zhai, Bo Tu and Dongyuan Zhao
- B-P-01 **Alkyl Polyglucosides as a Micellar Template For Silica Nanocomposites Fabrication**
A. V. Krekoten, Yu. A. Shchipunov
- B-P-02 **Immobilization of Glucose Oxidase in Thin Films on Solid Substrate by the Sol-Gel Technique**
T. Yu. Karpenko, Yu. A. Shchipunov
- B-P-03 **Supramolecular Structuring of Heterochain Polymers**
Davletbaeva I.M., Shkodich V.F., Melnikova I.A., Gumerov A.M.
- B-P-04 **Mesoporous Block Copolymers on the Base of Open-Chain Analogues of Crown-Ethers**
V.F. Shkodich, I.M. Davletbaeva, A.M. Gumerov, A.F. Galjautdinova

- B-P-05 **The Formation of Labile Intermolecular Bonds in Hybrid Organo-Inorganic Polymers**
Gumerov A.M., Davletbaeva I.M., Musafarova O.R., Davletbaev R.S.
- B-P-06 **Preparation of Hybrid of Mg-Al Hydrotalcite-Type Anionic Clay and Polyimide**
Jin-hee Ahn, Il Kim and Chang-Sik Ha
- B-P-07 **Graphene Oxide-Polyimide nanocomposites with Enhanced Mechanical Properties via Chemical Cross-Linking**
Jin-Yuen Kong, Myeon-Cheon Choi, Il-Kim, and Chang-Sik Ha
- B-P-08 **Preparation of Biomimetic Surface Initiator with a Catecol Group for Surface-initiated Polymerization**
H. Xu, M. Kobayashi, H. Otsuka, A. Takahara
- B-P-09 **Preparation and Characterization of Nanoimprinted Polyimide Film**
Qingsudu Si, Zhe Wang, Hui Wu, Atsushi Takahara
- B-P-10 **The Synthesis, Characterization and Thermostability of a Novel Hyperbranched Poly (ether ketone)**
Yang Sun, Xiuling Zhu
- B-P-11 **Synthesis and Characterization of Novel Ph-Sensitive Hydrogels with Biodegradability and Biocompatibility**
Jiaoxia Sun, Yangfeng Luo, Hui Peng, Zhiwei Han
- B-P-12 **Bottom-up Self-Assembly of Amino acids and Lanthanide Cations: Morphology Control of the Coordination Polymers and Oxides**
Shen Zhurui, Chen Tiehong
- B-P-13 **Role of Size on Cellular Uptake of Hydroxyapatite Nanoparticles**
Yurong Cai, Juming Yao
- B-P-14 **Simultaneously Reinforcing and Toughing: A Novel Silk Fibroin/Cellulose Nanowhisker Composite Film Plasticized by PEG**
Rongji Li, Yurong Cai, Juming Yao
- B-P-15 **Hydroxyapatite/Silk Fibroin Composite Scaffolds Fabricated by a Two-step Method**
Lin Liu, Xiangdong Kong, Yurong Cai, Juming Yao
- B-P-16 **Hydroxyapatite Growth on the Titanium Substrate Modulated by a Collagen-like Protein**
Mingli Pan, Yurong Cai, Juming Yao
- B-P-17 **A Simple Approach to Fabricate Morphological Gradient on Polymer Surfaces**
Shiling Zhang, Bo You, Guangxin Gu, Limin Wu
- B-P-18 **Preparation and Properties of Cross-linked Zirconia Nanoparticle Films**
Kaiqing Luo, Shuxue Zhou, Limin Wu
- B-P-19 **Surface Mechanical Properties of Transparent Poly(methyl methacrylate)/Zirconia Nanocomposites Prepared by in situ Bulk Polymerization**
Yiqing Hu, Shuxue Zhou, Limin Wu
- B-P-20 **Fabrication and Properties of Hollow Poly (N-isopropylacrylamide)-Ag Nanocomposite Spheres**
Lin Xie, Min Chen, Limin Wu
- B-P-21 **Synthesized Hydrogels Promote Self-renewal in Mouse Embryonic Stem Cell**
Yong Mei Chen, Jian Ping Gong, Kimiko Yamamoto, Joji Ando, Yoshihito Osada

- B-P-22 **Self-Assembly Behavior of Block and Graft Copolymer Blends**
Zeliang Zhuang, Chunhua Cai, Jiaping, Lin
- B-P-23 **Crystallization of Calcium Carbonate Under Control of Poly(N-Isopropylacrylamide)-B-Poly(L-Glutamic Acid)**
Wenjie Zhu, Chunhua Cai, and Jiaping Lin
- B-P-24 **Photoinduced Bending and Unbending Behavior of Crosslinked Liquid Crystalline Polymer Films with a Long Spacer**
Yuanyuan Zhang, Jixiang Xu, Futao Cheng, Ruoyuan Yin, and Yanlei Yu
- B-P-25 **Preparation and Properties of Vesicles Formed from Amphiphilic Block Copolymers Containing Azopyridine**
Zeng Yan, Li Lin, Ze Feng, Junsi Gu, Yuanyuan Zhang, Yanlei Yu
- B-P-26 **Full Plastic Microrobot Arm: Manipulate Object only by Light Exposure**
Futao Cheng, Yuanyuan Zhang, Ruoyuan Yin, Chu-Chun Yen, Yanlei Yu
- B-P-27 **Dual Responsive Block Copolymer Micelles Functionalized by NIPAM and Azobenzene**
Ze Feng, Zen Yan, and Yanlei Yu
- B-P-28 **A Rapid and Efficient Strategy for Preparation of Novel Super-Hydrophobic Surface with Fluorinated Cross-Linked Polyphosphazene Microspheres**
Xiaobin Huang, Wei Wei, Xiaoli Zhao, Peng Zhang, and Xiaozhen Tang
- C-P-01 **Protective Coatings Formed by Plasma Electrolytic Oxidation on Magnesium Alloys**
M.V. Nistratova, S.V. Gnedenkov, O.A. Khrisanfova, A.G. Zavidnaya, S.L. Sinebryukhov, V.S. Egorin
- C-P-02 **Electrochemical Properties of Nanocomposites based on Nickel Oxides and Carbon Fibers**
Irina V. Sheveleva, Larisa A. Zemskova, Aleksey V. Voit, Valeriy G. Kuriavyi, Valentin I. Sergienko
- C-P-03 **Formation of Calcium-Phosphate Biocoatings by Method of Detonation Gas Spraying and its Properties**
E. V. Legostaeva, Yu. P. Sharkeev, V.I. Yakovlev, P. V. Uvarin, E. G. Kryazheva
- C-P-04 **Relationship between the Adsorption Capacity of Hydrogen Isotopes and Specific Surface Area on Mesoporous Molecular Sieves**
Chu Xiao-zhong*, Zhang Wei-guang, Zhao Yi-jiang, Xu Ji-ming, Zhou Shou-yong, Li Mei-sheng
- C-P-05 **A Simple, Green Synthesis of Photochromic, Monoclinic Tungsten Oxide with Different Morphology**
Ying-ming Xu, Xiao-li Cheng, Li-hua Huo, Hui Zhao, Shan Gao
- C-P-06 **Ultrafast Response Ethanol and Acetone Nanosensors Based on TiO₂ Electrospun Nanobelts**
Xiao-li Cheng, Ying-ming Xu, Qiang Li, Li-hua Huo, Hui Zhao, Shan Gao
- C-P-07 **Synthesis and Property Studies of Transparent Resins Containing Rare Earth Complex Eu(III) (TTA)₂(MA)₂Phen•H₂O**
HUANG Liangchen, ZHAO Shuhui, LI Wengang, ZHAO Shengyin, WANG Zilin
- C-P-08 **Study on the Thermostability of Collagens from Scale of Silver Carp (*Hypophthalmichthys molitrix*) in the Winter and Summer**
Rui Duan, Kunihiko Konno, Wanli Xue, Fangfang Xing, Chao Ye

- C-P-09 **Loading and Release of Lysozyme Using AMS-8 Mesoporous Silica**
Qi Zhang, Zhuoqi Zhang, Minmin Chen¹ , Yunjun Meng, Xichuan Cao
- C-P-10 **A New Polysiloxane Coating on QCM Sensor for DMMP Vapor Detection**
Xiao-song Du, Zhi-dong Wang, Jia Huang, Si-lu Tao, Xian-zhong Tang, Ya-dong Jiang
- C-P-11 **Preparation and Electromagnetic Properties of Expanded Graphite/Cobalt Ferrite Composites**
Chen Xiang, Liangchao Li, Xiaoxi Liang, Bin Hao

October 15

Morning

7:30-15:30 One-day Tour to Water Town of Zhouzhuang

Note: Shuttles will pick up tourers at 7:30 October 15 morning at Fuxuan Hotel, and will turn back to Fuxuan Hotel at 17:30

General Information

Objective

This new symposium is intended as a forum for interdisciplinary discussion between scientists from Asian universities, research institutes and companies on chemistry of advanced functional materials.

The keynote lectures and contributed papers covered the following topics:

- ◆ Synthesis and characterization of Advanced Functional Materials (Organic, inorganic and hybrid)
- ◆ Properties and applications of Advanced Functional Materials
- ◆ Nanotechnology for Advanced Functional Materials

This is the 2nd meeting of the series. The 1st ASAM was organized by Institute of Chemistry of Far East Department of Russian Academy of Sciences during 1-4 Oct., 2007, Vladivostok, Russia.

Time and Place

The ASAM-2 will take place from Oct. 11 to 14, 2009 at:

Fuxuan Hotel (Training Center of School Journalism, Fudan University)
No. 400 Guoding Rd., School of Journalism, Fudan University, Shanghai
Phone: 86-21-55589518, Fax: 86-21-55661726

Registration

The registration time: 8:00-22:00, October 11, 2009
7:30-10:00, October 12, 2009

The registration desk: The lobby of Fuxuan Hotel, 400 Guoding Rd., School of Journalism, Fudan University, Shanghai

On-site registration fee: Only cash in US Dollar or equivalent RMB is acceptable
The secretariat will be in Room 1006 of Fuxuan Hotel
Tel: 86-21-55589518-1006(available during Oct. 11--14).

Information for Speakers

Please copy your PPT to the conference computer before the session (Office 2003 preferred, Microsoft only, no Macintosh). If you want to use your own laptop, please contact the secretariat in advance. The presentation sites of each section are listed in conference Final Program.

1. Plenary lecture: 40 min. including discussion.
2. Keynote lecture: 30 min. including discussion.
3. Invited lecture and oral lecture: 20 min. including discussion.

Information for poster presenters

Poster presentation will be held between 19:00 and 21:00 on Monday, October 13 in the

4th Lecture Hall of Fuxuan Hotel and identified by poster number (P-A-1, P-A-2, etc). You are expected to be available to exchange views with the participants as they stop by your Poster. Poster presenters are requested to hang up their posters between 16:00 to 17:30, October 13. The poster board is 90 cm wide and 120 cm high.

Post-symposium Tour

The conference will arrange a One-day Tour to Zhouzhuang on Oct. 15. Please register and pay the tour fee on registration desk, if you want to take part in the tour.

Delegate registration fees include

- ◆ Participation in scientific sessions
- ◆ Printed material of the Conference
- ◆ Conference gift
- ◆ Banquet (Oct. 12, only for these participants with banquet ticket)
- ◆ Coffee breaks
- ◆ Buffets, including 3 Lunches (Oct. 12-14) and 1 Dinner (Oct. 13)

Insurance / Medical Services

The Organizers cannot be responsible for personal accidents or material damage which may occur to the participants and their accompanying persons during the conference. All participants are accordingly advised to make their own arrangements for adequate personal health and travel insurance.