



中国科学院大连化学物理研究所  
DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES

## DICP Symposium (IX) on Miniaturization of Analytical Instruments & micro-System

April 20-21, 2006, Dalian, China

Sponsored by The Natural Science Foundation of China.  
Dalian Institute of Chemical Physics, Chinese Academy of Sciences

### Organization Committee

Honorary Chairman:

Peichang Lu

Chairman: Yukui Zhang

Quan Yuan

Co-Chairman: Yafeng Guan

Guangwen Chen



### General Information

You are warmly welcome to DICP Symposium on Miniaturization of Analytical Instruments & micro-System, which will be held on April 20-21, 2006 at Dalian Institute of Chemical Physics (DICP). This symposium aims to promote the international communication and collaboration between DICP and international scientific community, to discuss new research area or emerging research direction in-depth, and to enhance the creativity ability in research. About 20 top scientists in this discipline from overseas and domestic will be invited to give lectures on various aspects of micro fabrication and miniaturization of analytical instruments.

### Time

April 20-21, 2006

### Location

Conference Hall,  
Biotechnology Building,  
Dalian Institute of Chemical  
Physics, CAS

### Contact Information

Prof. Yafeng Guan  
Mobile: 13841135561  
Tel: 84379570/84379590  
E-mail:  
Kfguan@mail.dlptt.ln.cn

## AGENDA

### DICP Symposium (IX) on Miniaturization of Analytical Instruments & micro-System

2006-4-19 (Wednesday)

<b>8:00-24:00</b>	<b>Golf Hotel, Registration</b>
<b>18:00</b>	<b>Get Together Party at Golf Hotel</b>

2006-4-20 (Thursday)

<b>08:20-08:50</b>	Opening Presiding: Prof. Yukui Zhang, Presiding Address: Prof. Tao Zhang Prof. Peichang Lu Prof. Quan Yuan Introduction: Prof. Yafeng Guan
--------------------	--

#### Oral Lectures

**Presiding: Prof. Yukui Zhang**

<b>09:00-09:30</b>	<b>'Micro inside' - Micro Process Technology for Diagnostics and Chemistry.</b> Prof. H. Löwe Institut für Mikrotechnik Mainz GmbH, Carl-Zeiss-Str. 18-20, 55129 Mainz, Germany; Johannes Gutenberg University, Institute of Organic Chemistry, Duesbergweg 10-14; 55128 Mainz, Germany.
<b>09:30-10:00</b>	<b>Capillary Electrophoresis with Electrochemiluminescence Detection Techniques and RELATED Developments.</b> Prof. Erkang Wang State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China.
<b>10:00-10:10</b>	<b>Break</b>

**Presiding: Prof. S. Shoji, Prof.A. Amirav**

<b>10:10-10:40</b>	<b>Microseparation Techniques for Proteome Study.</b> Prof. Yukui Zhang, Lihua Zhang National Chromatographic R. & A. Center, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, China
<b>10:40-11:10</b>	<b>MEMS Technologies and Micro/Nano Flow Systems for Bio/Chemical Applications.</b> Prof. Shuichi Shoji School of Science & Technology, Waseda University 3-4-1, Ohkubo, Shinjuku, Tokyo, 169-8555, Japan.
<b>11:10-11:40</b>	<b>Portable Fast GC with PFPD for Chemical Warfare Agent Analysis and Electrolyzer FID for Breath Analysis.</b> Prof. Aviv Amirav School of Chemistry, Tel Aviv University, Tel Aviv 69978, Israel.
<b>11:40-12:00</b>	Discussion

**12:00 Lunch (Zhixin Restaurant)**

**Presiding: Prof. Liding Wang, Prof.C. Meinhart**

<b>13:00-13:30</b>	<b>Analysis of Microscale Transport in BioMEMS.</b> Prof. Carl D. Meinhart Mechanical & Environmental Engineering, University of California, Santa Barbara, USA.
<b>13:30-14:00</b>	<b>Fabrication Techniques of Plastic Microfluidic Chips.</b> Prof. Liding Wang, Chong Liu Key Laboratory for Micro/Nano Technology and System of Liaoning Province, Dalian

	University of Technology, Dalian, 116024, China.
<b>14:00-14:30</b>	<b>Toward High-Performance Microsystems.</b> Prof. Jong Hoon HAHN Department of Chemistry, Pohang University of Science and Technology, Pohang, South Korea.
<b>14:30-15:00</b>	<b>A Wireless and Remote-controlled Magnetoelastic Sensor Device for Noninvasive Biological Analysis</b> Prof. Shouzhuo Yao, Qingyun Cai Department of Chemistry, Hunan University, China.
<b>15:00-15:10</b>	<b>Break</b>

**Presiding: Prof. T. Kitamori, Prof. Yafeng Guan**

<b>15:10-15:40</b>	<b>Microchip based Analytical Instruments -Devices and Systems-</b> Prof. T. Kitamori Department of Applied Chemistry, School of Engineering, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656; Micro Chemistry Group, Kanagawa Academy of Science and Technology, KSP East-307, 3-2-1, Sakado, Takatsu-ku, Kawasaki, Kanagawa 213-0012, Japan
<b>15:40-16:10</b>	<b>Several Valuable New techniques for Miniaturizing Analytical Instruments.</b> Prof. Qinhan Jin Institute of Miniaturized Analytical Instrumentation, Jilin University, Changchun 130021; Research Center of Engineering for Miniaturized Analytical Instruments, Zhejiang University, Hangzhou 310027 China
<b>16:10-16:30</b>	<b>Studying Structure and Function of Proteins in Nanoliter Droplets in Microchannels.</b> Dr. Bo Zheng Department of Chemistry, The Chinese University of Hong Kong, Hong Kong, China.
<b>16:30-16:50</b>	<b>Discussion</b>

**18:00 Banquet (TaiPei Plus Restaurant)**

2006-4-21 (Friday)

**Presiding: Prof. P. Woias, Prof. A. deMello**

<b>08 :30-9:00</b>	<b>3D High-Speed Time-Resolved Fluorescence Imaging in Microfluidic Systems.</b> <b>Prof. Andrew J. deMello</b> Department of Chemistry, Imperial College London, Exhibition Road, South Kensington, SW7 2AY, United Kingdom.
<b>09:00-09:30</b>	<b>Miniaturization of Thermal Conductivity Sensor &amp; micro-GC by Cylindrical Configuration.</b> <b>Prof. Yafeng Guan</b> Department of Analytical Chemistry & micro-Instrumentation, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, 457 Zhongshan Road, 116023, China.
<b>09:30-10:00</b>	<b>MEMS Microfluidic Devices and Systems in Medical Applications, Chemical Analysis and Fluid Control.</b> <b>Prof. Peter Woias</b> Albert-Ludwig-University Freiburg Institute of Microsystem Technology (IMTEK), Laboratory for Design of Microsystems, Georges-Koehler-Allee 102, D-79110 Freiburg, Germany.
<b>10:00-10:10</b>	<b>Break</b>

**Presiding: Prof. Chi Wu, Prof. Yulin Deng**

<b>10:10-10:40</b>	<b>Reflective Fiber Optic Sensors and its Applications.</b> <b>Prof. Chi Wu</b> Department of Chemistry, The Chinese University of Hong Kong, Shatin, N.T. Hong Kong, China.
<b>10:40-11:10</b>	<b>Design of Microfluidic Analytical Devices with Corresponding Detection Techniques.</b> <b>Prof. Xinghua Xia</b> Key lab of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210093, China
<b>11:10-11:40</b>	<b>High-Throughput Microfluidic Sample Introduction Technique.</b> <b>Prof. Qun Fang</b> Institute of Microanalytical Systems, Department of Chemistry, Zhejiang University, Hangzhou, 310028, China
<b>11:40-12:00</b>	<b>Capillary Columns with Nano-flow HPLC/MS and Porous Silicon Chip with MALDI-TOF MS Detection for Proteome Analysis.</b> <b>Prof. Hanfa Zou</b> National Chromatographic R&A Center, Division of Biotechnology, Dalian Institute of Chemical Physics, Dalian 116023, China.

**Lunch:12:10 (Zhixin Restaurant)**

**Presiding: Prof. Guangwen Chen**

<b>13:20-13:50</b>	<b>Opportunities in Process Intensification Using Microchannel Reactor Technology.</b> Dr. Yong Wang Pacific Northwest National Laboratory, USA.
<b>13:50-14:20</b>	Prof. Guangwen Chen
<b>14:20-14:50</b>	Prof. H. Löwe
<b>14:50-15:00</b>	<b>Break</b>
<b>15:00~</b>	<b>Lab Tour</b>

**18:00 Dinner (South Mountain Garden Hotel)**

## Accommodation

Your accommodation is arranged at Xinghai Golf Hotel, which is located near seashore, right at downtown, 10 km to the airport.

Address: 29 Xinghe Road,  
Dalian 116023, China  
Tel: +86-411-84800888  
+86-411-84800788

## Contact

Prof. Yafeng Guan

Tel : +86-411-84379570  
+86-411-84379590

Fax: +86-411-84379570

Mobile: 013841135561

Email: kfguan@mail.dlptt.ln.cn

Dalian Institute of Chemical Physics Chinese  
Academy of Sciences

457 Zhongshan Road, Dalian, 116023 P. R. China  
[www.dicp.ac.cn](http://www.dicp.ac.cn)

