

Programme Schedule

Plenary Lectures

July 28, 2004

Venue: Academic Community Hall (AC Hall), Ho Sin Hang Campus

- 9:00-9:30 Open Ceremony
- 9:30-10:20 High Efficiency Microbial Analysis, Viability Determination and Antibiotic Screening: The Marriage of Separation Science and Microbiology [PL001]
Daniel Armstrong,
Iowa State University, U.S.A.
- 10:20-10:45 Tea break (6/F Podium)**
- 10:45-11:35 Can Proteomics and Mass Spectrometry Identify the Antigenic Peptide that Causes Diabetes and Determine Protein/Ligand Affinities? [PL002]
Michael L. Gross,
Washington University, in St. Louis, U.S.A.
- 11:35-12:25 Single Molecule Nano-Bioscience [PL003]
Toshio Yanagida,
Osaka University, Japan

July 29, 2004 (Afternoon session)

Venue: WLB 203, Lam Woo International Conference Center, Shaw Campus

- 2:00-2:50 High-Speed High-Throughput Screening of Biomolecules [PL004]
Edward S. Yeung,
Iowa State University, U.S.A.

Section A: Chemical Analysis of Herbal Medicines

Mini-symposium Chairperson: Professor Frank S. C. Lee

July 28, 2004 (Afternoon session)

Venue: SCM 012

Presider: Prof. Frank S. C. Lee

- 2:00-2:30 Safety and Quality Issues of Herbal Medicines (A001-K)
Barry Neil Noller,
EnTOX-The University of Queensland, Australia
- 2:30-3:00 Acetylcholinesterase Inhibitory Coumarins of *Angelica Gigas* (A002-K)
Young Choong Kim, So Young Kang, Ki Yong Lee, Jeong Seon Yoon,
Seoul National University, Korea
- 3:00-3:30 Purification of Pharmacologically Active Compounds from Medicinal Plants and Their Biological Assay (A003-K)
Masataka Moriyasu, Kinuko Iwasa, Momoyo Ichimaru, Yumi Nishiyama,
Kobe Pharmaceutical University, Japan
- 3:30-4:00 Functional Genomics Approach to the Study of Chinese Medicine (A004-K)
Ricky N. S. Wong, David T. P. Fan, Amber W. Y. Ha, Patrick Y. K. Yue, Daisy Y. L. Wong, N. K. Mak, Kelvin K. C. Chan, Liang Liu,
Hong Kong Baptist University, Hong Kong, China
- 4:00-4:15 Tea break**
- 4:15-4:45 The Combination Principle of Complex Prescription of Traditional Chinese Medicine (TCM)-Chemical Evidence for the Detoxification Mechanism of Highly Toxic Alkaloids (A005-K)
Shuying Liu, Yong Wang, Qingxuan Xu, Zhiqiang Liu, Fengrui Song,
Chinese Academy of Sciences, China
- 4:45-5:10 NMR Studies on the Formation and Conformation of Baicalin-Berberine and Wogonoside-Berberine Complexes (A017-I)
Zhi-Hong Jiang, Hong Zhang, Takashi Tanaka, Isao Kouno, Zhongzhen Zhao,
Hong Kong Baptist University, Hong Kong, China
- 5:10-5:30 Development of Quality Control for the Bioactive Ingredients in Chinese Medicinal Herbs (A019-O)
Ge Lin, Hoi-Sing Chung, Po-Ming Hon,
The Chinese University of Hong Kong, Hong Kong, China

July 29, 2004 (Morning session)

Venue: SCM 012

Presider: Dr. Zhi-hong Jiang

- 9:00-9:30 Chromatographic Fingerprint– New Concept and Practice for Assessing the Quality of TCM (Case Study) (A006-K)
Peishan Xie,
Guangzhou Institute for Drug Control, China
- 9:30-10:00 Classification of Cinnamomi Cortex Samples using their GC-MS Fingerprints (A007-K)
Foo Tim Chau, Man-ling To, Daniel Kam-wah Mok, Yi-zeng Liang, Hui Cao,
The Hong Kong Polytechnic University, Hong Kong, China
- 10:00-10:30 Fingerprinting Technique and Quality Control of Herbal Medicines (A008-K)
Yizeng Liang,
Central South University, China
- 10:30-10:45 Tea break**
- 10:45-11:15 Analytical Tools for the Chemical Assay and Biological Assay of Botanicals and Herbal Preparations (A009-K)
Eng Shi Ong,
Temasek Polytechnic, Singapore
- 11:15-11:35 Application of LC/MS/MS Techniques to the Identification and Characterization of Herbal Medicines (A020-O)
Siu-kay Wong, Shu-ki Tsui, Sik-yiu Kwan,
Hong Kong Government Laboratory, Hong Kong, China
- 11:35-11:55 Testing Technology, Certified Reference Materials (CRM) and Measurement Traceability of Active Constituent Analyse in Food and Oriental Herbal Medicines (A021-O)
Jing Wang,
National Research Center for Certified Reference Materials, China
- 11:55-12:15 Resolving Chromatographic Fingerprints from GC-MS of Asarum by Chemometric Techniques (A022-O)
Fan Gong, Ying-Sing Fung,
The University of Hong Kong, Hong Kong, China

July 29, 2004 (Afternoon session)

Venue: SCM 012

Presider: Prof. Kelvin Chan

- 3:00-3:30 Study on the Analysis of Synthetic Therapeutic Substances Adulterated in Herbal Medicines (A010-K)
Yuan Shiun Chang, Yoe-Ray Ku, Yu-Ling Ho,
China Medical University, Taiwan, China
- 3:30-4:00 GAP (Good Agricultural Practice) Study of Chinese Medicinal Herbs-A Hybrid of Chinese Medicinal Research and Environmental Research (A011-K)
Xiaoru Wang, Yin He, Wenshen Wang, Frank Sen-Chun Lee,
Xiamen University, China
- 4:00-4:15 Tea break**
- 4:15-4:45 Harmonization of Identification and Assay for Crude Drug Monograph in Eastern Asian Pharmacopoeia (A012-K)
Motoyoshi Sakake,
Ochanomizu University, Japan
- 4:45-5:15 Analysis of Trace Contaminants in Chinese Medicine (A013-K)
Kuk-ying Chui,
Hong Kong Government Laboratory, Hong Kong, China

July 30, 2004 (Morning session)

Venue: SCM 012

Presider: Prof. Xiaoru Wang

- 9:00-9:30 Aspects of New Chemometric Developments in Multivariate Chemical Data Analysis (A014-K)
Ru-Qin Yu,
Hunan University, China
- 9:30-10:00 The Role and Position of 2D-IR Correlation Analysis in Macroscopic Quality Controlling of Traditional Chinese Medicine (A015-K)
Suqin Sun,
Tsinghua University, China
- 10:00-10:30 Determination of the Mono-Saccharide Composition, Molecular Weight and Primary Structure of Tea Polysaccharide (A016-K)
Mingyong Xie, Peng Zhou, Shaoping Nie, Xiaoru Wang,
Nanchang University, China
- 10:30-10:45 Tea break**

- 10:45-11:10 Determination of Organochlorine Pesticide Residues of Chinese Materia Medica (A018-I)
Kelvin Leung, Chi-Leung Chan, Ying-Man Tsang, Kelvin Chan
Hong Kong Baptist University, Hong Kong, China
- 11:10-11:30 Identification Radix Astragali Injections of Different Factories by 2D IR Spectroscopy (A023-O)
Qun Zhou, Suqin Sun, Lin Zuo, Jiaxun Tao, Isao Noda,
Tsinghua University, China
- 11:30-11:50 The Isolation, Extraction and Identification of the Chemical Biomarkers in a Complex Formulation for the Treatment of Endometriosis (A024-O)
Shalona Anuj, Cheang Khoo, Alan Bensoussan
University of Western Sydney, Australia
- 11:50-12:10 Analysis of the End Point of Processing Rehmannia with FT-IR Spectroscopy and Two-Dimensional Correlation Infrared Spectroscopy (A025-O)
Lu Yu, Su-Qin Sun, Ke-Feng Fan, Qun Zhou, Jia-Xun Tao,
Tsinghua University, China
- 12:10-12:30 2D-LC/MS Platform for Analysis of Natural Products (A026-O)
Long-Sheng Sheng, Yin Wang, Ren-Ling Ma, Gang Ding, Hong-Hua Zhou,
Agilent Technologies Co., Ltd., Shanghai, China

Section B: Environmental and Field Analysis

Mini-symposium Chairperson: Prof. Hian Kee Lee

July 29, 2004 (Afternoon session)

Venue: WLB 310

Presider: Prof. Yong-Chien Ling

3:00-3:30 Microscale Solid-Phase and Liquid-Phase Extraction of Environmental Pollutants from Aqueous Matrices (B001-K)

H. K. Lee,

National University of Singapore, Singapore

3:30-4:00 An Integrated Approach for Identifying Odor using Chemical Sensors and Confirmed by GC-MS (B002-K)

Yong-Chien Ling, Shin-Hwa Tzing, Jen-Yu Liu,

National Tsing Hua University, Taiwan, China

4:00-4:15 Tea break

Presider: Dr. Wai-Hong Fung

- 4:15-4:35 The Detection Characteristics of GC/PFPD on Reduced Sulfur Gases (B007-O)
Ki-Hyun Kim,
Sejong University, Korea
- 4:35-4:55 Application of Solid Phase Microextraction (SPME) Headspace-GC/MS on the Analysis of Muscone in Animal Parts (B008-O)
Wai-hong Fung, Fan-lam So,
Hong Kong Government Laboratory, Hong Kong, China
- 4:55-5:15 Determination of Carbamate Pesticides in Water by Solid-Phase Microextraction Coupled with High-Performance Liquid Chromatography (B009-O)
Gongke Li, Weijian Zhong,
Zhongshan University, China
- 5:15-5:35 The Determination of Surface Contaminants and Identification of Low Bonding Yield in Semiconductor Packaging Process (B010-O)
Li-Chen Chen, Yong-Chien Ling,
National Tsing Hua University, Taiwan, China

July 30, 2004 (Morning session)

Venue: WLB 310

Presider: Dr. Della W. M. Sin

- 9:00-9:20 A New Analytical Approach for Determine the Essential Soil Components and the Chemical Forms of the Heavy Metal Pollutants (B011-O)
Suping Feng, Xiaodong Zou, Ying Zu,
College of Environmental Science and Engineering, Shandong University, China
- 9:20-9:50 Recent Development of Analytical Services in Support of the Development of Various Air Quality Monitoring Programmes in Hong Kong (B004-K)
Della Wai-mei Sin,
Hong Kong Government Laboratory, Hong Kong, China
- 9:50-10:10 Determination of Asbestos Contamination in Commercially Available Talcum Powder (B012-O)
M. Rasul Jan, Jasmin Shah, M. Imran,
University of Peshawar, Pakistan
- 10:10-10:30 Development of Low Cost Active Gas Sampling Techniques to Monitor Ambient Air Pollution Levels (B014-O)
O. A. Ileperuma, V. D. K. Abeyratne,
University of Peradeniya, Sri Lanka

10:30-10:45 Tea break

Presider: Dr. Ji Yan Liu

10:25-10:45 Determination of Butyltin Compounds Using Solid Phase Microextraction (B013-O)

Ji-yan Liu, Gui-bin Jiang,

Research Center for Eco-Environmental Sciences, China

10:45-11:05 Application of Sound Card in Wireless Signal Transmission from for On-Site Chemical Monitoring (B015-O)

Kamonthip Sereenonchai, Natchanon Amornthammarong, Perapat Anujar

Duangjai Nacapricha, Prapin Wilairat,

Mahidol University, Thailand

11:25-11:45 Determination of Radioactivity in Water and Oil Sludge using Gamma Spectrometry Analysis (B016-O)

V. Mahendran, Y. M. Amin, R. H. Mahat,

University of Malaya, Malaysia

July 30, 2004 (Afternoon session)

Venue: WLB 310

Presider: Prof. H. K. Lee

2:30-3:00 Express Methods for Field Environmental Analysis (B003-K)

Yu. A. Zolotov,

Lomonosov Moscow University, Russia

3:00-3:30 Analysis of Environmental Samples by Sample Extraction, Separation and Detection Techniques (B006-K)

Zu Liang Chen, Ravendra Naidu,

University of South Australia, Australia

3:30-3:45 Tea break

Presider: Dr. Zuliang Chen

3:45-4:05 Change of the Silica Species in the Seawater in the Tokyo Bay According to the Depth (B017-O)

Miho Tanaka, Kazuya Takahashi, Masao Nemoto, Hideki Nagashima,

Tokyo University of Marine Science and Technology, Japan

- 4:05-4:25 Characterization of Carbonaceous Residue from Pyrolysis of Used Tires (B018-O)
Jasmin Shah, M. Rasul Jan, Fazal Mabood,
University of Peshawar, Pakistan
- 4:25-4:45 Determination of Radioactivity In Tapioca using Gamma Spectrometry Analysis (B019-O)
V. Mahendran, M. Nava Sheelan, R. H. Mahat, Y. M. Amin,
University of Malaya, Malaysia
- 4:45-5:05 Modeling of Freezing Heat Transfer of Phase Change Materials (B020-O)
Ronny Hendra, H. H. Masjuki, T. M. I. Mahlia,
University of Malaya, Malaysia

Section C: Ultra-Sensitivity and Ultra-Small Volume Analysis

Mini-symposium Chairman: Prof. Edward S. Yeung

July 28, 2004 (Afternoon session)

Venue: WLB 209

Presider: Prof. Edward Yeung

- 2:00-2:30 Integrated Micro Bio Analytical Systems and HPLC on Chip (C001-K)
Takehiko Kitamori,
University of Tokyo, Japan
- 2:30-3:00 Anionic Phospholipids as Coating Material in Capillary and Microchip Electromigration Techniques (C002-K)
J. Hautala, M. Lindén, T. Bo, R. Kuldvee, S. K. Wiedmer, Marja-Liisa Riekkola,
University of Helsinki, Finland
- 3:00-3:30 Higher Contents and Scale Integrated Microfluidic Lab on A Chip in Life Sciences (C003-K)
Bingcheng Lin,
Dalian Institute of Chemical Physics, China
- 3:30-3:45 Tea break**

Presider: Dr. I-Ming Hsing

- 3:45-4:10 Microfluidic Chip-Based Liquid-Liquid Extraction and Preconcentration Using a Novel Droplet Trapping Technique (C011-I)
Qun Fang, Hong Chen, Zeng-Xuan Cai, Xue-Feng Yin, Heng-Wu Chen,
Zhao-Lun Fang,
Zhejiang University, China
- 4:10-4:35 Development of A Portable Bioanalytical Microsystem (C012-I)
I-Ming Hsing,
Hong Kong University of Science and Technology, Hong Kong, China
- 4:35-5:00 Complex Electroosmotic Microflow with Surface Charge Patterning (C013-I)
Yi-Kuen Lee,
Hong Kong University of Science and Technology, Hong Kong, China
- 5:00-5:20 Primary Studies on the Detection of Bacteria Using Protein Microarrays (C014-O)
Shuqiong Zhang, Zhixia Zhuang, Qingpi Yan, Rujing Huang, Xiaoru Wang,
Xiamen University, China

July 29, 2004 (Morning session)

Venue: WLB 209

Presider: Prof. Jin-Ming Lin

- 9:00-9:30 Molecular Beacon Aptamers for Cancer Cell Proteomics (C004-K)
Weihong Tan,
University of Florida, U.S.A.
- 9:30-10:00 Biotechnology and Bioanalysis Based on Bionanoparticles and Molecular Probes (C005-K)
Kemin Wang,
Hunan University, China
- 10:00-10:30 Environmental Analysis Using Microchip Technology (C006-K)
Jin-Ming Lin,
Research Center for Eco-Environmental Sciences, China

10:30-10:45 Tea break

Presider: Dr. Lihua Zhang

- 10:45-11:05 Capillary Electrophoresis of Human Erythrocytes for Observation of Their Interaction with Lectins (C015-O)
Atsushi Taga, Sachie Umemura, Shigeo Suzuki, Susumu Honda,
Kinki University, Japan

- 11:05-11:25 On-Column Monitoring of Natural Release of Epirubicin from Single Breast Cancer Cells by Capillary Electrophoresis (C016-O)
Yu-Xiu Xiao, Edward S. Yeung,
Wuhan University, China
- 11:25-11:45 Sensitivity and Precision in Ellipsometric Thickness Measurements on Transparent Substrates, and Their Improvement Using High-Refractive-Index Additional Layers (C017-O)
Soichi Otsuki, Kaoru Tamada,
National Institute of Advanced Industrial Science and Technology, Japan
- 11:45-12:05 Microfluidic Chips and Its Application in Bioanalysis (C018-O)
Lihua Zhang, Yongzheng Cong, Yoshinobu Baba, Yukui Zhang,
Dalian Institute of Chemical Physics, China
- 12:05-12:25 On-Chip Genotoxic Bioassay Based on the Expression of Luciferase Gene (C019-O)
Koji Maehana, Hirofumi Tani, Tamio Kamidate,
Hokkaido University, Japan

July 29, 2004 (Afternoon session)

Venue: WLB 209

Presider: Prof. Huan Tsung Chang

- 3:00-3:30 A Continuous Electrophoretic Purification System for Small Volume Samples (C007-K)
David D. Y. Chen,
University of British Columbia, Canada
- 3:30-4:00 Gold Nanoparticles for DNA Separation in Capillary Electrophoresis and Microchip Capillary Electrophoresis (C008-K)
Huan Tsung Chang,
National Taiwan University, Taiwan, China

4:00-4:15 Tea break

Presider: Prof. Chung-Shi Yang

- 4:15-4:45 Temporal and Spatial Monitoring of Release from Single Cells with Nanoelectrodes and Imaging (C009-K)
Jie-Ke Cheng, Wei-Hua Huang, Wei Cheng,
Wuhan University, China
- 4:45-5:15 Implantable Micro-Device for the Monitoring of In Vivo Nanoparticles and the Photo-Induced Controlled Release (C010-K)
Chung-Shi Yang,
National Chi-Nan University, Taiwan, China

5:15-5:35 Preparation and Application of Fluorescent and Magnetic Multi-Functionalized Nanomaterials (C020-O)
Hai-Yan Xie, Yi Liu, Chao Zuo, Zhi-Ling Zhang, Dai-Wen Pang, Jian-Gong Liang, Zhi-Ke He,
Wuhan University, China

Section D: Analytical Atomic and Molecular Spectroscopy

July 28, 2004 (Afternoon session)

Venue: WLB 304

Presider: Prof. W.T. Chan

2:30-3:00 Application of Wavelet Transform to Signal Processing in ICP-OES (D002-K)
Zhanxia Zhang, Xiaoguo Ma,
Zhongshan University, China

3:00-3:25 Biosensors Based on Colloidal Gold and Optical Waveguides (D009-I)
Lai-Kwan Chau, Shu-Fang Cheng, Shin-Hsien Liao, Chun-Chien Wang,
National Chung Cheng University, Taiwan, China

3:25-3:45 Metal Pre-Concentration and Matrix Separation using Water-Soluble Polymer (D010-O)
W. T. Chan, Michael H. P. Yau, Johanna Y. H. Kwok, Vincent W. K. Chow,
The University of Hong Kong, Hong Kong, China

3:45-4:00 Tea break

Presider: Prof. Hoeil Chung

4:00-4:20 Metabolomics Using Infrared Spectroscopy for New Gene Discovery (D011-O)
Soohwa Cho, Hoeil Chung,
Hanyang University, Korea

4:20-4:40 Analysis of Total Mercury and Mercury Speciation in Rat Tissues after Oral Intake of Cinnabar and Mercury Chloride (D012-O)
Rujin Huang, Zhixia Zhuang, Shuqiong Zhang, Jincan Shen, Xiaru Wang,
Xiamen University, China

4:40-5:00 Optical Film Sensor Based on Immobilization of 4-(2-Pyridylazo)-Resorcin on Acetyl Cellulose Membrane for Hg(II) Determination (D013-O)
Ali A. Ensafi, M. Fouladgar,
Isfahan University of Technology, Iran

5:00-5:20 Synthesis and Study of Physico-Chemistry Properties of Complexes of
Unitiol with d-metals (D014-O)
Gulnar Sugurbekova,
Taraz State Pedagogical Institute, Kazakhstan

July 29, 2004 (Morning session)

Venue: WLB 304

Presider: Prof. Zhanxia Zhang

9:00-9:30 New Optical Methods for Analysis of Airborne Particulates (D003-K)
Israel Schechter, Valery Bulatov, Yakov Yasman, Chen Yuheng, Inessa
Belostotsky, Eugenia Krupitzki,
Technicon-Israel Institute of Technology, Israel

9:30-10:00 Hydride Generation-Atomic Emission Spectrometric Determination of
Several Elements by Use of High Power Nitrogen Microwave Induced
Plasma (D004-K)
Taketoshi Nakahara,
Osaka Prefecture University, Japan

10:00-10:30 Some New Advances in Developing Microwave Plasma Torch (MPT)
Emission Spectrometry (D005-K)
Qinhan Jin,
Jilin University, China

10:30-10:45 Tea break

Presider: Prof. Yong-Il Lee

10:45-11:05 Fiber-Optic Probe Laser-Induced Breakdown Spectrometry (LIBS) for
Remote Elemental Analysis (D015-O)
Young-Sik Yu, Yong-Il Lee,
Changwon National University, Korea

11:05-11:25 Fluorescent Quenching Phenomenon Induced by Particle Formation of
Ion-Associates and its Analytical Application to Trace Silica (D016-O)
Junichi Ise, Keisuke Morita, Emiko Kaneko, Takeo Ishii, Makoto Satoda,
Ryozo Goto,
Tohoku University, Japan

11:25-11:45 Simultaneous Estimation of Gatifloxacin and Metronidazole in Mixture by
Spectrophotometric Method (D017-O)
Geeta M. Patel, P. U. Patel, B. N. Suhagia, Gayatri C. Patel, M. M. Patel, C.
N. Patel,
Hemchandracharya (North Gujarat University), India

11:45-12:05 Sampling Modulation Technique in Radio-Frequency Powered Helium Glow Discharge Emission Source by Use of Pulsed Laser Ablation (D018-O)
Tariq Mahmood Naeem, Hideyuki Matsuta, Kazuaki Wagatsuma,
Institute for Materials Research, Tohoku University, Japan

July 30, 2004 (Morning session)

Venue: WLB 304

Presider: Prof. Ai-jun Tong

9:00-9:30 SHG-CD Measurement of Liquid-Liquid Interface (D001-K)
Hitoshi Watarai, Kazuhiko Fujiwara,
Osaka University, Japan

9:30-10:00 Development of Optical Sensors Based on Nanomaterials (D007-K)
Xinrong Zhang, Zhenyu Zhang,
Tsinghua University, China

10:00-10:30 Molecular Recognition with Molecularly Imprinted Polymers and the Application in Microchip Analysis (D008-K)
Ai-Jun Tong, Yu-Hui Zhang, He Dong,
Tsinghua University, China

10:30-10:45 Tea break

Presider: Dr. Emiko Kaneko

10:45-11:05 Micro Particle Formation of Ion Associates and its Application to Trace Determination (D019-O)
Keisuke Morita, Junichi Isoe, Emiko Kaneko,
Tohoku University, Japan

11:05-11:25 Simultaneous Estimation of Gatifloxacin and Ornidazole in Mixture by Spectrophotometric Method. (D020-O)
Gayatri C. Patel, P. U. Patel, B. N. Suhagia, C. N. Patel, M. M. Patel, Geeta M. Patel,
Hemchandracharya (North Gujarat University), India

11:25-11:45 Separation and Quantification of Metallothionein Isoforms with HPLC-ICP/MS (D021-O)
Suge Lu, Jincan Shen, Zhixia Zhuang, Xiaoru Wang,
Xiamen University, China

11:45-12:05 Colorimetric Method for the Estimation of Carvedilol and Atenolol in Bulk and in the Pharmaceutical Formulations (D022-O)
P. U. Patel, B. N. Suhaghia, M. M. Patel, C. N. Patel, S. A. Patel, F. A. Mehta,
Hemchandracharya (North Gujarat University), India

12:05-12:25 Investigating Absorption in Polymer-Carrier System on the Basis of Water-Soluble Polymers (D023-O)
Shomanova Zhannat,
Taraz State Pedagogical Institute, Kazakhstan

Section E: Bioanalytical Chemistry

July 28, 2004 (Afternoon session)

Venue: WLB 204

Presider: Prof. Huangxian Ju

2:00-2:30 Continuous PCR and Electrochemical DNA Hybridization Detection (E001-K)
Nokyoung Park, Jong Hoon Hahn,
Pohang University of Science & Technology, Korea

2:30-3:00 Electrochemical and Chemiluminescent Immunosensors for Tumor Markers (E002-K)
Huangxian Ju,
Nanjing University, China

3:00-3:30 The Development of a Sensitive Determination Method for Peptides and Proteins Utilizing Fluorescence Derivatization with SBD-F Combined with Liquid Chromatography (E003-K)
Kazuhiro Imai,
Musashino University, Japan

3:30-4:00 Comparative Analysis of Human Plasma/Serum Proteome with Gel-based and Non-gel-based Strategies (E004-K)
Xiaohai Li, Yan Gong, Yun Cai, Xiaohong Qian,
Beijing Institute of Radiation Medicine, China

4:00-4:15 Tea break

Presider: Dr. Evonne Chung

4:15-4:35 A New Improved Assay Method for Simultaneous Determination of Sulfadoxine and Pyrimethamine in Blood Spot Filter Paper for Application in Field Study (E011-O)
S. Ramanathan, N. K Nair, P. L Olliaro, V. Navaratnam, S. M Mansor,
Center for Drug Research University Sains Malaysia, Malaysia

4:35-4:55 Detection of Isosorbide Dinitrate Metabolites in Horses by Gas Chromatography - Mass Spectrometry and Liquid Chromatography - Mass Spectrometry (E012-O)
Evonne W. Chung, Emmie N. M. Ho, David K. K. Leung, Francis P. W. Tang, Terence S. M. Wan
The Hong Kong Jockey Club, Hong Kong, China

- 4:55-5:15 A Flow-Through Optical Sensor for the Determination of Norfloxacin in Pharmaceutical Preparation (E013-O)
Jung Min Lee, Jun Hee Kwak, Hwa Suk Lee, Chang Jin Kim, Ik Su Joo, Sang Hak Lee,
Kyungpook National University, Korea
- 5:15-5:35 High-Performance Liquid Chromatographic Analysis of the Iron Chelator 3-Hydroxypyridin-4-One in Urine by Direct Injection (E014-O)
Piyada Jittangprasert and Prapin Wilairat,
Mahidol University, Thailand

July 29, 2004 (Morning session)

Venue: WLB 204

Presider: Dr. Terence Wan

- 9:00-9:30 Detection of SNPs Based on Fluorescence Signaling of Hydrogen Bond Forming Ligands Using an AP Site-containing DNA Duplex (E005-K)
Norio Teramae,
Tohoku University, Japan
- 9:30-10:00 Determination of Vitellogenin in Fish Plasma with Chromatography and Immunoassay Method (E006-K)
Guibin Jiang, Guoqing Shi, Jing Shao,
Research Center for Eco-Environmental Sciences, China
- 10:00-10:30 Studies of Anabolic Steroids in Horses (E007-K)
Terence S. M. Wan, Evonne W. Chung, Emmie N. M. Ho, W. H. Kwok, David K. K. Leung, Gary N. W. Leung, Francis P. W. Tang, Nola H Yu,
The Hong Kong Jockey Club, Hong Kong, China

10:30-10:45 Tea break

Presider: Dr. Wai-Tong Tang

- 10:45-11:05 Detection of Androstene-3,17-Dione in Horse Urine (E015-O)
Gary N. W. Leung, Wai Him Kwok, David K. K. Leung, Francis P. W. Tang, Terence S. M. Wan,
The Hong Kong Jockey Club, Hong Kong, China
- 11:05-11:25 Authentication of Counterfeit Drugs (E016-O)
Wai-Tong Tang,
Hong Kong Government Laboratory, Hong Kong, China
- 11:25-11:45 Evaluation of On-Line Two-Dimensional Nanoflow LC-MS/MS for Proteome Analysis (E017-O)
Myeong Hee Moon, Dukjin Kang,
Yonsei University, Korea

- 11:45-12:05 Analysis of Biodegradation Metabolites of Polycyclic Aromatic Hydrocarbons (PAHs) by Solid-Phase Microextraction on Fiber (E018-O)
Tiangang Luan, Chongyu Lan, Nora F. Y. Tam, Sun Yet-Sen (Zhongshan) University, China
- 12:05-12:25 A New and Simple Assay Method for Simultaneous Determination of Artesunate and Dihydroartemisinin in Biological Medium: Application for Drug-Drug Interaction Study (E019-O)
N. W. Sit, A. H. Hussin, S. M. Mansor, P. L. Olliaro, S. Ramanathan, V. Navaratnam, University Sains Malaysia, Malaysia

July 30, 2004 (Morning session)

Venue: WLB 204

Presider: Prof. Daiwen Pang

- 9:00-9:30 Arsenic Speciation and Interaction with Proteins (E008-K)
Meiling Lu, Xiufen Lu, Hailin Wang, Zhongwen Wang, X. Chris Le, University of Alberta, Canada
- 9:30-10:00 Simultaneous Profiling and Screening for Amino Acids and Carboxylic Acids by Gas Chromatography and Gas Chromatography-Mass Spectrometry for Clinical Diagnosis (E009-K)
Kyoung-Rae Kim, College of Pharmacy, Sungkyunkwan University, Korea
- 10:00-10:30 Micromethods for the Investigation of the Interactions of DNA with Some Species (E010-K)
Daiwen Pang, Wuhan University, China

10:30-10:45 Tea break

Presider: Dr. Man-fung Lo

- 10:45-11:05 Quantification of Genetically Modified Organisms (GMOs) in Foods using Real-Time PCR Technology (E020-O)
Della Wai-Mei Sin, Dan-Dan Ho, Christina Li, Hong Kong Government Laboratory, Hong Kong, China
- 11:05-11:25 Total Volatile Nitrogen: A Chemical Indicator for Assessment of Deterioration of Food (E021-O)
Della Wai-Mei Sin, Yiu-Chung Wong, Man-Fung Lo, Hong Kong Government Laboratory, Hong Kong, China
- 11:25-11:45 LC-MS Detection of Anabolic Steroids in Horse Urine (E022-O)
Nola H. Yu, Emmie N. M. Ho, David K. K. Leung, Terence S. M. Wan, The Hong Kong Jockey Club, Hong Kong, China

- 11:45-12:05 Mesoporous Materials Promoting Direct Electron Transfer and Electro catalysis of Horseradish Peroxide (E023-O)
Zhihui Dai, Huangxian Ju,
Nanjing University, China
- 12:05-12:25 Sensitive Determination of Molybdenum of Catalytic Adsorptive Stripping Differential Pulse Voltammetry (E024-O)
Ali A. Ensafi, Shokooh S. Khaloo,
Isfahan University of Technology, Iran

Section F: Electroanalysis and Electrochemical Techniques

July 29, 2004 (Afternoon session)

Venue: WLB 304

Presider: Dr. K.K. Shiu

3:00-3:30 Electrochemical Determination of Racemic Mixtures using Azophenolic Crown Ethers (F001-K)
Hasuck Kim, Kyungmin Chun, Hyunchang Lim,
Seoul National University, Korea

3:30-4:00 Development of an Enzymeless/Mediatorless Glucose Sensor (F002-K)
Jyh-Myng Zen,
National Chung Hsing University, Taiwan, China

4:00-4:15 Tea break

Presider: Prof. Chen-Wen Whang

4:15-4:35 The Research of Copper Oxide Nanoparticle Modified Electrode as an Amperometric Sensor for Aminoglycoside Drugs and Amino Acids (F009-O)
Jun-Jie Zhu, Jin-Zhong Xu, Hong-Yuan Chen,
Nanjing University, China

4:35-5:00 The Role of Direct Oxalate Oxidation in Electrogenated Chemiluminescence of Poly(4-Vinylpyridine)-Bound [Ru(Bpy)₂Cl]⁺/Oxalate System (F008-I)
Chen-Wen Whang, Mei-Chun Lu,
Tunghai University, Taiwan, China

5:00-5:20 Electrochemical Properties of Lead Dioxide Electrodes Prepared by Various Electrochemical Means (F010-O)
In-Hyeong Yeo, Seo-Su Chu,
Dongguk University, Korea

5:20-5:40 Monolayer Formation of Glucose Oxidase Covalently Attached on -Aminoalkanethiol/Au *via* Activation of Carbohydrate Residue of Gox as Characterized by AFM, IR, QCM, and Biosensor Applications (F011-O)
Koji Nakano, Kenji Doi, Kousuke Tamura, Yosuke Katsum,
Kyushu University, Japan

July 30, 2004 (Morning session)

Venue: WLB 305

Presider: Prof. W.H. Chan

9:00-9:30 Capillary Electrophoresis with Electrochemiluminescence Detection (F003-K)
Erkang Wang,
Changchun Institute of Applied Chemistry, China

9:30-10:00 A Novel Electrochemical Detection Approach for Microchip Capillary Electrophoresis (F004-K)
Hong-Yuan Chen,
Nanjing University, China

10:00-10:30 Electroanalytical Chemistry Today and Tomorrow (F005-K)
Shaojun Dong,
Changchun Institute of Applied Chemistry, China

10:30-10:45 Tea break

Presider: Prof. Xuemei Wang

10:45-11:05 Electrochemical and Spectral Properties of Substituted *p*-Phenylenediamines (F012-O)
Yuhlong Oliver Su, Guo Yuan Chiou, Tzy-Hsiang Su, Guey-Sheng Liou,
Shu-Hua Cheng,
National Chi Nan University, Taiwan, China

11:05-11:25 Specific Molecular Recognition of DNA Based on Colloidal Gold (F013-O)
Renyun Zhang, Xuemei Wang,
Southeast University, China

11:25-11:45 Application of Ordered Mesoscopic Materials in Biosensors and Electrocatalysis (F014-O)
Xinghua Xia, Dai Zhang, Jinghua Yuan, Hongyuan Chen,
Nanjing University, China

11:45-12:05 An Isfet Glucose Biosensor in New Principle based on MnO₂ Nanoparticles (F015-O)
Jing-Juan Xu, Xi-Liang Luo, Wei Zhao, Hong-Yuan Chen,
Nanjing University, China

- 12:05-12:25 Comparison Methods for Detection of Tetracyclines (F016-O)
Orawon Chailapakul,
 Chulalongkorn University, Thailand
- 12:25-12:45 Potentiometric Determination of Nicotine in Cigarette and Hydrogen Sulfide
 in Cigarettes Smoke (F017-O)
Raja Ram Pradhananga, Lok Kumar Shrestha, Nabin Kumar Shrestha,
Shikhya Tanduka,
 Tribhuvan University, Nepal

July 30, 2004 (Afternoon session)
Venue: WLB 305

Presider: Dr. K. K. Shiu

- 2:30-3:00 Development of Various Electrochemical Sensors Employing Self-Assembled
 Monolayers (F006-K)
Jin-Young Lee, Bo-Gum Choi, Shin-Jung Choi, Hye-Young Shim, Jung-Suk
 Yoo, Su-Moon Park,
 Pohang University of Science & Technology, Korea
- 3:00-3:30 Electrochemical Sensors and Biosensors Based on Nanostructured Materials
 (F007-K)
Yuehe Lin,
 Pacific Northwest National Laboratory, U.S.A.

3:30-3:45 Tea break

Presider: Prof. Shengshui Hu

- 3:45-4:05 Electrochemical Analysis of Cationic Surfactants on Hydrophobic Surface
 (F018-O)
Chengguo Hu, Shengshui Hu,
 Wuhan University, China
- 4:05-4:25 Analysis of Tetracycline Antibiotics Using HPLC Method with Pulsed
 Amperometric Detection (F019-O)
T. Charoenraks, K. Grudpan, O. Chailapakul,
 Chulalongkorn University, Thailand
- 4:25-4:45 Electroanalysis of Tetracycline Using Nickel-Implanted Boron-Doped
 Diamond Thin Film Electrode Applied with Flow Injection System (F020-O)
Surudee Treetepvijit, Yasuaki Einag, Orawon Chailapakul,
 Chulalongkorn University, Thailand

4:45-5:05 Development of A Electrochemical Conductive Polyaniline Based Solid-Contact Hydrogen Ion-Selective Sensor (F021-O)
Do Phuc Quan, Vu Thi Huong, Nguyen Minh Tue, Tu Vong Nghi, Pham Hung Viet,
Vietnam National University, Vietnam

Section G: Elemental and Molecular Mass Spectrometry

July 28, 2004 (Afternoon session)

Venue: WLB 305

Presider: Dr. Jin-Ying Li

2:00-2:30 Recent Development of Enabling Proteome Analysis Techniques and Their Applications in Bioscience Research (G001-K)

Liang Li,
University of Alberta, Canada

2:30-3:00 Proteomic Analysis: Discovery and Identification of Protein Markers in Endometrial Carcinoma (G002-K)

K. W. Michael Siu,
York University, Canada

3:00-3:30 Applications of Mass Spectrometry to the Determination of Trace Long-Lived Radionuclides (G003-K)

Jinying Li,
China Institute of Atomic Energy, China

3:30-3:45 Tea break

Presider: Prof. Hanfa Zou

3:45-4:05 Analysis of Chloramphenicol Residues in Food and Biological Fluid Samples by Liquid Chromatography Tandem Mass Spectrometry (G011-O)

Della Wai-Mei Sin, Clare Ho, Ya-Yin Choi,
Hong Kong Government Laboratory, Hong Kong, China

4:05-4:30 Novel Matrices for Analysis of Low-mass Compounds by MALDI-TOF Mass Spectrometry (G010-I)

Hanfa Zou, Songyun Xu, Chensong Pan, Zhong Guo, Baochuan Guo,
Dalian Institute of Chemical Physics, China

4:30-4:50 Simultaneous Detection of NO_x Using Velocity Map Imaging (G012-O)

Sung Hyup Lee, Bum Suk Zhao, Hoi Sung Chung, Sungu Hwang, Wee Kyung Kang, Doo Soo Chung,
Seoul National University, Korea

- 4:50-5:10 Method Development for the Enhanced Detection of Flavonoids and Chlorinated Herbicides by ESI-Mass Spectrometry (G013-O)
Sung-Gun Park, Seung-Jin Kim, Yong-Ill Lee,
Changwon National University, Korea
- 5:10-5:30 Single Drop Microextraction Combined with Low Temperature Electrothermal Vaporization ICP-MS for the Determination of Trace Be(II), Co(II), Pd(II) and Cd(II) in Biological Samples (G014-O)
Linbo Xia, Bin Hu, Zucheng Jiang, Yunli Wu, Yu Liang,
Wuhan University, China

July 29, 2004 (Morning session)

Venue: WLB 305

Presider: Prof. Zeper Abliz

- 9:00-9:30 Supersonic Jet Spectrometry of Dioxins Based on Multiphoton Ionization Mass Spectrometry (G004-K)
Totaro Imasaka,
Kyushu University, Japan
- 9:30-10:00 Characterization of the Intermolecular Interactions in Solution by Using Coldspray Ionization Mass Spectrometry (G005-K)
Zeper Abliz, Ruiping Zhang, Kentaro Yamaguchi, Shigeru Akamoto, Jiuming He,
Chinese Academy of Medical Sciences & Peking Union Medical College, China
- 10:00-10:30 Mass Spectrometry in Determining the Origin of Seized Heroin Sample (G006-K)
Tsonghui Wang, Daming Zhang, Xuejun Shi, Zengping Yuan, Wei Sun,
Beijing Institute of Forensic Science, China

10:30-10:45 Tea break

Presider: Prof. Guangdi Wang

- 10:45-11:05 Characterization of Aminoalkylindole Metabolism by HPLC-MS/MS (G015-O)
Guangdi Wang,
Xavier University of Louisiana, U.S.A.
- 11:05-11:25 Determination of Quinoxaline-2-carboxylic Acid by Isotope Dilution Gas Chromatography -Negative Chemical Ionization Mass Spectrometry (GC-NCIMS) (G016-O)
Della Wai-Mei Sin, Hubert Po-On Tang,
Hong Kong Government Laboratory, Hong Kong, China

- 11:25-11:45 Analytical Techniques Developed for Safeguards Environmental Samples at Jaeri (G017-O)
S. Usuda, K. Watanabe, S. Sakurai, M. Magara, F. Esaka, N. Kohno, Takahashi, K. Yasuda, C. G. Lee, J. Inagawa, Y. Saito, Y. Miyamoto, Suzuki, H. Gunji, S. Kurosawa, S. Ichimura, K. Esaka, H. Fukuyama, K. Iguchi, Onodera, J. Imai, Jy Chai, Hoang Bich Ngoc, Japan Atomic Energy Research Institute, Japan
- 11:45-12:05 Method Development for the Detection of Estrogenic Compounds in Environmental Water Samples using Gas Chromatography-Mass Spectrometry (G018-O)
Anwar Norazit, Mustafa Ali Mohd, University of Malaya, Malaysia
- 12:05-12:25 Determination of Mycotoxins in Food Samples by Liquid Chromatography-Mass Spectrometry (G019-O)
Wai-Cheung Chung, Twinnie Sau-Ching Tso, Hong Kong Government Laboratory, Hong Kong, China

July 29, 2004 (Afternoon session)

Venue: WLB 305

Presider: Dr. Wai-cheung Chung

- 3:00-3:30 Highly-Ordered Mesoporous Material as Assisted Matrix in MALDI-TOF and TOF/TOF MS (G007-K)
Zhe Shan, Minjia Yuan, Guoan Zhang, Xuejiao Xu, Bo Tu, Dongyuan Zhao, Pengyuan Yang, Fudan University, China
- 3:30-4:00 Characterization of Atmospheric Aerosol Lead Pollution in China with Isotope Abundance Ratios (G008-K)
Xiande Liu, Xianfang Li, Bing Li, Ming Yin, Chinese Research Academy of Environmental Sciences, Beijing, China

4:00-4:15 Tea break

Presider: Dr. Yiu-chung Wong

- 4:15-4:45 Application of Mass Spectrometry in the Analysis of Trace Residues and Contaminants in Food (G009-K)
Wai-cheung Chung, Hong Kong Government Laboratory, Hong Kong, China
- 4:45-5:05 Identification of Irradiated Pork and Chicken Meat Samples by Determination of Alkylcyclobutanones Using Gas Chromatography with Mass Spectrometry (G020-O)
Della Wai-mei Sin, Yiu-chung Wong, Michael Wai-yin Yao, Hong Kong Government Laboratory, Hong Kong, China

5:05-5:25 The Determination of Lead Availability in Contaminated Soils by Isotope Dilution Mass Spectrometry (G021-O)
Namfon Tongtavee, Juwadee Shiowatana, Ronald G. McLaren, Weerawan Waiyawat,
Mahidol University, Thailand

Section H: Flow Analysis and Separation Science

July 28, 2004 (Afternoon session)

Venue: WLB 203

Presider: Prof. Sam Fong Yau Li

2:00-2:30 High Sensitivity Analysis of Metal Ions by Capillary Electrophoresis with On-Line Sample Preconcentration (H001-K)
Shigeru Terabe, Kentaro Isoo,
Himeji Institute of Technology, Japan

2:30-3:00 Development of Chiral Monolithic Silica Columns for the Enantiomeric Separation by Capillary Electrochromatography (H002-K)
Toshiyuki Hobo, Zilin Chen, Hiroshi Ozawa, Takahide Nishiyama, Tatsuro Nakagama, Katsumi Uchiyama,
Tokyo Metropolitan University, Japan

3:00-3:30 Determination of the Bacterial Pathogens by Capillary Electrophoresis (H003-K)
Sam Fong Yau Li,
National University of Singapore, Singapore

3:30-3:45 Tea break

Presider: Prof. Masaaki Tabata

3:45-4:15 New Polyelectrolyte Phases for HPLC and Capillary Electrophoresis (H004-K)
Oleg Shpigun, A. V. Pirogov,
Moscow State University, Russia

4:15-4:35 Characterization of Cationic Potato Amylopectin using Flow Field-Flow Fractionation Coupled with Multi Angle Laser Light Scattering (H018-O)
Seungho Lee, Karl-Gustav Wahlund,
Hannam University, Korea

4:35-4:55 Simple and Selective Extraction of Metal Chloro Complexes from Homogeneous Mixed Solvents by Addition of NaCl (H019-O)
Masaaki Tabata, Nguen Huu Chung,
Saga University, Japan

4:55-5:15 Hadamard Transform Electrophoresis with Capillary-Based Injection Device
Constructed by Laser Fabrication (H020-O)
Kazuki Hata, Takashi Kaneta, Totaro Imasaka,
Kyushu University, Japan

July 29, 2004 (Morning session)

Venue: WLB 203

Presider: Dr. Y.S. Fung

9:00-9:30 Virus-Cell Receptor Interactions Measured by Capillary Electrophoresis
(H005-K)

Ernst Kenndler,

University of Vienna, Austria

9:30-10:00 Dynamic Fractionation of Trace Metals in Environmental Solid Samples
(H012-K)

Boris Spivakov, Petr S. Fedotov, Rainer Wennrich,

Russian Academy of Sciences, Russia

10:00-10:30 Headspace Hanging Drop Microsolvent Extraction for the Determination of
Herbal Aroma Compounds by GC-MS (H007-K)

Dong-Sun Lee, Nam-Sun Kim, Zoo-Won Yoo, Sun-Neo Lee,

Seoul Women's University, Korea

10:30-10:45 Tea break

Presider: Dr. Doo Soo Chung

10:45-11:05 Flow Injection Analysis of Highly Concentrated Sodium ion on the basis of
Specific Decomposition of Bis(1, 4, 7, 10, 13- penta-oxa- 16-
aza-cyclooctadecane-N-carbodithioato)cobalt(II) (H021-O)

Nobuo Uehara, Shigenori Sekine, Ei'ichi Aikawa, Tokuo Shimizu,

Utsunomiya University, Japan

11:05-11:25 Stacking of Highly Saline Samples by Transient Isotachopheresis (H022-O)

Doo Soo Chung, Asif Riaz, Sang-Hee Shim, Bojeong Kim, Kihwan Choi,

Yongwon Jeong, Yongseok Han, Songyi Kim, Seok Chung, Seung Il Cho,

Moon Koo Kang, Kukjin Chun, Jun Keun Chang,

Seoul National University, Korea

11:25-11:45 Development and Evaluation of a FIA-Based Lab-On-Valve System
(H023-O)

Soulin Lin, Zhi-yong Tang, Hai-ou. Qiu,

China University Of Geosciences, China

11:45-12:05 The Use of Carbon Column for Clean-Up in the Analysis of Dioxins and
Dioxin-Like PCBs in Food (H024-O)

Chi-shing Ng, Wai-cheung Chung,

Hong Kong Government Laboratory, Hong Kong, China

- 12:05-12:25 Membrane Permeation for Selective Detection of Iodide by Chemiluminescence (H025-O)
Nuanlaor Ratanawimarnwong, P. Wilairat, I. D. Mckelvie, D. Nacapricha, Mahidol University, Thailand
- 12:25-12:45 New Approach for Chromatographic Detection of Iodide Using Boron Doped-Diamond Thin Film Electrode (H026-O)
Maliwan Amatatongchai, Duangjai Nacapricha, Orawon Chailapakul, Prapin Wilairat, Kate Grudpan, Mahidol University, Thailand

July 29, 2004 (Afternoon session)

Venue: WLB 203

Presider: Dr. Carmen Huie

- 3:00-3:30 Fast, Selective and Sensitive Separations of Inorganic Ions Using Chromatographic and Electroseparation Methods (H008-K)
Paul Haddad, P. Zakaria, J. Hutchinson, M. Macka, N. Avdalovic, University of Tasmania, Australia
- 3:30-4:00 In-Situ Derivatization of Biological Substances in Free Solution Capillary Electrophoresis (H009-K)
Susumu Honda, Atsushi Taga, Mayumi Sugimura, Aki Nishino, Shigeo Suzuki, Kinki University, Japan

4:00-4:15 Tea break

Presider: Dr. Waraporn Som-aum

- 4:15-4:45 Comparative Studies on Enantioseparations of Hydrobenzoin and Structurally Related Compounds in Capillary Zone Electrophoresis using Heptakis(2,3-dihydroxy-6-O-sulfo)- β -cyclodextrin and Randomly Sulfate-substituted- β -cyclodextrin as Chiral Selector and Enantiomer Migration Reversal of Hydrobenzoin with Dual Cyclodextrin Systems in the Presence of Borate Complexation (H010-K)
Ching-Erh Lin, Sheng-Li Lin, I-Ju Fang, Wei-Ssu Liao, National Taiwan University, Taiwan, China
- 4:45-5:05 3-Iodinacetylaminobenzanthrone as a Fluorescent Labeling Reagent for Thiols in High Performance Liquid Chromatography (H027-O)
Hong Wang, Shu-Cai Liang, Zhi-Min Zhang, Hua-Shan Zhang, Wuhan University, China
- 5:05-5:25 Application of Ion Interaction Chromatographic Method for the Analysis of Anionic Anions (H028-O)
Waraporn Som-aum, Jirasak Threeprom, Mahidol University, Thailand

5:25-5:45 Lagrangian Description of Nonlinear Chromatography (H029-O)
Heng Liang,
Xi'an Jiaotong University, China

July 30, 2004 (Morning session)

Venue: WLB 203

Presiders: Prof. Yukui Zhang and Dr. Z.W. Cai

9:00-9:30 Multidimensional Chromatography and its Application (H011-K)
Yukui Zhang,
Chinese Academy of Sciences, China

9:30-10:00 Polymer-Coated Fiber-Packed Capillary Columns in Gas Chromatography (H006-K)
Kiyokatsu Jinno, Ai Tahara, Mitsuhiro Ogawa, Yoshihiro Saito,
Toyohashi University of Technology, Japan

10:00-10:30 High-Performance Aqueous Micellar Two-Phase Systems for Protein Separation (H013-K)
Hirofumi Tani, Tamio Kamidate,
Hokkaido University, Japan

10:30-10:45 Tea break

Presider: Prof. Yu Yang

10:45-11:10 Subcritical Water Extraction and Chromatography (H016-I)
Yu Yang,
East Carolina University, U.S.A.

11:10-11:30 Challenges in Selective Determination of Iodine (H030-O)
Duangjai Nacapricha,
Mahidol University, Thailand

11:30-11:50 Cucurbit[7]uril: A Novel Additive for the Separation of Nitrobenzenes by Capillary Electrophoresis (H031-O)
Li Xu, Fang Wei, Si-Min Liu, Cheng-Tai Wu, Yu-Qi Feng,
Wuhan University, China

11:50-12:10 Application of Iodide-Catalyzed Reaction for Kinetic Determination of Iodide and Iodate (H032-O)
Nathawut Choengchan, Pornsawan Tongkaew, Supasin Suwannachaoat, Nuanlaor Ratanawimarnwong, Prapin Wilairat, Duangjai Nacapricha,
Mahidol University, Thailand

- 12:10-12:30 Pretreatment Method for Multivitamin Tablet Prior to Iodide Determination by Chemiluminescence Flow Injection (H033-O)
Patcharin Chaisuwan, Nathawut Choengchan, Benjamaporn Promthong, Prapin Wilairat, Duangjai Nacapricha,
Mahidol University, Thailand
- 12:30-12:50 Development of Split Fractionation for Studies on the Metal Distribution in Aquatic Particles (H034-O)
Nongnuch Tantidanai, Waret Veerasai, Ronald Beekett,
Mahidol University, Thailand

July 30, 2004 (Afternoon session)

Venue: WLB 203

Presider: Dr. Carmen Huie

- 2:30-3:00 Concepts and Developments in Comprehensive Two-Dimensional Gas Chromatography (GCXGC) (H014-K)
Philip Marriott,
RMIT University, Australia
- 3:00-3:25 Comprehensive Two-Dimensional Gas Chromatography/Time of Flight-Mass Spectrometer (GCxGC/TOF-MS) and its Applications in Analysis of Complex Samples (H017-I)
Guowang Xu, Xin Lu, Hongwei Kong, Yufang Zheng, Yuan Wang, Jianfang Wu, Lei Guo, Yanli Li,
Dalian Institute of Chemical Physics, China

3:25-3:40 Tea break

Presider: Prof. Shu-Hui Chen

- 3:40-4:00 Liquid-Phase Microextraction as an On-Line Preconcentration Method in Capillary Electrophoresis (H035-O)
Doo Soo Chung, Kihwan Choi,
Seoul National University, Korea
- 4:00-4:30 An Integrated Microfluidic Device with on-line Microdialysis Sampling, Derivatization, Electrophoretic Analysis and Detection (H015-K)
Shu-Hui Chen, Yi -Hsuan Hu, Hsuan-Hsiu Hsu,
National Cheng Kung University, Taiwan, China
- 4:30-4:50 High Performance Liquid Chromatographic Determination of Derivatizing Product between 1,2-Naphthoquinone-4-Sulfonate and Methanol (H036-O)
Duangduean Hinsin, Prapin Wilairat,
Mahidol University, Thailand

4:50-5:10 A Continuous-Flow System for Sequential Extraction and Flow Injection Analysis of Phosphorus in Soil and Sediment Extracts (H037-O)
Warawut Tiyapongpattana, Pichit Pongsakul, Juwadee Shiowatana,
Duangjai Nacapricha,
Mahidol University, Thailand

Section I: Chemical Education/Low Cost Instrumentation

July 29, 2004 (Morning session)

Venue: WLB 306

Presider: Prof. W. H. Chan

9:00-9:30 The Application of Microscale Titration in Chinese Schools (I001-K)
Ninghuai Zhou, Xue-Li Zhang,
Hangzhou Teachers College, China

9:30-10:00 Microscale Experiments in Analysis – Provide Student Understanding and a Green Chemistry Approach (I002-K)
Christer Gruvberg,
University of Halmstad, Sweden

10:00-10:30 The Development of Low Cost Data Monitoring and Logging for the Study of Environmental Processes (I003-K)
Barry N. Noller, Krishna V. Sane,
The University of Queensland, Australia

10:30-10:45 Tea break

Presider: Dr. M. S. Wong

10:45-11:05 Analysis of Iron in Commercial Iron Tablet Using a Low-cost Photometer (I008-O)
Raymond W. Y. Wong, Tak-Sun Wu,
Hong Kong Baptist University, Hong Kong, China

11:05-11:25 Quantative Microscale Determination of Vitamin C (I009-O)
Huifang Zhou, Li Huang,
Guangxi Normal University, China

11:25-11:45 Chemistry Works! (I010-O)
K. C. Pun,
SKH Tsang Shiu Tim Secondary School, Hong Kong, China

11:45-12:05 Data Logger Applying for Analysing Water Quality (I011-O)
Taotao Wang, Li Huang,
Guangxi Normal University, China

- 12:05-12:25 Kinetic of Tris(1,10-phenanthroline) Iron (II) Complex Using a Four-colour LED Photometer (I012-O)
M. S. Wong, Wai Kit Tsui,
 Hong Kong Baptist University, Hong Kong, China
- 12:25-12:45 Microscale Quantitative Analysis of Total Hardness of Tap Water Samples Using EDTA-2Na Complexometric Titration by an Practical Microscale Titrate Installation (I013-O)
Zhihui Yang, Li Huang,
 Guangxi Normal University, China

July 29, 2004 (Afternoon session)
Venue: WLB 306

Presider: Prof. A. W. M. Lee

- 2:00-2:30 Microscale Qualitative Analysis of Unknown Solutions Containing Some Cations (I004-K)
Kazuko Ogino,
 Tohoku University, Japan
- 2:30-3:00 Demonstration of Environmental Chemistry *via* Case Studies Using LEDs-Photometer and Microscale Chemistry (I005-K)
W. H. Chan, Ruth W. Y. Chu, April K. Y. Lau,
 Hong Kong Baptist University, Hong Kong, China
- 3:00-3:30 Rote Learning and the Lack of Conceptual Learning by Students at All Levels Evidenced by their Inability to Deduce Elementary and Fundamental Expressions (I006-K)
J. N. Oleap Fernando,
 The Open University, Sri Lanka
- 3:30-4:00 Ideas and Practices of Using Information and Communication Technology (ICT) for Interactive Learning of Secondary School Chemistry (I007-K)
Raymond W. H. Fong,
 Education and Manpower Bureau, Hong Kong, China

4:00-4:15 Tea Break

Presider: Dr. W. Y. Wong

- 4:15-4:35 A Simple and Easy Apparatus Facilitating the Organic Analysis *via* Small-Scale Chemistry (I014-O)
S. Tantayanon, W. Jaturonrusmee, C. Karalai, P. Theramongkol, S. Rajviroongit, D. Buddasukh, P. Asvarujanon, G. Veerachato,
 Chulalongkorn University, Thailand
- 4:35-4:55 A Microburet and Microscale Titrimetry (I015-O)
Chun-Xiang He, Shu-min Zhang,
 Liaoning Normal University, China

- 4:55-5:15 Microscale Determination of Potassium Iodate in Iodized Salt (I016-O)
Silin Wei, Li Huang,
Guangxi Normal University, China
- 5:15-5:35 Monitoring and Remediation of Inorganic and Organic Pollutants (I017-O)
W. K. Kee, Wing Hong Chan,
Hong Kong Baptist University, Hong Kong, China