

BCEIA 2017

The 17th Beijing
Conference and Exhibition
on Instrumental
Analysis

BCEIA 2017

CONFERENCE PROGRAM

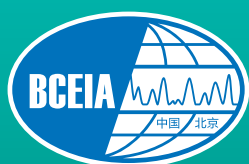
Date: 9-11 October 2017

Location: China National Convention Center, Beijing

Sponsored by: The China Association for Instrumental Analysis

Approved by: Ministry of Commerce of the People's

Republic of China



BCEIA 2017

第十七届

北京分析测试学术报告会暨展览会

The 17th Beijing Conference and Exhibition
on Instrumental Analysis (BCEIA2017)

analytical chemistry

Submit Your Research to The Most Cited Journal in the Field

Analytical Chemistry serves as a key focal point for the fields of measurement science. It is the journal that reports the measurement of important *chemical things* and we welcome your best research to our pages. We publish manuscripts representing all of the specialties of analytical chemistry, as well as reviews, features and virtual manuscript collections.



EDITOR-IN-CHIEF

Jonathan V. Sweedler

University of Illinois Urbana-Champaign



ACS Publications
Most Trusted. Most Cited. Most Read.

pubs.acs.org/ac

CONTENTS

FOREWORD	02
SCIENTIFIC COMMITTEE OF BCEIA 2017	03
BCEIA2017 CONFERENCE GENERAL SCHEDULE	05
BCEIA2017 MEETING ROOM SCHEDULE	06
SCHEDULE OF PLENARY SESSION	07
SCHEDULE OF SESSIONS	09
A. ELECTRON MICROSCOPY AND MATERIAL SCIENCE	09
B. MASS SPECTROMETRY	19
C. OPTICAL SPECTROSCOPY	38
D. CHROMATOGRAPHY	48
E. MAGNETIC RESONANCE SPECTROSCOPY	58
F. ELECTROANALYTICAL CHEMISTRY	68
G. ANALYTICAL TECHNIQUES IN LIFE SCIENCES	80
H. ENVIRONMENTAL ANALYSIS	92
I. CHEMICAL METROLOGY AND REFERENCE MATERIALS	99
J. LABELED IMMUNOASSAY	109
APPENDIX	



Foreword

Since it was inaugurated in 1985 with the approval of the State Council, the biennial Beijing Conference and Exhibition on Instrumental Analysis (BCEIA) hosted by China Association for Instrumental Analysis (CAIA) has adhered to the concept of “Analytical Science Creates Future” and always associated national strategic demand with goals of scientific research. So far, 16 editions of the BCEIA have been held successfully. It has already become the most professional and influential event in the field of analysis and testing in China, and played an important role in promoting international academic exchanges and advancing the development of China’s analytical science and instrument manufacturing technology.

The 17th BCEIA (BCEIA 2017) is scheduled to take place at China National Convention Center in Beijing in October, of which the Conference will be held from October 9 to 11, and the Exhibition from October 10 to 13.

Themed on “Moving Towards a Green Future”, BCEIA 2017 will be better aligned with the needs of social development. Prof. Cheng Jinpei, Academician of the Chinese Academy of Sciences, and Vice Chairman of National Committee of Education, Science, Culture, Public Health and Sports of the CPPCC, serves as Chairperson of the Conference, and Prof. Zhang Ze of Zhejiang University, Academician of the Chinese Academy of Sciences, as Chairman of the Academic Committee.

The Conference will consist of more than 600 academic lectures in diverse forms like session reports, forum reports and posters. Twelve renowned Chinese and foreign analytical experts will give academic lectures, including Academician Cheng Jinpei, and Prof. Knut W. Urban, winner of the Wolf Prize in Physics and member of the German National Academy of Sciences. The lectures will revolve around life sciences and precision medicine in that the rapid development of mass spectrometric methods has provided powerful analytical instruments for life sciences.

The ten sessions on electron microscopy and materials sciences, mass spectrometry, optical spectroscopy, chromatography, magnetic resonance, electroanalytical chemistry, analytical techniques in life sciences, environmental analysis, chemical metrology and reference materials, and labeled immunoassays technology will bring together 319 scholars from home and abroad, and more than 344 posters will be put up.

The Chinese Young Analytical Scientists Forum, China-Japan Scientific Instruments Development Forum, Green Laboratory Technology Forum and Laboratory Capacity Validation Forum will focus on hot areas of application of analytical and testing techniques, such as life sciences, environmental analysis, materials characterization, and disease diagnosis. Experts from Japan Analytical Instruments Manufacturers’ Association (JAIMA), and winners of China’s National Science Fund for Distinguished Young Scholars will make reports at the forums.

The Exhibition will bring together nearly 500 exhibitors from more over 20 countries and regions including China, the United States, Germany and Japan. More than 3,100 new instruments will be on display, all backed by domestically and internationally advanced technology. The 2nd National Major Scientific Equipment Development Phased Achievements Exhibition will demonstrate the achievements China has made in the research and development of scientific instruments since the start of the 12th Five-year Plan period (2011–2015), and exhibit more than 100 instruments and key components. Given that analytical instruments are closely related to everyday life, on-site experience activities will also be held in response to the public concern about food and drug safety, allowing visitors to understand the application of portable instruments in daily life. In addition, there will be new product launch events and new technology seminars at BCEIA 2017.

We warmly welcome professionals, manufacturers and other interested parties to take part in BCEIA 2017.

Organizational Structure of BCEIA 2017

Chairman

Jinpei Cheng Academician of CAS
Vice-chairman of Committee of Education, Science, Culture, Public Health and Sports, the National Committee of the Chinese People's Political Consultative Conference.

Vice Chairman

Guibin Jiang	Academician of CAS	President of CAIA
Xuemin Zhang	Academician of CAS	Vice-president of CAIA
Ze Zhang	Academician of CAS	Zhejiang University
Yukui Zhang	Academician of CAS	The Dalian Institute of Chemical Physics, CAS
Xinrong Zhang	Professor	Vice-President and Secretary General of CAIA
Zeper ABLIZ	Professor	Vice-president of CAIA
He Tian	Senior Engineer	Vice-president of CAIA
Chengyan Liu	Researcher	Vice-president of CAIA

Organizing Committee:

Chairman

Xinrong Zhang	Professor	Vice-President and Secretary General of CAIA
---------------	-----------	--

Vice- Chairman

Yuying Zhang	Researcher	Executive Deputy Vice-Secretary General of CAIA
Qiankun Zhuang	Professor	National Science Foundation of China
Huwei Liu	Professor	Peking University
Hongmei Li	Researcher	National Institute of Metrology, China
Zhenzhu Ma	Researcher	China Building Material Test & Certification Group Co., Ltd

Academic Conference:

Chairman

Ze Zhang	Academician of CAS	Zhejiang University
----------	--------------------	---------------------

Vice Chairman

Hongyuan CHEN	Academician of CAS	Nanjing University
---------------	--------------------	--------------------



Secretary General

Xinrong Zhang Professor Vice-President and Secretary General of CAIA

Advisory Board Members (listed by alpha-betacal order)

Benli HUANG	Academician of CAS	Xiamen University
Guofan JIN	Academician of CAE	Tsinghua University
Peizhang LU	Academician of CAS	Dalian Institute of Chemical Physics,CAS
Yunyu SHI	Academician of CAS	University of Science and Technology of China
Fusheng WEI	Academician of CAE	China National Environmental Monitoring Center
Hengqiang YE	Academician of CAS	Shenyang Institute of Metal Research,CAS

Members (listed by letter)

Zeper ABLIZ	Professor	Minzu University of China
Edward S. Yeung	Professor	Lowa State University,USA
Hubert H. Girault	Professor	Swiss federal Institute of Technology in Lausanne
Guibin JIANG	Academician of CAS	Research Centerfor Eco-Environmental Sciences,CAS
Yulin DENG	Professor	Beijing Institute of Technology
Knut W. Urban	Professor	ER-Center for Microscopy and Spectroscopy with Electrons, J ü lich, Germany
K. W. Michael SIU #	Professor	York University, Canada
Shuying LIU	Researcher	Changchun Institute of Applied Chemistry, CAS
Liang LI	Professor	University of Alberta, Canada
Xiaohong QIAN	Researcher	Beijing Proteome Research Center
Reinhard NIESSNER	Professor	Technical University of Munich,Germany
R. Graham Cooks	Professor	Purdue University,USA
Yuanhua SHAO	Professor	Peking University
Erkang WANG	Academician of CAS	Changchun Institute of Applied Chemistry,CAS
Haizhou WANG	Academician of CAE	China Iron & Steel Research Institute,CISRI
X. Chris LE#	Professor	University of Alberta, Canada
Xiurong YANG	Academician of CAS	Changchun Institute of Applied Chemistry,CAS
Zhaohui YE	Academician of CAS	Wuhan Institute of Physics and Mathematics,CAS
Xinrong ZHANG	Professor	Tsinghua University
Xuemin ZHANG	Academician of CAS	Academy of Military Medical Sciences .China
Yukui ZHANG	Academician of CAS	Dalian Institute of Chemical Physics,CAS

Fellow of the Royal Society of Canada

BCEIA2017 CONFERENCE GENERAL SCHEDULE

Date	Time	Location & Activities
Oct.8(Sun.)	8:00-18:00	Registration Location: Conference hall is on the third floor in China National Convention Center.
Oct.9(Mon.)	AM 8:00-12:00	Oral Presentation
	PM 13:30-18:00	
Oct.10(Tue.)	AM 8:30-12:05	BCEIA2017 General Plenary Session Location: Room 309A.309B, China National Convention Center, Beijing
	PM 13:30-17:10	
	PM 18:00-20:00	Welcoming Banquet Location: Convention Hall No.2, Beijing International Convention Center
Oct.11(Wed.)	AM 8:00-12:00	Oral Presentation
	PM 13:30-18:00	



BCEIA2017 MEETING ROOM SCHEDULE

Date	Meeting	Room
October 10th All day	PLENARY LECTURES	309A-B
October 9th All day October 11th All day	A.ELECTRON MICROSCOPY AND MATERIALS SCIENCES	309A
October 9th All day October 11th All day	B.MASS SPECTROMETRY	309B
October 9th All day October 11th A.M	C.OPTICAL SPECTROSCOPY	310
October 9th All day October 11th All day	D.CHROMATOGRAPHY	311A
October 9th All day October 11th All day	E.MAGNETIC RESONANCE SPECTROSCOPY	306A
October 9th All day October 11th All day	F.ELECTROANALYTICAL CHEMISTRY	306B
October 9th All day October 11th All day	G.ANALYTICAL TECHNIQUES IN LIFE SCIENCES	307A
October 9th All day October 11th All day	H.ENVIRONMENTAL ANALYSIS	307B
October 9th All day October 11th All day	I.CHEMICAL METROLOGY AND REFERENCE MATERIALS	308
October 9th All day October 11th All day	J.LABELED IMMUNOASSAY	311B

AGENDA OF PLENARY LECTURES

- Time: Oct.10, 2017(Tue.)
- SITE: Room 309A.309B, China National Convention Center, Beijing.
- Chairman: Prof. Erkang WANG
- 8:30-8:40 Opening Speech by Prof.Ze ZHANG
Ze ZHANG
Academician of CAS
Zhejiang University
- Chairman: Hongyuan CHEN and Xinrong ZHANG
- 8:40-9:00 TITLE:On Scientific Evaluation Reform and Sustainable Development of
Chemical Science
Jinpei CHENG
Academician of CAS
Vice-chairman of Committee of Education,Science,Culture,Public Health and
Sports,the National Committee of the Chinese People's Political Consultative
Conference.
- 9:00-9:35 A1 TITLE:Aberration-corrected electron microscopy:
A tool for advanced materials science
Professor Knut Urban
JARA Distinguished Professor,
Former Director Ernst Ruska Center Julih, Germany,
Co-inventor of Aberration Corrected Electron Optics.
- 9:35-10:10 B1 TITLE: The assembly of amino acids and peptides: Applications to the
amyloid mechanism, disease and structure
Professor Michael Bowers
University of California, Santa Barbara
- 10:10-10:20 Coffee Break
- Chairman: Yukui ZHANG and Huwei LIU
- 10:20-10:55 C1 TITLE:The foundation of molecular medicine: A chemical biology approach
Professor Weihong TAN
Academician of Chinese Academy of Sciences, academician of Third World
Academy of Sciences, Professor of Hunan University and University of Florida
- 10:55-11:30 D1 TITLE:Quantitative Proteomics in Wellness and Disease Settings
Professor Robert Moritz
Institute for Systems Biology, Seattle, WA, USA



- 11:30–12:05 E1 TITLE:Progress of Low-Field Magnetic Resonance for Chemical Analysis
Dr.Yi-Qiao Song
Schlumberger-Doll Research, Massachusetts General Hospital and Harvard Medical school, Radiology
- Chairman: **Xiurong YANG and Jin-Ming LIN**
- 13:30–14:05 F1 TITLE:Half a century of spectroelectrochemistry: from starting point to future development
Professor Zhongqun TIAN
Professor of Xiamen University, academician of Chinese Academy of Sciences, Member of Royal Society of Chemistry, and chairman of International Electrochemical Society
- 14:05–14:40 G1 TITLE:Droplet microfluidics for single cell studies
Professor David A. Weitz
Academician of American National Academy of Sciences (NAS,U.S.A) , American National Academy of Engineering(NAE.U.S.A), American Academy of Arts and Sciences (AAAS,U.S.A) , Harvard University
- 14:40–15:15 G2 TITLE:Glycosylation; its applications and analytical tools: current and future trends
Professor Lokesh Joshi
Professor of National University of Ireland (Galway)
- 15:15–15:25 **Coffee Break**
- Chairman: **Xuemin ZHANG and Hongmei LI**
- 15:25–16:00 I1 TITLE:Characterization of peptide reference materials: from valine to insulin
Dr.Robert Wielgosz
Director of Chemistry Department, International Bureau of Metrology
- 16:00–16:35 J1 TITLE:Assay development strategies and pipeline
Dr.Beatus Ofenloch-haehnle
CTO of Roche Diagnostics Group
- 16:35–17:10 H1 TITLE:Discovery and Identification of Oral Cancer Biomarkers and Their Translation to Prognosis of Oral Premalignant Lesions
Professor K.W.Michael Siu
Member of Canadian Royal Society of Chemistry, University of Windsor, Canada

SCHEDULE OF SESSIONS

A.ELECTRON MICROSCOPY AND MATERIAL SCIENCE

CHAIRMAN: PROF. XIAODONG HAN

ORAL LECTURES

Keynote: 25min talk + 5min questions

Invited: 20min talk + 5min questions

Location: Room 309A, China National Convention Center, Beijing

Time:		Oct. 9, 2017 AM (Monday)
Chairman:		Prof. Xiaodong Han (Session I)
8:30-8:40		Opening address by Prof. Ze Zhang
8:40-9:10	A2	IN_SITU HIGH RESOLUTION TEM STUDY ON METAL/OXIDE CATALYSTS UNDER GAS ENVIRONMENT Professor Ze Zhang (KEYNOTE) Zhejiang University, China
9:10-9:40	A3	TITLE: UNDERSTANDING THE NANO STRUCTURED METAL CHALCOGENIDES USING ADVANCED ELECTRON MICROSCOPY Prof. Jin Zou (KEYNOTE) The University of Queensland, Australia
9:40-10:05	A4	TITLE: DIRECT DETECTION IMAGE DETECTOR AND ELECTRON COUNTING - A NEW TOOL FOR HIGH RESOLUTION IMAGING OF METAL-ORGANIC FRAMEWORKS AND BEAM SENSITIVE MATERIALS Dr. Ming Pan (INVITED) Gatan, Inc., Pleasanton, CA, USA
10:05-10:15		Coffee break
Chairman:		Prof. Ze Zhang (Session II)
10:15-10:45	A5	TITLE: GIANT LINEAR STRAIN GRADIENT WITH EXTREMELY LOW ELASTIC ENERGY IN A PEROVSKITE NANOSTRUCTURE ARRAY Prof. Xiuliang Ma (KEYNOTE) Institute of Metal Research, China
10:45-11:15	A6	TITLE: DEVELOPMENT OF IN-SITU TEM TECHNIQUE AND ITS APPLICATIONS Prof. Xuedong Bai (KEYNOTE) Institute of Physics, China
11:15-11:45	A7	TITLE: ULTRAHIGH STRENGTH AND FRACTURE OF METALLIC AND SEMICONDUCTOR NANOWIRES



		Prof. Yang Lu (KEYNOTE)
		City University of Hong Kong, China
Time:		Oct. 9, 2017 PM (Monday)
Chairman:		Prof. Jianfeng Nie (Session III)
13:30-14:00	A8	TITLE: ATOMIC AND ELECTRONIC RECONSTRUCTION OF GRAIN BOUNDARIES IN TITANIA
		Prof. Zhongchang Wang (KEYNOTE)
		International Iberian Nanotechnology Laboratory (INL), Braga, 4715-310, Portugal
14:00-14:30	A9	TITLE: IN SITU & EX-SITU ATOMIC SCALE UNDERSTANDING THE ATOMISTIC MECHANISMS OF STRENGTH AND DUCTILITY OF PT AND NI-BASED SUPER-ALLOY
		Prof. Xiaodong Han (KEYNOTE)
		Beijing University of Technology, China
14:30-14:55	A10	TITLE: TO BE CONFIRMED
		Dr. Yang Ye (INVITED)
		Thermo fisher Scientific, Inc. USA
14:55-15:10		Coffee break
Chairman:		Prof. Yimei Zhu (Session IV)
15:10-15:40	A11	TITLE: HAADF-STEM CHARACTERIZATION OF MAGNESIUM ALLOYS
		Prof. Jianfeng Nie (KEYNOTE)
		Department of Materials Science and Engineering, Monash University, Victoria 3800, Australia
15:40-16:10	A12	TITLE: REVEALING THE GROWTH MECHANISMS OF ATOMICALLY THIN TWO-DIMENSIONAL MATERIALS VIA ADVANCED TRANSMISSION ELECTRON MICROSCOPY
		Prof. Chuanhong Jin (KEYNOTE)
		State Key Laboratory of Silicon Materials, School of Material Science and Engineering, Zhejiang University, Hangzhou, Zhejiang 310027, China
16:10-16:40	A13	TITLE: DEVELOPMENT OF THE MEV ELECTRON MICROSCOPE AT BROOKHAVEN FOR ULTRAFAST SCIENCE AND TECHNOLOGY
		Prof. Yimei Zhu (KEYNOTE)
		Department of Condensed Matter Physics, Institute for Advanced Electron Microscopy, Brookhaven National Laboratory, Upton, NY 11973, USA
16:40-17:10	A14	TITLE: IN-SITU TRANSMISSION ELECTRON MICROSCOPY INVESTIGATION OF THE EFFECTS OF EXTERNAL STIMULATIONS ON

		FERROELECTRIC DOMAIN STRUCTURE
		Prof. Xiaozhou Liao (KEYNOTE)
		The University of Sydney, Australia
17:30-21:00		Banquet, JADE PALACE HOTEL (翠宫饭店), 海淀区知春路 76 号
Time:		Oct. 11, 2017 AM (Wednesday)
Chairman:		Prof. Luchang Qin (Session V)
8:30-9:00	A15	TITLE: PERSPECTIVE ON HETEROGENEOUS MATERIALS
		Prof. Yuntian Zhu (KEYNOTE)
		Department of Materials Science and Engineering, North Carolina State University, Raleigh, NC 27695, USA
9:00-9:30	A16	TITLE: QUANTITATIVE IN-SITU STUDY OF LOW DIMENSIONAL MATERIALS AND RELATED INTERFACES
		Professor Jun Lou (KEYNOTE)
		Department of Materials Science and Nano Engineering, Rice University, Houston, Texas 77005, USA
9:30-9:55	A17	TITLE: THE NEW HITACHI REGULUS SERIES ULTRA HIGH RESOLUTION FE-SEM AND LATEST APPLICATION
		Prof. Masahito Watanabe (INVITED)
		Hitachi High-Technologies Co., Ltd.
9:55-10:05		Coffee break
Chairman:		Prof. Yuntian Zhu (Session VI)
10:05-10:35	A18	TITLE: IN SITU TEM STUDY ON THE SURFACE OF SUB-10NM MATERIALS
		Prof. Litao Sun (KEYNOTE)
		Southeast University, China
10:35-11:05	A19	TITLE: SURFACE-COATING MEDIATED ELECTRO-CHEMICAL PERFORMANCE IN CUO-BASED SODIUM ION BATTERY
		Prof. Jianbo Wang (KEYNOTE)
		Wuhan University, China
11:05-11:35	A20	TITLE: TOPOTACTIC INTERFACE BETWEEN CORUNDUM AND RUTILE STRUCTURES
		Prof. Rong Yu (KEYNOTE)
		National Center for Electron Microscopy in Beijing, Tsinghua University, Beijing 100084, P. R. China.
Time:		Oct. 11, 2017 PM (Wednesday)
Chairman:		Prof. Jianbo Wang (Session VII)



- 13:30–14:00 A21 TITLE: A LAB6 FIELD-EMISSION ELECTRON SOURCE FOR THE ELECTRON MICROSCOPE
Prof. Luchang Qin (KEYNOTE)
The University of North Carolina at Chapel Hill, USA
- 14:00–14:30 A22 TITLE: STRUCTURE AND ELECTRONIC STRUCTURE OF MATERIALS UNDER SYMMETRY BREAKING
Prof. Lin Gu (KEYNOTE)
Institute of Physics, China
- 14:30–15:00 A23 TITLE: IN SITU TEM STUDIES ON RRAM DEVICE AND EPITAXIAL THIN FILMS
Prof. Richeng Yu (KEYNOTE)
Institute of Physics, China
- 15:00–15:10 **Coffee break**
- Chairman: Prof. Litao Sun (Session VIII)
- 15:10–15:40 A24 TITLE: DEPENDENT PROPERTIES OF INAS NANOWIRES AND THEIR DEVICES
Prof. Qing Chen (KEYNOTE)
Key Laboratory for the Physics and Chemistry of Nanodevices and Department of Electronics, Peking University, Beijing 100871, China
- 15:40–16:10 A25 TITLE: ATOMIC-RESOLUTION ELECTRON MICROSCOPY OF HIGH-PERFORMANCE ALUMINUM ALLOYS
Prof. Jianghua Chen (KEYNOTE)
Center for High-Resolution Electron Microscopy, College of Materials Science and Engineering, Hunan University, Changsha, Hunan 410082, China
- 16:10–16:30 **Closing Remarks**

POSTER SESSION

- A26 EFFECT OF GRAIN SIZE ON THE PHASE STRUCTURE AND ELECTRICAL PROPERTIES OF PZT-PNZN QUATERNARY SYSTEMS
ZHIRONG AI
BEIJING UNIVERSITY OF TECHNOLOGY
- A27 SHIFT OF MORPHOTROPIC PHASE BOUNDARY IN HIGH-PERFORMANCE FINE-GRAINED PZN-PZT CERAMICS
MING ZHANG
BEIJING UNIVERSITY OF TECHNOLOGY
- A28 ULTRA-FAST SELF-ASSEMBLY AND STABILIZATION OF REACTIVE NANOPARTICLES IN REDUCED GRAPHENE OXIDE FILMS
YANAN CHEN
TISHINGHUA UNIVERSITY
- A29 IMPROVING DIELECTRIC PROPERTIES OF PVDF COMPOSITES BY EMPLOYING SURFACE MODIFIED STRONG POLARIZED BATIO₃ PARTICLES DERIVED BY MOLTEN SALT METHOD
MING ZHANG
BEIJING UNIVERSITY OF TECHNOLOGY
- A30 RAPID, IN SITU SYNTHESIS OF HIGH CAPACITY BATTERY ANODES THROUGH HIGH TEMPERATURE RADIATION-BASED THERMAL SHOCK
HEYANG QI
BEIJING UNIVERSITY OF TECHNOLOGY
- A31 AN IN SITU TEM STUDY OF THE SIZE EFFECT ON THE THERMALLY INDUCED MARTENSITIC TRANSFORMATION IN NANOSCALE NITI SHAPE MEMORY ALLOY
HEYANG QI
BEIJING UNIVERSITY OF TECHNOLOGY
- A32 KINK STRUCTURES INDUCED IN NICKEL-BASED SINGLE CRYSTAL SUPERALLOYS BY HIGH-Z ELEMENT MIGRATION
FEI HUI
BEIJING UNIVERSITY OF TECHNOLOGY
- A33 STRONGLY ENHANCED ULTRAVIOLET EMISSION OF AN AU@SiO₂/ZNO PLASMONIC HYBRID NANOSTRUCTURE
LI WANG
BEIJING UNIVERSITY OF TECHNOLOGY
- A34 EVOLUTION OF MICROSTRUCTURE AND MECHANICAL PROPERTIES OF A



DISSIMILAR ALUMINIUM ALLOY WELDMENT

YADI ZHAI

A35 BEIJING UNIVERSITY OF TECHNOLOGY

REVEAL THE SIZE EFFECT ON THE PLASTICITY OF ULTRA-SMALL SIZED AG
NANOWIRES WITH IN SITU ATOMIC-SCALE MICROSCOPY

LIRONG XIAO

A36 BEIJING UNIVERSITY OF TECHNOLOGY

MEMS DEVICE FOR QUANTITATIVE IN SITU MECHANICAL TESTING IN ELECTRON
MICROSCOPE

XIAODONG WANG

A37 BEIJING UNIVERSITY OF TECHNOLOGY

IN-SITU INVESTIGATION OF DISLOCATION TANGLE - UNTANGLE PROCESSES IN
SMALL-SIZED BODY-CENTERED CUBIC NB SINGLE CRYSTALS

XINYU SU

A38 BEIJING UNIVERSITY OF TECHNOLOGY

SITE PREFERENCE OF METALLIC ELEMENTS IN M₂₃C₆ CARBIDE IN A NI-BASED
SINGLE CRYSTAL SUPERALLOY

SHIYU MA

A39 SHANDONG UNIVERSITY

SHEARING MECHANISMS OF STACKING FAULT AND ANTI-PHASE-BOUNDARY
FORMING DISLOCATION PAIRS IN THE γ' PHASE IN NI-BASED SINGLE CRYSTAL
SUPERALLOY

DELI KONG

A40 BEIJING UNIVERSITY OF TECHNOLOGY

STRUCTURAL, MECHANICAL, AND SAND EROSION PROPERTIES OF TIN/ZR/ZRN
CHUNLANG GAO

A41 BEIJING UNIVERSITY OF TECHNOLOGY

DIRECT OBSERVATION OF STRUCTURAL TRANSITIONS IN THE PHASE CHANGE
MATERIAL GE₂SB₂TE₅

QINGSONG DENG

A42 BEIJING UNIVERSITY OF TECHNOLOGY

A SECOND AMORPHOUS LAYER UNDERNEATH SURFACE OXIDE

BIN ZHANG

A43 CHONGQING UNIVERSITY

UNVEILING THE DYNAMIC CAPACITIVE STORAGE MECHANISM OF CO₃O₄ @
NiO₂O₄ HYBRID NANO-ELECTRODES FOR SUPERCAPACITOR APPLICATIONS

- YANHUI CHEN
- A44 BEIJING UNIVERSITY OF TECHNOLOGY
REVEALING ULTRALARGE AND LOCALIZED ELASTIC LATTICE STRAINS IN NB
NANOWIRES EMBEDDED IN NITI MATRIX
KETAO ZANG
- A45 TIANJIN UNIVERSITY OF TECHNOLOGY
FABRICATION OF INDIVIDUAL CARBON NANOTUBES AND THEIR ARRAYS IN A
TRANSMISSION ELECTRON MICROSCOPE
RUIWEN SHAO
- A46 PEKING UNIVERSITY
SELECTIVE EVOLUTION OF SECONDARY γ' PRECIPITATION IN A NI-BASED
SINGLE CRYSTAL SUPERALLOY BOTH IN THE γ MATRIX AND AT THE DISLOCATION
NODES
SISI XIANG
- A47 BEIJING UNIVERSITY OF TECHNOLOGY
IN-SITU TEM EXPERIMENTS AND FIRST-PRINCIPLES STUDIES ON THE
ELECTROCHEMICAL AND MECHANICAL BEHAVIORS OF α -MOO₃ IN LI-ION
BATTERIES
YONGHE LI
- A48 BEIJING UNIVERSITY OF TECHNOLOGY
LITHIUM-ION BATTERIES: UNDERSTANDING THE STABILITY FOR LI-RICH LAYERED
OXIDE Li₂RuO₃ CATHODE
BIN ZHANG
- A49 CHONGQING UNIVERSITY
UNIFORM FINE MICROSTRUCTURE AND RANDOM TEXTURE OF MG - 9.8GD - 2.7Y -
0.4ZR MAGNESIUM ALLOY PROCESSED BY REPEATED-UPSETTING DEFORMATION
HAO ZHOU
- A50 NANJING UNIVERSITY OF TECHNOLOGY
ENERGY BAND ENGINEERING AND CONTROLLED P - TYPE CONDUCTIVITY OF
CuAlO₂ THIN FILMS BY NONISOVALENT CU - O ALLOYING
CHUNQIANG ZHUANG
- A51 BEIJING UNIVERSITY OF TECHNOLOGY
SIZE-DEPENDENT BANDGAP MODULATION OF ZNO NANOWIRES BY TENSILE
STRAIN
XIANQIANG LIU
- A52 BEIJING UNIVERSITY OF TECHNOLOGY



HYDROTHERMAL SYNTHESIS OF $[Y(H_2O)_X]_2(C_2O_4)(CO_3)_2$ POWDER USING
ASCORBIC ACID

ZHENG GUANG YAN

A53 BEIJING UNIVERSITY OF TECHNOLOGY

IN SITU OBSERVATION OF DISLOCATION BEHAVIOR IN NANOMETER GRAINS

LI HUA WANG

A54 BEIJING UNIVERSITY OF TECHNOLOGY

EFFECT OF LATTICE MISFIT ON THE EVOLUTION OF THE DISLOCATION STRUCTURE
IN NI-BASED SINGLE CRYSTAL SUPERALLOYS DURING THERMAL EXPOSURE

SHENG CHENG MAO

A55 BEIJING UNIVERSITY OF TECHNOLOGY

ORIENTATION DEPENDENCE OF ELECTROMECHANICAL CHARACTERISTICS OF
DEFECT-FREE INAS NANOWIRES

KUN ZHENG

A56 BEIJING UNIVERSITY OF TECHNOLOGY

PREPARATION OF MOLECULARLY IMPRINTED POLYMERS AND FLUORESCENT
DETECTION OF CYT C

HONG YANG LIU

A57 BEIJING INSTITUTE OF TECHNOLOGY

PURIFICATION OF FLAVONOIDS FROM AUREA HELIANTHUS EXTRACT BY ZINC(II)
COMPLEXATION METHOD

XIAO JIAO ZHANG

A58 BEIJING INSTITUTE OF TECHNOLOGY

PREPARATION OF MOLECULARLY IMPRINTED PHOTONIC CRYSTAL HYDROGEL
FOR DETECTION OF MELAMINE

ZHE HAN LIU

A59 BEIJING INSTITUTE OF TECHNOLOGY

PREPARATION OF LYSOZYME MOLECULARLY IMPRINTED MEMBRANES

YUAN YUAN LI

A60 BEIJING INSTITUTE OF TECHNOLOGY

INVESTIGATION ON THE PREPARATION METHODS OF Fe_3O_4 -QDS MAGNETIC
FLUORESCENT NANOCOMPOSITES

WEI JIE CHEN

A61 BEIJING INSTITUTE OF TECHNOLOGY

APPLICATION OF SHIMADZU EPMA-CL IN ANALYSIS OF MINERALS

ZHAO TONGXIN

- A62 SHIMADZU CHINA
A WIRELESS NANOPORE ELECTRODE FOR SINGLE MOLECULE/ION ANALYSIS
YILUN YING
- A63 EAST CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGYs
THE DISTRIBUTION OF ACTIVE INGREDIENTS IN A SUPPORTED CATALYST
QUANTITATIVELY DETERMINED BY SEM/EDS
ZHIHUA HAN
- A64 NATIONAL INSTITUTE OF CLEAN AND -LOW-CARBON ENERGY
APPLICATION OF TG-MS AND TG-IR FOR DETERMINATION OF CHEMICAL STABILITY
OF LUBRICATING OIL
YUN BAI
- A65 NATIONAL INSTITUTE OF CLEAN AND -LOW-CARBON ENERGY
CHARACTERIZATION OF STRUCTURAL DEFECTS AND ELEMENTAL DISTRIBUTION
ON CDS NANO-DIPOLE SOLAR CELL
FU-KUO CHIANG
- A66 NATIONAL INSTITUTE OF CLEAN AND -LOW-CARBON ENERGY
ATOMIC AND ELECTRONIC RECONSTRUCTION OF GRAIN BOUNDARIES IN TITANIUM
DIOXIDE
ZHONGCHANG WANG
- A67 INTERNATIONAL IBERIAN NANOTECHNOLOGY LABORATORY (INL)
APPLICATION OF MICRO INFRARED METHOD IN ANALYSIS OF FOREIGN MATTER IN
ELECTRONIC PRODUCTS
WANG LIHUA
- A68 SHIMADZU (CHINA) CO.,LTD.
FLUORESCENT PROBES FOR SENSING HYDROGEN PEROXIDE IN VIVO
ZHUO WANG
- A69 BEIJING UNIVERSITY OF CHEMICAL TECHNOLOGY
SUPER-ASSEMBLIES OF POROUS NANODOT-HETERO-FRAMEWORKS FOR
EFFICIENT OPTOELECTRONIC CONVERSION
KONG BIAO
- A70 FUDAN UNIVERSITY
L-PHENYLALANINE METHYL ESTER BASED MONOLITHIC COLUMN FOR
ENANTIOSEPARATION OF AMINO ACIDS
MINGMING ZHANG
- A71 INSTITUTE OF CHEMISTRY, CHINESE ACADEMY OF SCIENCES
MECHANICAL AND ELECTRONIC PROPERTIES OF ULTRATHIN NANODIAMONDS



UNDER UNIAXIAL COMPRESSIONS

ZHIPENG LI

A72 BEIJING INSTITUTE OF TECHNOLOGY

INFRARED SPECTRA OF HYDROGENATED NANODIAMONDS BY FIRST-PRINCIPLES
SIMULATIONS

QING ZHANG

A73 BEIJING INSTITUTE OF TECHNOLOGY

ATOMIC-SCALE FRICTION BEHAVIOR OF LAYERED GRAPHENE AND GRAPHENE-
LIKE BN MATERIALS MODULATED BY INTERACTION POTENTIAL

DAWEI PANG

A74 BEIJING INSTITUTE OF TECHNOLOGY

SYNTHESIS OF LAYERED DOUBLE HYDROXIDES/GRAPHENE OXIDE
NANOCOMPOSITE AS A NOVEL HIGH-TEMPERATURE CO₂ ADSORBENT

ZHIBING AN

A75 BEIJING INSTITUTE OF TECHNOLOGY

MICROSTRUCTURE AND TEXTURE EVOLUTION OF ULTRA-THIN TINI HOT-ROLLED
SHEETS STUDIED BY AUTOMATED EBSD

DAWEI PANG

BEIJING INSTITUTE OF TECHNOLOGY

SCHEDULE OF SESSIONS

B. MASS SPECTROMETRY

CHAIR: Prof. Huwei LIU

ORAL LECTURES

Time:	Oct. 9, 2017 AM (Monday)		
Location:	Room 309B, China National Convention Center, Beijing		
Topic:	BioMS-----Proteomics		
Chair:	Prof. Zhongping YAO and Prof. Joseph A LOO		
8:00-8:25	B2	STRUCTURAL CHARACTERIZATION OF PROTEIN COMPLEXES BY NATIVE TOP-DOWN MASS SPECTROMETRY	
		Joseph A LOO (Keynote)	
		University of California, Los Angeles	
8:25-8:50	B3	SITE-SPECIFIC IDENTIFICATION AND CHARACTERIZATION OF PROTEIN GLYCOSYLATION BY MASS SPECTROMETRY	
		Xiaohong QIAN (Keynote)	
		National Center for Protein Science, Beijing Proteome Research Center, Beijing Institute of Radiation Medicine	
8:50-9:15	B4	PROBING INTERACTIONS OF β -LACTAMASES AND β -LACTAMASE INHIBITORY PROTEIN USING HYDROGEN/DEUTERIUM EXCHANGE MASS SPECTROMETRY	
		Zhongping YAO (Keynote)	
		The Hong Kong Polytechnic University	
9:15-9:40	B5	AN INTEGRATED APPROACH FOR RAPID GLYCAN STRUCTURAL CHARACTERIZATION	
		Cheng LIN (Keynote)	
		Boston University	
9:40-9:55	B27	PARALLEL ACCUMULATION - SERIAL FRAGMENTATION (PASEF) ON A NOVEL TRAPPED ION MOBILITY SPECTROMETRY (TIMS) - QTOF INSTRUMENT	
		Kefei WANG	
		Bruker Daltonics	
9:55-10:10	B28	LARGE-SCALE IDENTIFICATION AND VISUALIZATION OF N-GLYCANS WITH PRIMARY STRUCTURES USING ISOTOPIC ENVELOPE FINGERPRINTING AND GLYSEEKER	
		Zhixin TIAN	



		Tongji University
10:10–10:25		Coffee Break
Topic:		Instrumentation I
Chair:		Prof. Zheng OUYANG and Prof. Wei HANG
10:25–10:50	B6	DEVELOPMENT OF NON-RESONANCE LASER POSTIONIZATION MASS SPECTROMETRY Wei HANG (Keynote) Xiamen University
10:50–11:15	B7	MASS SPECTROMETRY AND IMAGING OF PARTICLES Zongxiu NIE (Keynote) Institute of Chemistry, Chinese Academy of Sciences
11:15–11:40	B8	TRIPLE-QUAD FUNCTIONS OF MINIATURE MS INSTRUMENTS FOR DIRECT QUANTITATION OF BIOLOGICAL SAMPLES Zheng OUYANG (Keynote) Tsinghua University
11:40–11:55	B29	AGILENT’ S REVOLUTIONARY TRIPLE QUADRUPOLE LC/MS-ULTIVO UNBELIEVABLY POWERFUL, REMARKABLY SMALL Qing YU Agilent Technologies
12:10–13:30	B30	ELECTRO-KINETIC ASSISTED ELECTROSPRAY IONIZATION FOR ENHANCED COMPLEX SAMPLE ANALYSIS Wei XU Beijing Institute of Technology
		Lunch Time/Poster Session
Time:		Oct. 9, 2017 PM (Monday)
Location:		Room 309B, China National Convention Center, Beijing
Topic:		BioMS----Metabolomics
Chair:		Prof. Pao-Chi LIAO and Prof. Robert Samuel HOUK
13:30–13:55	B9	MASS SPECTROMETRY FROM ATOMS TO METABOLITES Robert Samuel Houk (Keynote) Iowa State University
13:55–14:20	B10	MS-BASED ANALYTICAL METHOD DEVELOPMENT OF IN VIVO AND IN SITU METABOLOMICS Zeper ABLIZ (Keynote) Minzu University of China, Chinese Academy of Medical Sciences and Peking Union Medical College

- 14:20–14:45 B11 TOXICANT EXPOSURE MARKER DISCOVERY USING DIFFERENT MASS SPECTROMETRY-BASED METABOLOMICS DATA PROCESSING METHODS
Pao-Chi LIAO (Keynote)
National Cheng Kung University
- 14:45–15:00 B31 METDNA: RECURSIVE METABOLITE ANNOTATION AND DYSREGULATED NETWORK ANALYSIS FOR UNTARGETED METABOLOMICS
Zhengjiang ZHU
Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences
- 15:00–15:15 B32 DISCOVERY AND CHARACTERIZATION OF NOVEL SIDEROPHORE ENCODED BY HIGH PATHOGENICITY ISLAND IN UROPATHOGENIC ESCHERICHIA COLI
Haitao LU
Shanghai Jiao Tong University
- 15:15–15:30 B33 RAPID EVAPORATIVE IONIZATION MASS SPECTROMETRY (REIMS) FOR THE NEAR REAL-TIME IDENTIFICATION OF LAMB MEAT FROM DIFFERENT REARING METHODS
Wei RAO
Waters Corporation
- 15:30–15:45 B34 HIGH-THROUGHPUT IDENTIFICATION OF GLYCAN BRANCHING PATTERNS USING MULTISTAGE MASS SPECTROMETRY
Yan LI
Institute of Biophysics, Chinese Academy of Sciences
- 15:45–16:00 **Coffee Break**
Topic: Fundamental I
Chair: Prof. Yuanjiang PAN and Prof. Zhongxing CHEN
- 16:00–16:25 B12 DECIPHER THE INTERACTION BETWEEN CLIMATE CHANGES AND SOLID EARTH AT GLACIAL-INTERGLACIAL SCALES USING MASS SPECTROMETRY TECHNOLOGIES: A REVIEW OF CASE STUDY OF JUAN DE FUCA AND MID-ATLANTIC OCEAN RIDGES
Zhongxing CHEN (Keynote)
Harvard University
- 16:25–16:50 B13 NANOMATERIALS-ASSISTED LASER DESORPTION/ IONIZATION-TOFMS FOR ANALYSIS OF SMALL MOLECULES
Zongwei CAI (Keynote)



- Hong Kong Baptist University
- 16:50–17:15 B14 PROTON AND BENZYL CATION TRANSFER IN MASS SPECTROMETRY
Yuanjiang PAN (Keynote)
Zhejiang University
- 17:15–17:30 B35 HELP REALIZE LIFE'S POTENTIAL: THE TOTAL MS SOLUTION BY
SCIEX IN PRECISION MEDICINE AND ONE HEALTH
Jianlan YU
SCIEX China
- 17:30–17:45 B36 STUDY ON THE INTERACTIONS OF BROMINATED FLAME RETARDANTS
WITH TRANSTHYRETIN BY ELECTROSPRAY IONIZATION MASS
SPECTROMETRY
Xian WANG
South-Central University for Nationalities
- Time: Oct. 11, 2017 AM (Wednesday)
- Location: Room 309B, China National Convention Center, Beijing
- Topic: BioMS----Cell Analysis
- Chair: Prof. Mitsuo TAKAYAMA and Prof. Xinrong ZHANG
- 8:00–8:25 B15 SINGLE CELLS ANALYSIS WITH PICO-ESI-MS
Xinrong ZHANG (Keynote)
Tsinghua University
- 8:25–8:50 B16 NANOLITER-SCALE DROPLET SANDWICH CHIP-BASED SINGLE CELL
PROTEOMICS ANALYSIS
Catherine WONG (Keynote)
Peking University
- 8:50–9:15 B17 NOVEL APPROACH FOR THE ESTIMATION OF FLEXIBILITY AND
RIGIDITY OF AMINO ACID RESIDUES OF INTACT PROTEINS BY USING
MATRIX-ASSISTED LASER DESORPTION/ IONIZATION IN-SOURCE
DECAY MASS SPECTROMETRY
Mitsuo TAKAYAMA (Keynote)
Yokohama City University
- 9:15–9:40 B18 TEMPORAL REGULATION OF A SALMONELLA TYPHIMURIUM
VIRULENCE FACTOR BY THE TRANSCRIPTIONAL REGULATOR YDCR
Xiaoyun LIU (Keynote)
Peking University
- 9:40–9:55 B37 CONFIDENT ANALYSIS, QUANTITATING OUR FUTURE TOGETHER
Kai TANG

- Thermo Fisher Scientific
- 9:55–10:10 B38 CHALLENGES FOR MASS SPECTROMETRY IN LARGE SCALE ANALYSIS OF SINGLE LIVE CELLS
Guangming HUANG
University of Science and Technology of China
- 10:10–10:25 Coffee Break
- Topic: Organic MS
- Chair: Prof. Minghui ZHENG and Prof. Yi CHEN
- 10:25–10:50 B19 LC-MS/MS OF TRACE BIOACTIVE CHEMICALS
Yi CHEN (Keynote)
Institute of Chemistry, Chinese Academy of Sciences
- 10:50–11:15 B20 PHOTO-THERMAL STABILITY SEQUENCING BY MICROWAVE PLASMA TORCH MASS SPECTROMETRY
Huanwen CHEN (Keynote)
East China University of Technology
- 11:15–11:40 B21 ROFILING AND QUANTIFYING SHORT- AND MEDIUM-CHAIN CHLORINATED PARAFFINS IN ENVIRONMENTAL SAMPLES USING GC × GC-ECNI-HRTOF-MS
Minghui ZHENG (Keynote)
Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
- 11:40–11:55 B39 INTRODUCTION OF NEW INSTRUMENT, DIRECT PROBE IONIZATION MASS SPECTROMETER DPiMS-2020
Koretsugu OGATA
Shimadzu Corporation
- 11:55–12:10 B40 DIRECT ANALYSIS AND DISCRIMINATION OF THIOPHENIC AND SULFIDIC COMPOUNDS IN CRUDE OILS
Yehua HAN
China University of Petroleum
- 12:10–13:30 Lunch time/Poster Session
- Time: Oct. 11, 2017 PM (Wednesday)
- Location: Room 309B, China National Convention Center, Beijing
- Topic: Fundamental II
- Chair: Prof. HanBin OH and Prof. Stephen BLANKSBY
- 13:30–13:55 B22 CURRENT FADS IN MASS SPECTROMETRY FOR CANCER RESEARCH: TRACKING DESATURASE ACTIVITY BY OZONE-INDUCED



DISSOCIATION

Stephen BLANKSBY (Keynote)

Queensland University of Technology

- 13:55–14:20 B23 DETERMINATION OF URANIUM ISOTOPES IN PARTICLES EXTRACTED FROM SWIPE SAMPLES BY LG-SIMS

Dongfa GUO (Keynote)

Beijing Research Institute of Uranium Geology

- 14:20–14:45 B24 A NEW SCREENING SOFTWARE PLATFORM FOR ERECTILE DYSFUNCTION DRUGS AND ITS ANALOGUES USING LC-MS/MS

HanBin OH (Keynote)

Sogang University

- 14:45–15:00 B41 ON THE PROBLEM OF ASYMMETRIC CHARGE STATE DISTRIBUTION IN NATIVE MASS SPECTROMETRY OF NONCOVALENT PROTEIN-LIGAND COMPLEXES

Konstantin CHINGIN

East China University of Technology

- 15:00–15:15 B42 SCREENING FOR ANTI-PROLIFERATIVE AND ANTI-INFLAMMATORY COMPONENTS FROM RHAMNUS DAVURICA PALL USING BIO-AFFINITY ULTRAFILTRATION MS WITH MULTIPLE DRUG TARGETS

Mingquan GUO

Wuhan Botanical Garden, Chinese Academy of Sciences

- 15:15–15:30 B43 THE MS BEHAVIORS OF ORGANOIMIDO DERIVATIVES OF LINDQVIST POLYOXOMETALATE

Jie CAO

Beijing Institute of Technology

- 15:30–15:45 B44 CHARACTERIZATION AND THERMOSTABILITY STUDY OF THERAPEUTIC PROTEINS USING HYBRID MASS SPECTROMETRY-BASED TECHNIQUES

Guanbo WANG

Nanjing Normal University

- 15:45–16:00 Coffee Break

Topic: Instrumentation II

Chair: Prof. Huwei LIU and Prof. Jinming LIN

- 16:00–16:25 B25 Cell analysis and lipid profiling by combining drop-on-demand inkjet cell printing and probe electrospray ionization mass spectrometry

Jinming LIN (Keynote)

		Tsinghua University
16:25-16:50	B26	AN INTEGRATED AMBIENT IONIZATION SOURCE PLATFORM Yu BAI (Keynote)
		Peking University
16:50-17:05	B45	FAD ROLES IN GLUCOSE CATALYTIC OXIDATION INVESTIGATED BY SOFT IONIZATION MASS SPECTROMETRY Na NA
		Beijing Normal University
17:05-17:20	B46	CHIRAL DIFFERENTIATION BASED ON INFRARED PHOTODISSOCIATION SPECTROSCOPY – MASS SPECTROMETRY Xianglei KONG
		Nankai University
17:20-17:40		Poster Awards/Closing Remarks
Chair:		Prof. Huwei LIU

Poster Session

Oct. 09 (Monday), 12:40–13:30 and Oct. 11 (Wednesday), 12:40–13:30

B47 MEMBRANE-BASED MASS SPECTROMETRY AND ITS APPLICATIONS

Tianyi LI^{1,3}, Liusheng FAN², Zhongqiu TENG^{1,3}, Ji PU^{1,3}, Mei ZHANG^{1,3*}, Wei XU^{2*}

1 State Key Laboratory for Infectious Disease Prevention and Control, National Institute for Communicable Disease Control and Prevention, Chinese Center for Disease Control and Prevention, Beijing 102206, China; ² School of Life Science, Beijing Institute of Technology, Beijing 100081, China; ³ Collaborative Innovation Center for Diagnosis and Treatment of Infectious Diseases, Hangzhou 310003, China.

B48 STABILITY OF ARSENOLIPIDS IN THREE COMMERCIAL MARINE FISH SPECIES DURING COOKING

Chan Xiong¹, Md Hasan Al Amin², Georg Raber¹, Jun Yoshinaga³ and Kevin A. Francesconi¹

1 Institute of Chemistry, NAWI Graz, University of Graz, Austria.

2 University of Tokyo, Japan

3 Toyo University, Japan

B49 DETERMINATION OF ORGANOPHOSPHATE ESTERS IN SEDIMENT SAMPLES USING GAS CHROMATOGRAPH TRIPLE QUADRUPOLE MASS SPECTROMETER

Xiaoming BAO¹, Mengqin CHEN², Jingyan JIANG², Jun FUN³, Taohong HUANG³

1 Shimadzu (China) Co., Ltd, Chengdu 610015, China

2 College of Architecture and Environment, Sichuan University, Chengdu, China

3 Shimadzu (China) Co., Ltd, Shanghai 200052, China

B50 DETERMINATION OF IODINE ELEMENT IN URINE SAMPLE BY INDUCTIVELY COUPLED PLASMA- MASS SPECTROMETRY

Rongyin GAI¹, Li ZENG², Xiaoling MA¹, Youbao SUN¹, Taohong HUANG¹

1. Shimadzu (China) CO.LTD, shanghai

2. Shimadzu (China) CO.LTD, Sichuan

B51 DETERMINATION OF ELEMENTAL IMPURITIES IN ORAL DRUG USING ICPMS-2030

Xiaoling MA, Rongyin GAI, Youbao SUN, Taohong HUNG

Shimadzu Global COE (Center of Excellence) for Application & Technical Development, China

B52 DETERMINATION OF MULTI-ELEMENTS IN URINE BY INDUCTIVELY COUPLED PLASMA-MASS SPECTROMETRY

Youbao SUN*, Rongyin GAI, Xiaoling MA, Taohong HUANG

Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Shanghai branch,

Huaxin C801 building, No. 180, Yizhou Road, Shanghai, P.R. China

B53 APPLICATION OF TG-MS AND TG-IR FOR DETERMINATION OF CHEMICAL STABILITY OF LUBRICATING OIL

Yun Bai, Xinqi Chen¹, Guanghui Hu¹, Mei Zhang¹, Weili Liu*

Beijing Key Laboratory of Organic Materials Testing Technology & Quality Evaluation, Beijing Centre for Physical and Chemical Analysis, Beijing 100089, China;

B54 RAPID DETERMINATION OF TRACE ELEMENTS IN SERUM BY ICPMS-2030 WITH COLLISION CELL

SONG Xiaohong¹, LI Yueqi¹, SUN Youbao², HUANG Taohong²

1. Shimadzu (China) Co., Ltd., Beijing Analytical Application Center, Beijing 100020;

2. Shimadzu (China) Co., Ltd., Shanghai Analytical Application Center, Shanghai 200052

B55 SENSITIVITY TEST OF DEXAMETHASONE BY USING UHPLC-MS/MS

Jianli CHEN¹, Dan LUO¹, Hongyuan HAO², Jinting YAO², Youbao SUN², Taohong HUANG²

1 Shimadzu (China) Co., Ltd, Wuhan 430000, China

2 Shimadzu (China) Co., Ltd, Shanghai 200052, China

B56 ANALYSIS OF GRAIN COMPOSITION IN MAINSTREAM SMOKE BY GC × GC-Qms

Xi ZHANG, Yueqi LI, Jun FAN, Taohong HUANG

Analytical Instruments Dept. Analytical Application Center Shimadzu (China) Co., LTD. 6F, Life Tower, No. 16 Chaoyang Men Wai Street Chaoyang District 100020, Beijing, China

B57 A MULTIDIMENSIONAL MATCHING APPROACH FROM CHEMICAL GROUP TO METABOLIC GROUP COMBINED WITH VITRO-TO-VIVO LONGITUDINAL ANALYSIS USING LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Guifang FENG^{1,2}, Shu LIU¹, Fengrui SONG¹, Zhiqiang LIU^{1,*}

1 National Center of Mass Spectrometry in Changchun & Jilin Province Key Laboratory of Chinese Medicine Chemistry and Mass Spectrometry & Chemical Biology Laboratory, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, P. R. China;

2 University of Science and Technology of China, Hefei 230026, China.

B58 ANALYSIS OF 25-HYDROXYVITAMIN D2/D3 IN SERUM BY CLEANERT SLE PLATES COUPLE WITH LC-MS/MS

Warren Chen*, Wan Wang, Suzi Qin, Qun Wang and Lei Yin

Bonna-Agela Technologies, No. 179, Southern Street, West TEDA, Tianjin, 300462, China

E-mail: xiaohua.chen@agela.com

B59 MALDI MASS SPECTROMETRY IMAGING AS A NOVEL MOLECULAR MICROSCOPY FOR IN SITU DETECTION OF HIGH MOLECULAR WEIGHT PROTEINS

Liang QIN¹, Huixin HE¹, Yaqin LIU¹, Hang HAN¹, Wanqian FENG¹, Yuting LAN¹,

Xin LIU¹, Juan ZHANG¹, Yanfang MA¹, Tianze LI¹, Xiaodong WANG*¹

1 Centre for Imaging & Systems Biology, College of Life and Environmental Sciences, Minzu University of China, 27 Zhongguancun South Avenue, Beijing, China

B60 DETERMINATION OF BLOOD PHOSPHATIDYLETHANOL BY LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Yueming TANG¹, Siming WANG², Ruiyue YANG², Hongxia LI², Jun DONG*^{1,2}

1 Peking University Fifth School of Clinical Medicine, Beijing Hospital, Beijing 100730, China;

2 The MOH Key Laboratory of Geriatrics, Beijing Hospital, National Center of Gerontology, Beijing 100730, China

B61 A LC-MS/MS BASED APPROACH FOR METABOLIC PROFILING OF ARTEMISIA RUPERTIS L.

Lulu CHEN, Zhonghua WANG, Bingshu HE, Zeper ABLIZ*

Center for Imaging & Systems Biology, College of Life and Environmental Sciences, Minzu University of China, Beijing 100081, China

B62 THE EFFECT OF CATECHINS ON THE CONFORMATION AND AGGREGATION OF SOD1 BY ION MOBILITY MASS SPECTROMETRY COMBINED WITH OPTICAL SPECTROSCOPY

Bing ZHAO^{1,2}, Xiaoyu ZHUANG¹, Shu LIU¹, Junpeng XING¹, Zhiqiang LIU¹, Fengrui SONG^{1*}

1 National Center of Mass Spectrometry in Changchun & Jilin Province Key Laboratory of Chinese Medicine Chemistry and Mass Spectrometry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China;

2 University of Science and Technology of China, Hefei, 230029, China

B63 STUDIES ON INTESTINAL TRANSPORT OF PORIA COCOS COMPATIBILITY WITH PANAX GINSENG VIA CACO-2 CELL MONOLAYER MODEL COUPLED WITH SFC-MS METHOD

Yan Zheng^{1,2}, Shu LIU¹, Fengrui SONG¹, Zhiqiang LIU^{1*}

1 National Center of Mass Spectrometry in Changchun & Jilin Province Key Laboratory of Chinese Medicine Chemistry and Mass Spectrometry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China;

2 University of Chinese Academy of Sciences, Beijing, 100049, China

B64 RAPID AND PH-INDEPENDENT DEGRADATION OF N-NITROSAMINES REVEALED BY ELECTROSPRAY IONIZATION MASS SPECTROMETRY

Meihui ZHUANG¹, Hongbao LI², Gongyu LI¹, Jun JIANG², and Guangming HUANG*¹

1 Department of Chemistry, School of Chemistry and Materials Science, University of Science and Technology of China, Hefei, Anhui 230026, China

2 Department of Chemical Physics, School of Chemistry and Materials Science, University of

Science and Technology of China, Hefei, Anhui 230026, China

B65 RELATIONSHIPS BETWEEN GERMINATION INHIBITION AND CHEMICAL COMPOSITION OF EUCALYPTUS ESSENTIAL OILS BY GC-MS METHOD COUPLED WITH PRINCIPAL COMPONENT ANALYSIS

Aoxin LI¹, Hanwen WU², Yun WEI^{*1}

1 State Key Laboratory of Chemical Resource Engineering, Beijing University Of Chemical Technology, 15 3rd North East Road, Chaoyang District, Beijing 100029, China. Tel & Fax: 0086 10 64442928. E-mail: weiyun@mail.buct.edu.cn

2 Graham Centre for Agricultural Innovation (NSW Department of Primary Industries and Charles Sturt University), Wagga Agricultural Institute, NSW DPI, Private Bag, Wagga Wagga, NSW 2650, Australia.

B66 INTERNAL EXTRACTIVE ELECTROSPRAY IONIZATION MASS SPECTROMETRY FOR QUANTITATIVE DETERMINATION OF FLUOROQUINOLONES CAPTURED BY MAGNETIC MOLECULARLY IMPRINTED POLYMERS FROM RAW MILK

Hua ZHANG¹, Wei KOU¹, Keke HUANG¹, and Huanwen CHEN^{*1,2}

1State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry, Jilin University, Changchun 130012, P. R. China

2Jiangxi Key Laboratory for Mass Spectrometry and Instrumentation, East China University of Technology, Nanchang 330013, P. R. China

B67 MICRO-ELECTROPHORESIS FOR IN-SITU DETACHMENT OF NONSPECIFIC BINDING
Yuting Chen¹, Gongyu Li¹, Yang Pan² and Guangming Huang^{*1}

1 Department of Chemistry, School of Chemistry and Materials Science, University of Science and Technology of China, Hefei, Anhui 230026, P. R. China

2 National Synchrotron Radiation Laboratory, University of Science and Technology of China, Hefei, Anhui 230029, P. R. China

B68 AMMONIUM ACETATE ENHANCED DESORPTION ELECTROSPRAY IONIZATION MASS SPECTROMETRY IMAGING WITH ON-TISSUE CHEMICAL DERIVATIZATION

Xiaoqun WANG¹, Yiwen HOU², Wei XIONG² and Guangming HUANG^{*1}

1Department of Chemistry, School of Chemistry and Materials Science, University of Science and Technology of China, Hefei, Anhui 230026, China

2 School of Life Sciences, University of Science and Technology of China, Hefei 230026, China

B69 ANALYSIS OF SMALL MOLECULES BY MALDI-TOF-MS WITH ZEOLITE SUPPORTED CHCA AS COMPOSITE MATRIX

Peng LI, Mengrui YANG, Min WANG *, Jian ZHOU, Fang LIU, Liyuan ZHANG

Institute of Quality Standard and Testing Technology for Agro-Products, Key Laboratory of



- Agro-Product Quality and Safety, Chinese Academy of Agriculture, Beijing 100081, China
- B70 **NANOCOATING CELLULOSE PAPER BASED MICROEXTRACTION COMBINED WITH NANOSPRAY MASS SPECTROMETRY FOR RAPID AND FACILE QUANTITATION OF RIBONUCLEOSIDES IN HUMAN URINE**
Lingzhong Wan^a, Haijing Zhu^a, and Guangming Huang^{a*}
a Department of Chemistry, School of Chemistry and Materials Science, University of Science and Technology of China (USTC), Hefei 230026, China
- B71 **DISCOVERY OF POTENTIAL BIOMARKERS FOR MULTIDRUG RESISTANCE IN BREAST CANCER BY CELLULAR LIPIDOMICS AND METABOLOMICS ANALYSIS**
Li Zong^{1,2}, Guorong Cheng¹, Shu Liu^{1*}, Zhiqiang Liu¹, Fengrui Song^{1,*}
1 National Center of Mass Spectrometry in Changchun, Jilin Province Key Laboratory of Chinese Medicine Chemistry and Mass Spectrometry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China
2 University of Chinese Academy of Sciences, Beijing 100039, China
- B72 **FACILE SYNTHESIS OF CYSTEINE-FUNCTIONALIZED METAL-ORGANIC FRAMEWORK AND ITS APPLICATION IN N-LINKED GLYCOPEPTIDE ENRICHMENT**
Wen Ma, Linnan Xu, Xianjiang Li, Yu Bai* and Huwei Liu
Beijing National Laboratory for Molecular Sciences, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China.
- B73 **MONOLITHIC CAPILLARY MICROEXTRACTION ONLINE COUPLED WITH INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY FOR THE ANALYSIS OF URANYL ION**
Shiyao SONG, Yu BAI* and Huwei LIU*
Beijing National Laboratory for Molecular Sciences, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, P. R. China.
- B74 **GOLD NANOBOWL ARRAY FOR QUANTITATIVE ANALYSIS OF OLIGONUCLEOTIDE THROUGH CHIP-MATRIX ASSISTED LASER DESORPTION IONIZATION MASS SPECTROMETRY**
Weiwei Li, Mashooq Khan, Sifeng Mao, Dingkun Zhang, Jin-Ming Lin*
Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, P. R. China
- B75 **A NOVEL CONFIRMATION METHOD BASED ON FRAGMENTATION TREES FOR STRUCTURE ELUCIDATION OF ACETAMIPRID PESTICIDE IN VEGETABLES, FRUITS, AND TEAS USING UPLC-IT-MSN**
Zhe Meng*, Yanfen Zhou, Zelan Wang,
College of Chemistry and Chemical Engineering, Ningxia University, Yinchuan 750021, China

B76 REAL-TIME ANALYSIS OF FLAVORS USING DART AND THE ACQUITY QDA MASS DETECTOR

Kari Organtini¹, Naren Meruva¹, and Gareth Cleland¹

1 Waters Corporation, Milford, MA, USA

B77 TARGETED METABOLOMICS OF TRYPTOPHAN PATHWAY METABOLITES IN STOOL OF MIGRAINE PATIENTS

Sensen SHEN¹, Shiyao SONG¹, Wenjing Tang², Yu BAI^{*1}, Shengyuan Yu² and Huwei LIU¹

1.Beijing National Laboratory for Molecular Sciences, Key Laboratory of Bioorganic Chemistry and Molecular Engineering of Ministry of Education, Institute of Analytical Chemistry, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, P. R. China.

2. Chinese PLA General Hospital, 28 Fuxing Road, Beijing, P. R. China.

B78 DETECTION OF PALLADIUM-CARBINE COMPLEX USING INTEGRATED AMBIENT IONIZATION PLATFORM

Wanpeng AI, Honggang NIE, Xiaoyun LIU, Yu BAI* and Huwei LIU

Beijing National Laboratory for Molecular Sciences, Key Laboratory of Bioorganic Chemistry and Molecular Engineering of Ministry of Education, Institute of Analytical Chemistry, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, P. R. China

B79 MULTISTEP SIGNAL AMPLIFICATION MASS SPECTROMETRY METHOD FOR ATTOMOLAR DETECTION OF GENES

Shuting XU, Yu BAI* and Huwei LIU

Institute of Analytical Chemistry, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, P. R. China.

B80 AN ULTRA PERFORMANCE LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETRY METHOD FOR THE THERAPEUTIC DRUG MONITORING OF THREE ANTI-INFECTIVE DRUGS IN PLASMA OF LUNG TRANSPLANT RECIPIENTS

Xiao-xue WANG¹, Peng-mei LI¹, Xiang-lin ZHANG^{*1}

1 Department of Pharmacy, China-Japan Friendship Hospital, Beijing, 100029, China

B81 FACILE AND SELECTIVE ENRICHMENT OF INTACT SIALOGLYCOPEPTIDES USING GRAPHITIC CARBON NITRIDE

Mo ZHANG, Yujie LIU, Dan ZHANG, Tianjing CHEN and Zhili LI*

Department of Biophysics and Structural Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences & School of Basic Medicine, Peking Union Medical College, 5 Dongdan San Tiao, Beijing, P.R. China Medicine,

B82 DEVELOPMENT OF ON-LINE PROTEOLYSIS AND GLYCOPEPTIDE ENRICHMENT METHOD BY DUAL MICRO-SCALE POROUS POLYMER MEMBRANE ENZYME REACTOR (MPPMER) COUPLED WITH NLC-ESI-MS/MS

Joon Seon Yang¹, Juan Qiao², Liping Zhao², Li Qi^{2*} and Myeong Hee Moon^{1*}

1 Department of Chemistry, Yonsei University, 50 Yonsei-ro, Seoul, 03722, Korea

2 Beijing National Laboratory for Molecular Sciences; Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, No. 2 Zhongguancun Beiyijie, Beijing, 100190, China

B83 DETERMINATION OF THREE MAJOR EGG ALLERGEN PROTEINS IN BAKED FOOD BY ISOTOPE DILUTION MASS SPECTROMETRY

Kailun Qi^{1,2}, Yi YANG², Xiaojing DING^{1,2} and Bing SHAO^{*1,2}

1 School of Public Health, Capital Medical University, Beijing 100069, China

2 Beijing Key Laboratory of Diagnostic and Traceability Technologies for Food Poisoning, Beijing Center for Disease Prevention and Control, Beijing 100013, China

B84 SCREENING OF PESTICIDES AND OTHER CONTAMINANTS IN FOOD USING A NOVEL HIGH RESOLUTION GC/Q-TOF

Kai Chen and Joan Stevens

1 Agilent Technologies, Inc., 5301 Stevens Creek Boulevard, Santa Clara, CA 95051, USA

2 Agilent Technologies, Wilmington, DE, USA

B85 DIRECT BIOLOGICAL ANALYSIS USING MINIATURE MASS SPECTROMETRY WITH ATMOSPHERIC PRESSURE MATRIX ASSISTED LASER DESORPTION IONIZATION

Yanbing ZHAI, Siyu LIU, Wei XU*

School of Life Science, Beijing Institute of Technology, Beijing 100081, China

B86 PAPAN AS A REACTIVE MATRIX FOR SENSITIVE AND SELECTIVE MALDI-MS ANALYSIS OF OLIGOSACCHARIDES

Ling Ling¹, Sheng Wang¹, Liming Guo¹ and Xinhua Guo^{*1}

1 College of Chemistry, Jilin University, Changchun 130012, China

B87 STUDIES OF THE METABOLISM AND DISTRIBUTION OF METHYLONE IN RATS BY LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY

Xueguo CHEN and Dan ZHAO

Department of Forensic Chemistry, Criminal Investigation Police University of China, Shenyang Liaoning 110854

B88 Laser Desorption / Ionization Using Micro-Structured Anti-Reflection Metal Surfaces for Mass Spectrometry Analysis

Jing Yang¹, Xiaoxiao Ma¹, Zishuai Li¹, Jia Jia², Peixun Fan³, Minlin Zhong³ and Zheng Ouyang^{1,4*}

1 State Key Laboratory of Precision Measurement Technology and Instruments, Department of Precision Instrument, Tsinghua University, Beijing, 100084, China

2 Department of Chemistry, Tsinghua University, Beijing, 100084, China

3School of Materials Science and Engineering, Tsinghua University, Beijing, 100084, China

4Weldon School of Biomedical Engineering, Purdue University, West Lafayette, IN 47906, USA

B89 COAXIAL SURFACE INDUCED DISSOCIATION OF MASS-SELECTED IONS

Xinwei Liu¹, Xiaoyu Zhou¹, Zheng Ouyang^{1,2*}

1State Key Laboratory of Precision Measurement Technology and Instruments, Department of Precision Instrument, Tsinghua University, Beijing 100084, China

2Weldon School of Biomedical Engineering and Department of Chemistry, Purdue University, West Lafayette, IN 47906, USA

B90 CHEMICAL IMAGING OF SINGLE CELLS BY GRAPHENE OXIDE ENHANCED TOF-SIMS

Lesi CAI, Meng-Chan XIA, Zhanping LI, Sichun ZHANG and Xinrong ZHANG*

1 Department of Chemistry, Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Tsinghua University, Beijing, 100084, People's Republic of China

B91 METABOLOMICS OF SINGLE GLIOBLASTOMA CELLS WITH MS2 SPECTRA

Xiaochao Zhang¹, Qingce Zang², Xingyu PAN¹, Sichun Zhang¹, Ruiping Zhang², Zeper Abliz² and Xinrong Zhang*¹

1Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, China

2State Key Laboratory of Bioactive Substance and Function of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing 100050, China

B92 SAFEGUARD OUR FOODS WITH TECHNOLOGICAL INNOVATIONS

Dan-Hui Dorothy Yang¹, Theresa Sosienski¹, Phil Wylie² and Kai Chen¹

Agilent Technologies, Inc., Santa Clara, CA

Agilent Technologies, Inc., Wilmington, DE

B93 THE EFFECT OF TERMINAL ADENINE BASE ON THE FORMATION OF G-QUADRUPLEX IN ACIDIC SOLUTION

Xiaoxuan Xiang, Yuting Yan, Yang Li and Xinhua Guo*

College of Chemistry, Jilin University, Changchun 130012, China

Jilin University

B94 MASSIMAGERTM: A NEW SOFTWARE FOR INTERACTIVE AND IN-DEPTH ANALYSIS OF MASS SPECTROMETRY IMAGING DATA

Luojiao Huang¹, Runtao Tian², Tiegang Li¹, Chenglong Sun¹, Yiwei Lv¹, Zhigang Luo¹, Xin Li¹, Jiuming He^{*1} and Zeper Abliz^{*1,3}

1State Key Laboratory of Bioactive Substance and Function of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College,

Beijing 100050, China

2Chemmind Technologies Co., Ltd., Beijing 100085, China

3Center for Imaging and Systems Biology, Minzu University of China, Beijing 100081, China

B95 IN VITRO HUMAN METABOLISM OF THE MYCOTOXINS ALTERNARIOL, ALTERNARIOL METHYL ETHER, ALTENUENE AND TENTOXIN

HU Jia¹, ZHANG Jing^{1,2}, SHAO Bing*^{1,2}

1(School of Public Health, Capital Medical University, Beijing 100069, China)

2(Beijing Key Laboratory of Diagnostic and Traceability Technologies for Food poisoning, Beijing Center for Disease Prevention and Control, Beijing 100013, China)

B96 COMBINATORIAL IMMUNOASSAY FOR MULTIPLE BIOMARKERS BY STABLE ISOTOPE TAGGING STRATEGY

Gongwei SUN, Yuqing ZHANG, Zhi XING, Sichun ZHANG and Xinrong ZHANG*

Beijing Key Laboratory for Microanalytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, China.

B97 MOLECULAR PROFILING OF INTACT TISSUE BY USING HIGH SENSITIVE AND WIDE OVERAGE AMBIENT MASS SPECTROMETRY IMAGING METHOD

Chenglong SUN¹, Jiuming HE¹, Tiegang LI¹, Luoqiao HUANG¹, Xiaowei SONG¹, Xin LI¹, Zhigang LUO¹ and Zeper ABLIZE*^{1,2}

1State Key Laboratory of Bioactive Substance and Function of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing 100050, China

2Center for Imaging and Systems Biology, Minzu University of China, Beijing 100081, China

B98 CHARACTERIZATION OF ORGANIC AEROSOL IN BEIJING BY LASER DESORPTION IONIZATION COUPLED WITH FOURIER TRANSFORM ION CYCLOTRON RESONANCE MASS SPECTROMETRY

Jinjuan Xue,^{1,3}Yafeng Li,^{1,3}Xiaobo Xie,^{1,3}Caiqiao Xiong,¹Huihui Liu,¹Suming Chen,¹

Zongxiu Nie,^{*,1,3,4}Chuncheng Chen,^{2,3}and Jincai Zhao*^{*,2,3}

1Beijing National Laboratory for Molecular Sciences, Key Laboratory of Analytical Chemistry for Living Biosystems Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China

2 Beijing National Laboratory for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100190, China.

3 University of Chinese Academy of Sciences, Beijing 100049, China

4 National Center for Mass spectrometry in Beijing, Beijing 100190, China

B99 THE CAPTURE AND IDENTIFICATION OF TARGETED PROTEINS OF BAICALIN BY MASS SPECTROSCOPY

Qun Luo, Zuqing Liang, Yao Zhao, Fuyi Wang,*

Institut of Chemistry, Chinese Academy of Sciences, Beijing, China

B100 HANDHELD DIGITAL QUADRUPOLE ION TRAP PARTICLE MASS SPECTROMETER

Xi Huang^{1,2}, Jinlong Jiang⁴, Yiming Zhang¹, Linpeng Zhan^{1,2}, Caiqiao Xiong¹ and Zongxiu Nie^{*1,2,3}

1Beijing National Laboratory for Molecular Sciences, Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China

2University of Chinese Academy of Sciences, Beijing 100049, China

3National Center for Mass Spectrometry in Beijing, Beijing 100190, China.

4School of Electronic Engineering, Jiujiang University, Jiujiang 332005, China

B101 PROTEOMIC STUDIES ON CELLULAR RESPONSES TO DAMAGED DNA BY PLATINUM-BASED ANTICANCER COMPLEXES

Wenjuan ZENG^{1,2}, Yan XU², Qun LUO^{1,2}, Yao ZHAO¹, Fuyi WANG^{*1,2}

1Beijing National Laboratory for Molecular Sciences; National Centre for Mass Spectrometry in Beijing; CAS Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, Beijing, P. R. China

2University of Chinese Academy of Sciences, Beijing 100049, P. R. China

E-mail: fuyi.wang@iccas.ac.cn; zengwj2014@iccas.ac.cn

B102 Detecting Low-abundance Molecules at Single-cell Level by Repeated Ion Accumulation in Ion Trap Mass Spectrometer

Xingyu Si¹, Xingchuang Xiong², Sichun Zhang¹, Xiang Fang^{*2}, and Xinrong Zhang^{*1}

1Beijing Key Laboratory for Microanalytical Methods, Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, P. R. China

2National Institute of Metrology, Beijing 100029, P. R. China

B103 INVESTIGATION OF DISTURBANCE IN CELLULAR HOMEOSTASIS OF TRACE METAL ELEMENTS BY ANTICANCER METALLODRUGS

Feifei JIA¹, Yao ZHAO¹, Kui Wu¹, Qun LUO^{1,2}, Fuyi WANG^{1,2}

1Beijing National Laboratory for Molecular Sciences; National Centre for Mass Spectrometry in Beijing; CAS Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, Beijing, P. R. China

2University of Chinese Academy of Sciences, Beijing 100049, P. R. China

B104 QUANTITATION AND SEQUENCE ANALYSIS OF PEPTIDES BY MINIATURE MASS SPECTROMETRY

Spencer Chiang,^{1,2} Wenpeng Zhang,^{1,2} and Zheng Ouyang^{1,2,*}

1 Weldon School of Biomedical Engineering, Purdue University, West Lafayette, IN 47907, USA

2 State Key Laboratory of Precision Measurement Technology and Instruments, Department of Precision Instruments, Tsinghua University, Beijing 100084, P.R. China

B105 DETERMINATION OF FIVE BENZODIAZEPINES IN DRINKING WATER BY SOLID-PHASE EXTRACTION AND ULTRA PERFORMANCE LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETRY

ZHANG Xin¹, ZHANG Jing^{1,2}, SHAO Bing^{1,2}

1School of Public Health, Capital Medical University, Beijing 100069, China

2Beijing Key Laboratory of Diagnostic and Traceability Technologies for Food Poisoning, Beijing Center for Disease Prevention and Control, Beijing 100013, China

B106 GLOBAL REGULATORY ROLES OF THE CAMP/PKA PATHWAY REVEALED BY PHENOTYPIC, TRANSCRIPTOMIC AND PHOSPHOPROTEOMIC ANALYSES IN A NULL MUTANT OF THE PKA CATALYTIC SUBUNIT IN CANDIDA ALBICANS

Chengjun Cao,^{1,2†} Mei Wu,^{3†} Jian Bing,^{1†} Li Tao,¹ Xuefen Ding,^{1,2} Xiaoyun Liu^{3*} and Guanghua Huang^{1,2*}

1Institute of Microbiology, Chinese Academy of Sciences, Beijing 100101, China.

2University of Chinese Academy of Sciences, Beijing 100049, China.

3College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China.

B107 IDENTIFICATION OF A NOVEL SALMONELLA TYPE III EFFECTOR BY QUANTITATIVE SECRETOME PROFILING

Sen Cheng^{#1}, Lu Wang^{#2}, Qian Liu^{#3}, Linlu Qi¹, Kaiwen Yu¹, Zhen Wang¹, Mei Wu¹, Yanhua Liu¹, Jiaqi Fu¹, Mo Hu¹, Min Li³, Daoguo Zhou^{*2,4} and Xiaoyun Liu^{*1}

1Institute of Analytical Chemistry and Synthetic and Functional Biomolecules Center, College of Chemistry and Molecular Engineering, Peking University, Beijing, China 100871

2Department of Biological Sciences, Purdue University, West Lafayette, IN 47907, USA

3Department of Laboratory Medicine, Ren Ji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China 200127

4TEDA Institute of Biological Sciences and Biotechnology, Nankai University, Tianjin, China 300457

B108 TEMPORAL REGULATION OF A SALMONELLA TYPHIMURIUM VIRULENCE FACTOR BY THE TRANSCRIPTIONAL REGULATOR YDCR

Yanhua Liu^{1#}, Qian Liu^{2#}, Linlu Qi¹, Tao Ding¹, Zhen Wang¹, Jiaqi Fu¹, Mo Hu¹, Min Li², Jeongmin Song^{3*}, Xiaoyun Liu^{1*}

1Institute of Analytical Chemistry and Synthetic and Functional Biomolecules Center, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China;

2Department of Laboratory Medicine, Renji Hospital, School of Medicine, Shanghai Jiaotong University, Shanghai 200127, China;

3Department of Microbiology & Immunology, Cornell University, Ithaca, NY 14853-6401

B109 NON-TRADITIONAL STABLE ISOTOPE ANALYSIS FOR THE SOURCE TRACING OF ATMOSPHERIC PARTICULATES

Xuezhi YANG, Qian LIU*, Guibin JIANG

State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China

B110 PRECISE DETERMINATION OF IRON STABLE ISOTOPE RATIOS BY MULTICollector-INDUCTIVELY COUPLED PLASMA-MASS SPECTROMETRY IN BLOOD SAMPLES

Dawei LU, Qian LIU*, Guibin JIANG

State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China

B111 MEASUREMENT OF TITANIUM STABLE ISOTOPE RATIOS OF TITANIUM DIOXIDE NANOPARTICLES BY MULTI-COLLECTOR ICP-MS

Peng SU, Qian LIU*, Guibin JIANG

State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China

B112 GRAPHENE-ASSISTED LASER DESORPTION/IONIZATION MASS SPECTROMETRY FOR FAST AND HIGH-THROUGHPUT SCREENING OF SHORT-CHAIN CHLORINATED PARAFFINS IN COMPLEX SAMPLES

Xiu HUANG, Qian LIU*, Guibin JIANG

State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China



SCHEDULE OF SESSIONS

C. OPTICAL SPECTROSCOPY

CHAIRMAN: Prof. Dr. Jin-Ming Lin

ORAL LECTURES

Time: Oct. 9, 2017 AM(Monday)

Location: Room310, China National Convention Center, Beijing

Chairman: Jin-Ming Lin; Katsumi Uchiyama

8:30-08:55 K1 FABRICATION OF NANO / MICRO STRUCTURE BY MICRO CHEMICAL PEN

Prof. Katsumi Uchiyama

Tokyo Metropolitan University

08:55-09:20 K2 DEVELOPMENT OF FLUORESCENT BIOSENSORS FOR DETECTING ANTIBIOTIC RESIDUES AND SCREENING OF INHIBITORS OF SOME BACTERIAL ENZYMEs

Prof. Kwok-Yin Wong

The Hong Kong Polytechnic University

09:20-09:45 K3 NANOCRYSTALS MEET ELECTROSPUN NANOFIBERS: A NOVEL AND MEMBRANES-BASED SENSING PLATFORM

Prof. Chengzhi Huang

Southwest University

09:45-10:00 O1 TARGET-TRIGGERED DNAZYME MOTORS THAT TRAVERSE AUTONOMOUSLY ALONG GOLD NANOPARTICLES

Junbo Chen

Sichuan University

10:00-10:20 Coffee Break

Chairman: Maryam Aghaei; Xiandeng Hou

10:20-10:45 K4 ATOMIC SPECTROMETRY FOR ELEMENTAL DETECTION AND BIOANALYSIS

Prof. Xiandeng Hou

Sichuan University

10:45-11:10 K5 NANOSCALE CHARACTERIZATION OF REACTIONS AND STRUCTURES BY TIP-ENHANCED RAMAN SPECTROSCOPY

Prof. Bin Ren

Xiamen University

11:10-11:35 K6 PARTICLE TRANSPORT THROUGH AN INDUCTIVELY COUPLED

- PLASMA TORCH: WHAT CAN WE LEARN FROM MODELING?
Dr. Maryam Aghaei
University of Antwerp
- 11:35–11:50 O2 SYNTHESIS OF NON-WOVEN FABRIC BASED SURFACE-ENHANCED
RAMAN SCATTERING SUBSTRATE TO DIRECTLY DETECT PESTICIDE
RESIDUES IN FRUITS
Lemei CAI
Xiamen University
- 11:50–12:05 O3 ACCURATE MEASUREMENT OF TRACE ELEMENTAL IMPURITIES IN
SUPERALLOY USING ICAP TQ ICP-MS
Xiaobo Li
ThermoFisher Scientific
- 11:05–12:20 O4 RAPID DETECTION OF FORAGE MAIZE QUALITY BASED ON GRATING
NEAR INFRARED SPECTROSCOPY ON-LINE ANALYSIS
Yumei YAO
China Agricultural University
- Time:** Oct. 9, 2017 PM(Monday)
Location: Room310, China National Convention Center, Beijing
Chairman: Xi Chen; XiuJun James Li
- 13:30–13:55 K7 SYNTHESIS OF LUMINESCENT LEAD HALIDE PEROVSKITE MATERIALS
AND THEIR ANALYTICAL APPLICATIONS
Prof. Xi Chen
Xiamen University
- 13:55–14:20 K8 NANOPARTICLE-MEDIATED PHOTOTHERMAL IMMUNOSENSING
FOR QUANTITATIVE CANCER BIOMARKER DETECTION USING A
THERMOMETER
Prof. XiuJun James Li
University of Texas at El Paso
- 14:20–14:45 K9 NOVEL STRATEGIES FOR COLOR-SPECIFIC FLUORESCENCE
SWITCHING AND SUPER-RESOLUTION FLUORESCENCE IMAGING
Prof. Soo Young Park
Seoul National University
- 14:45–15:00 O5 EXPLORING TUNABLE EXCITATION OF QDs TO MAXIMIZE THE
OVERLAP WITH ABSORBER FOR INNER FILTER EFFECT-BASED
PHOSPHORESCENT SENSING OF ALKALINE PHOSPHATASE
Jinyi ZHANG



- Sichuan University
- 15:00–15:20 **Coffee Break**
- Chairman:** Yan He, Takashi Hayashita
- 15:20–15:45 K10 DESIGN OF NOVEL SUPRAMOLECULAR CYCLODEXTRIN COMPLEX
SENSORS FOR SELECTIVE SACCHARIDE RECOGNITION IN WATER
Prof. Takashi Hayashita
Sophia University
- 15:45–16:10 K11 FUNCTIONALIZED LIQUID CRYSTAL MATERIALS IN OPTICAL
BIOANALYSIS
Dr. Mashooq KHAN
Kyungpook National University
- 16:10–16:35 K12 Molecular probes in the polarimetric analysis of crystalline structures
Dr. Xiaoyan CUI
East China Normal University
- 16:35–16:50 O6 TURN-ON THERANOSTIC FLUORESCENT NANOPROBE BY
ELECTROSTATIC SELF-ASSEMBLY OF CARBON DOTS WITH
DOXORUBICIN FOR TARGETED CANCER CELL IMAGING, IN VIVO
HYALURONIDASE ANALYSIS, AND TARGETED DRUG DELIVERY
Na Gao
Yan' an University
- Chairman:** Weili Wei; Qiang Ma
- 16:50–17:15 K13 AQUEOUS SYNTHESIS OF HIGH QUALITY MULTICOLOR CU-ZN-IN-S
QUANTUM DOTS AND ANALYTICAL APPLICATION
Prof. Qiang Ma
Jilin University
- 17:15–17:35 K14 AS DEMAND ACTIVATE AND INACTIVATE FLUORESCENT PROBES
BASED ON AN INTRAMEMBRANE IMPELLER FOR SPATIOTEMPORAL
INTRACELLULAR MONITORING
Prof. Weili Wei
Chongqing University
- 17:35–17:50 O7 THE APPLICATION OF FLUORESCENCE FINGERPRINT IN FOOD
ANALYSIS
Miao Sun
Hitachi High-Technologies (Shanghai) Co., Ltd. Beijing Branch
- 17:50–18:05 O8 ATOMETRIC FLUORESCENT SENSOR FOR VISUAL DETERMINATION
OF COPPER IONS AND ALKALINE PHOSPHATASE BASED ON CARBON

		DOTS AND GOLD NANOCCLUSERS
		Haijian LIU
		China Agricultural University
18:05-18:20	O9	CATALYTIC DNA DEVICE FOR SELF-ASSEMBLY OF DNA HYDROGELS AND FLUORESCENCE DETECTION OF MICRORNA
		Prof. Sai BI
		Qingdao University
Time:		Oct. 11, 2017 AM(Wednesday)
Location:		Room310, China National Convention Center, Beijing
Chairman:		Seiichi Nishizawa; Aijun Tong
8:30-08:55	K15	DESIGN AND SYNTHESIS OF FLUORESCENT MOLECULAR PROBES FOR RNA SENSING
		Prof. Seiichi Nishizawa
		Tohoku University
08:55-09:20	K16	PHOTOACTIVATABLE AGGREGATION INDUCED EMISSION BASED ON SMALL ORGANIC MOLECULES
		Prof. Aijun Tong
		Tsinghua University
09:20-09:45	K17	HIGHLY SENSITIVE FLUORESCENCE SENSORS BASED ON AGGREGATION INDUCED EMISSION
		Prof. Yong Wang
		Tianjin University
09:45-10:10	K18	SINGLE-VIRUS TRACKING WITH QUANTUM DOTS: UNRAVELLING ENTRY MECHANISM OF INFLUENZA A VIRUS
		Prof. Daiwen Pang
		Wuhan University
10:10-10:30		Coffee Break
Chairman:		Jianzhong Lu; Lixia Zhao
10:30-10:55	K19	DETECTION OF MICRORNA VIA CHEMILUMINESCENCE INSTANTANEOUS DERIVATIZATION TECHNOLOGY
		Prof. Jianzhong Lu
		Fudan University
10:55-11:20	K20	DYNAMIC ANALYSIS OF REACTIVE OXYGEN SPECIES PHOTO-GENERATED ON METAL-OXIDE NANOPARTICLES AND THEIR BACTERIA TOXICITY BASED ON CHEMILUMINESCENCE
		Prof. Lixia Zhao



Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

11:20-11:35 O10 CHEMILUMINESCENCE PROBES BASED ON CARBONACEOUS NANOPARTICLES

Yi Lv

Sichuan University

11:35-11:50 O11 APTAMER SANDWICH BASED CHEMILUMINESCENCE ASSAY FOR QUANTITATIVE DETERMINATION OF VEGF165 IN CELL CULTURE MEDIUM

Dr. Sifeng MAO

Tsinghua University

11:50-12:05 O12 DEVELOPMENT OF THE HIGH-SENSITIVE MONITORING METHOD OF ARSENIC APPLIED FOR THE ENVIRONMENTAL REGULATION IN WATER

Xiangnan Dou

Tsinghua University

Poster Session

- PC1 A PHOSPHOLIPID-BIOMIMETIC FLUORESCENT PROBE FOR IMAGING VISCOSITY IN PLASMA MEMBRANES AND ITS APPLICATION IN THE CELL APOPTOSIS
Bingpeng Guo, Xiaoling zhang
Beijing Institute of Technology
- PC2 ENANTIOSELECTIVE FLUORESCENT RECOGNITION OF AMINO ACIDS BY A FACILE AMIDE FORMATION: AN UNUSUAL CONCENTRATION EFFECT
Chao Wang, Chaoyuan Zeng, Xiaoling Zhang and Lin Pu
University of Virginia
- PC3 FAST RESPONDING TWO-PHOTON FLUORESCENT PROBE FOR ENDOGENOUS FORMALDEHYDE IMAGING IN THE LIVING CELLS
Fangyun Xin, Congcong Gao, Jing Jing, Xiaoling Zhang
Beijing Institute of Technology
- PC4 ULTRASENSITIVE SPECIATION ANALYSIS OF SILVER IONS AND SILVER NANOPARTICLES WITH A CDSE QUANTUM DOTS IMMOBILIZED FILTER BY CATION EXCHANGE REACTION
Xiu Wang, Qin Xiong, Qingqing Yuan, Xue Jiang, Hong Luo, Xin Yuan, Xiaoli Xiong, Ke Huang
Sichuan Normal University
- PC5 A RGB-TYPE AU NANOCUSTER FOR VISUAL DETECTION OF Hg²⁺ BY USING FLUORESCIN AS REFERENCE
Wenqing DENG, Xue JIANG, Hong LUO, Ke HUANG and Xiaoli XIONG
Sichuan Normal University
- PC6 ONE-POT SYNTHESIS OF BULL SERUM ALBUMIN PROTECTED GOLD/SILVER BIMETALLIC NANOCUSTERS FOR RATIONOMETRIC AND VISUAL DETECTION OF Hg²⁺
Rui DAI, Xue JIANG, Hong LUO, Ke HUANG and Xiaoli XIONG
Sichuan Normal University
- PC7 HIGHLY CHEMILUMINESCENT LUCIGENIN/CO (TRYPTOPHAN)₂ COMPLEX/ GRAPHENE OXIDE HYBRIDS FOR DIRECT SENSING OF ASCORBIC ACID
Qi LI, Fang LI, Wen SHEN, Xiangyang LIU and Hua CUI
University of Science and Technology of China
- PC8 HIGH-THROUGHPUT SYNTHESIS OF COLLOIDAL CsPbX₃ PEROVSKITE NANOCRYSTALS BY MICROWAVE IRRADIATION
Zi LONG, Hong REN, Jianghui SUN, Jin OUYANG, and Na NA
Beijing Normal University



- PC9 DETERMINATION OF GOLD IN LEAD CONCENTRATE BY ICP-OES WITH ACTIVATED CARBON ADSORPTION ENRICHMENT
Zaizheng Dong, Nan Wang
Northeastern University
- PC10 XRF SPECTROMETRIC APPLICATION IN STUDY OF MICRO-AREA DISTRIBUTION OF THE IMPURITY ELEMENTS IN TITANIUM ALLOY
Yiren Liu, Ting Zhao, Guanghui Hu, Xia Gao and Weili LIU
Beijing Centre for Physical and Chemical Analysis
- PC11 A COMPARATIVE STUDY ON REDUCTION RATES OF VERTEBRATE GLOBINS
Danlei Zhou, Aiqin Luo¹, Jay L.Zweier, Xiaoping Liu
Beijing Institute of Technology
- PC12 A CELL-PENETRATING RATIO-METRIC PROBE FOR SIMULTANEOUS MEASUREMENT OF LYSOSOMAL AND CYTOSOLIC pH CHANGE
Meng-Chan XIA, Lesi CAI, Sichun Zhang and Xinrong Zhang
Tsinghua University
- PC13 PHOTOLUMINESCENCE LIFETIME IMAGING OF NEWLY SYNTHESIZED PROTEINS IN LIVING CELLS
Jinyu WANG, Jie XUE, Zihé YAN, Sichun ZHANG, Juan QIAO and Xinrong ZHANG
Tsinghua University
- PC14 STUDY ON NONDESTRUCTIVE TESTING OF SCRIPT BY INFRARED MICROSCOPE
Weiya DUAN, Xiaohong SONG, Yueqi LI, Taohong HUANG
SHIMADZU(CHINA)CO.,LTD
- PC15 MnII-DOPED CESIUM LEAD CHLORIDE PEROVSKITE NANOCRYSTALS: NON-NOBLE METAL OXYGEN SENSING BASED ON PHOSPHORESCENT DOPANTS AND HOST-TO-DOPANT ENERGY TRANSFER
Fangyuan LIN, Xi CHEN
Xiamen University
- PC16 SYNTHESIS OF NON-WOVEN FABRIC BASED SURFACE-ENHANCED RAMAN SCATTERING SUBSTRATE TO DIRECTLY DETECT PESTICIDE RESIDUES IN FRUITS
Lemei CAI, Zhuo DENG, Jing DONG, Shidong SONG, Yiru WANG and Xi CHEN
Xiamen University
- PC17 SENSITIVE MONITOR OF HIPPURIC ACID WITH CALIX[4]ARENE-FUNCTIONALIZED METAL-ORGANIC FRAMEWORK PROBE
Yaran DU, Qiong JIA
Jilin University
- PC18 APPLICATION OF POLYETHYLENEIMINE-PROTECTED COPPER NANOCLUSTERS

**TO THE DETECTION OF BIOTHIOLS AND ACETYLCHOLINESTERASE BASED ON
CU²⁺-QUENCHED FLUORESCENCE TURN-ON ASSAY**

Jinlan YANG, Naizhong SONG, Xueju LV, Qiong JIA

Jilin University

**PC19 DETERMINATION OF THE CONTAMINANT FROM WATER TAP BY SHIMADZU AIM-
9000 AND EDX-8000**

Wang Juan-Juan, Zhang Min, Sun You-Bao, Hu Xiao-Chun, Huang Tao-Hong

Shimadzu (China) co., Ltd

**PC20 DETERMINATION OF TRACE CADMIUM AND LEAD IN HERBAL MEDICINES BY
FLAME ATOMIC ABSORPTION SPECTROMETRY AFTER ULTRASOUND-ASSISTED
DIGESTION**Watsaka SIRIANGKHAWUT, Patcharee SITTICHAN, Kraingkrai PONHONG, and Piyanete
CHANTIRATIKUL

Mahasarakham University

**PC21 ENNCAPSULATED LIQUID CRYSTAL DROPLETS FOR IMAGING OF ENDOTOXIN
EFFECT ON CELL**

Mashooq KHAN and Jin-Ming LIN

Tsinghua University

**PC22 MICROCHEMICAL PEN: A NEW TECHNOLOGY FOR MICROFABRICATIONS AND
LOCALIZED CHEMISTRY**

Sifeng MAO, Jin-Ming LIN and Katsumi UCHIYAMA

Tsinghua University

**PC23 DEVELOPMENT OF THE HIGH-SENSITIVE MONITORING METHOD OF SUBSTANCES
(Se and Cr) APPLIED FOR THE ENVIRONMENTAL REGULATION IN WATER**

Xiangnan Dou, Guilong Peng, Yurong Jiao, Jin-Ming Lin

Tsinghua University

**PC24 APPLICATION OF ENERGY DISPERSIVE X-RAY FLUORESCENCE IN IDENTIFICATION
OF TURQUOISE**

Min Zhang, Hui Xu, Xiaochun Hu, Taohong Huang, Xinmin Wang

Shimadzu (China) Co., Ltd

**PC25 MODULARIZATION OF HAIRPIN DNA DESIGN TO INDUCE ROLLING CIRCLE
AMPLIFICATION FOR OCHRATOXIN A DETECTION BY INDUCTIVELY COUPLED
PLASMA MASS SPECTROMETRY**

Peng YANG, Junbo CHEN, Xiaoming JIANG and Xiandeng HOU

Sichuan University

PC26 NANOSCALE GLUTATHIONE-RESPONSIVE FLUORESCENT CONJUGATED POROUS



POLYMERS FOR DRUG DELIVERY

Yunqian GONG, Wen YANG, Xiaoling ZHANG

Beijing Institute of Technology

PC27 SHARE ONE ICP SOURCE FOR SIMULTANEOUS ELEMENTAL ANALYSIS BY ICP-MS/OES: SOME UNIQUE INSTRUMENTAL CAPABILITIES

Yujia DENG, Xi WU, Yunfei TIAN, Zhirong ZOU, Xiandeng HOU and Xiaoming JIANG

Sichuan University

PC28 DETERMINATION OF MIGRATION OF HARMFUL ELEMENTS IN FOOD SIMULATION BY ICP - MS

Li ZENG, Youbao SUN, Jun FAN, Taohong HUANG

Analytical Application Center Shimadzu (China) Co., LTD

PC29 A NEW TECHNIQUE FOR SAMPLE DIGESTION BASED ON DILECTRIC BARRIER DISCHARGE

Yijing LUO, Li WU, Xiandeng HOU, Chengbin ZHENG

Sichuan University

PC30 g-C₃N₄/TiO₂ COMPOSITES TO ENHANCE PHOTOCHEMICAL VAPOR GENERATION OF Se(VI) FOR ATOMIC SPECTROMETRY

Fujian Xu, Jing HU, Zhirong ZOU, Mengtian LI, Xiaoming Jiang, Xiandeng HOU

Sichuan University

PC31 ULTRAVIOLET LIGHT-EMITTING DIODE: A MINIATURIZED IRRADIATION SOURCE FOR SELENIUM PHOTOCHEMICAL VAPOR GENERATION

Zhirong ZOU, Fujian XU, Yunfei TIAN, Xiaoming JIANG, Xiandeng HOU

Sichuan University

PC32 FABRICATION OF AuNPs/SNW-1 HYBRIDS AS SERS-ACTIVE SUBSTRATE

Juan HE, Fujian XU, Zhou LONG, Xiandeng HOU

Sichuan University

PC33 HIGHLY SELECTIVE "OFF - ON" FLUORESCENT PROBE FOR METHANOL

Qing Kang, Yong Wang

Tianjin University

PC34 HIGHLY SENSITIVE FLUORESCENCE DETECTION OF HYDROGENASES IN SOLUTION BASED ON AGGREGATION INDUCED EMISSION

Rui Zhao, Yong Wang

Tianjin University

PC35 ONE-POT CLICK ACCESS TO A CYCLODEXTRIN DIMER BASED NOVEL AGGREGATION INDUCED EMISSION SENSOR AND MONOMER BASED CHIRAL STATIONARY PHASE

Xiaoli Li, Yong Wang

Tianjin University

- PC36 **RAPID SYNTHESIS OF NITROGEN DOPED CARBON DOTS AND THEIR APPLICATION AS LABEL FREE SENSOR ARRAY FOR SIMULTANEOUS DISCRIMINATION OF MULTIPLE PROTEINS**

Shenghao XU, Zhengzhong SU, Jun WANG, and Xiliang LUO

Qingdao University of Science and Technology

- PC37 **PHOTOLUMINESCENT Ag NANOCCLUSERS FOR REVERSIBLE TEMPERATURE AND pH NANOSENSORS IN AQUEOUS SOLUTION**

Xiaohong GUO, Ruru WANG, Guomei ZHANG*, Shaomin SHUANG, Chuan DONG

Shanxi University

- PC38 **A HIGHLY SELECTIVE FLUORESCENT PROBE FOR SULFIDE IONS BASED ON AGGREGATION OF Cu NANOCCLUSER INDUCED EMISSION ENHANCEMENT**

Ruru WANG, Xiaohong GUO, Guomei ZHANG*, Shaomin SHUANG, Chuan DONG

Shanxi University



SCHEDULE OF SESSIONS D. CHROMATOGRAPHY CHAIRMAN: Prof. Lihua Zhang

ORAL LECTURES

- Time: Oct. 9, 2017 AM (Monday)
- Location: Room 311A, China National Convention Center, Beijing
- Chairman: Prof. David Muddiman and Prof. Xiangmin Zhang
- 09:00–09:20 D2 SELECTIVE CELL PROTEOME ANALYSIS BY COVALENT BINDING OF PROTEINS FOLLOWED BY NANO LC-MS IDENTIFICATION
Xiangmin Zhang (Keynote)
Fudan University, China
- 09:20–09:40 D3 NOVEL DISCOVERIES IN ALS: FROM PROTEOME PROFILING AND PROTEOFORMS TO NON-PROTEIN AMINO ACID LEVEL MEASUREMENTS
David Muddiman (Keynote)
North Carolina State University, USA
- 09:40–10:00 D4 NOVEL ONLINE SAMPLE PREPARATION MEDIA FOR COMPLICATED SAMPLES ANALYSIS COUPLING WITH HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY
Gongke Li (Keynote)
Sun Yat-sen University, China
- 10:00–10:20 D5 APPLICATION OF VANQUISH UHPLC IN BIOPHARMACEUTICAL RESEARCH
Xiaoda Liu
ThermoFisher Scientific China Inc., China
- Chairman: Prof. Myeong Hee Moon and Prof. Yafeng Guan
- 10:40–11:00 D6 SPATIAL PROFILING OF GEBBERELINS IN A SINGLE LEAF
Yafeng Guan (Keynote)
Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China
- 11:00–11:20 D7 DEVELOPMENT OF NEW METHODS FOR THE ANALYSIS OF LOW MOLECULAR WEIGHT COMPOUNDS USING MATRIX-ASSISTED LASER DESORPTION/IONIZATION MASS SPECTROMETRY
Yuqi Feng (Keynote)
Wuhan University, China
- 11:20–11:40 D8 FLOW FIELD-FLOW FRACTIONATION WITH MASS SPECTROMETRY

- FOR EXOSOME AND METALLOPROTEINS
Myeong Hee Moon (Keynote)
 Yonsei University, Korea
- 11:40–12:00 D9 INNOVATING GAS CHROMATOGRAPHY TECHNOLOGY
Eric Denoyer
 Agilent Technologies Inc., USA
- Time: Oct. 9, 2017 PM (Monday)
 Location: Room 311A, China National Convention Center, Beijing
 Chairman: Prof. Weiguo Andy Tao and Prof. Oliver J. Schmitz
- 13:00–13:20 D10 A PIPELINE FOR DISCOVERY AND VERIFICATION OF GLYCOPROTEINS
 FROM PLASMA-DERIVED EXTRACELLULAR VESICLES AS BREAST
 CANCER BIOMARKERS
Weiguo Andy Tao (Keynote)
 Purdue University, USA
- 13:20–13:40 D11 DETERMINATION OF SPECIFIC BINDING IN THE PRESENCE OF NON-
 SPECIFIC BINDING INTERACTIONS
David Chen (Keynote)
 University of British Columbia, Canada
- 13:40–14:00 D12 MULTIDIMENSIONAL CHROMATOGRAPHY COUPLED WITH ION
 MOBILITY – MASS SPECTROMETRY: HYPE OR RIPE?
Oliver J. Schmitz (Keynote)
 University of Duisburg–Essen, Germany
- 14:00–14:20 D13 DEEP EUTECTIC SOLVENTS AS NEW SOLVENTS FOR SYNTHESIS OF
 NEW STATIONARY PHASES
Hongdeng Qiu (Keynote)
 Lanzhou Institute of Chemical Physics, Chinese Academy of Science, China
- 14:20–14:40 D14 APPLICATION OF HITACHI HIGH PERFORMANCE LIQUID
 CHROMATOGRAPH IN THE FIELD OF FOOD AND DRUG
Youhao Hu
 Hitachi High–Technologies(shanghai) Co.,Ltd. Beijing Branch, China
- Voices of
 Sonorous Rose: **Session for women scholars**
- Chairman: **Prof. Feng Qu and Prof. Lingjun Li**
- 15:00–15:20 D15 COUPLING MICRO-SEPARATION TECHNIQUES TO MASS
 SPECTROMETRY IMAGING FOR ENHANCED ANALYSIS OF
 NEUROPEPTIDES



Lingjun Li (Keynote)

University of Wisconsin-Madison, USA

15:20-15:40 D16 SMELLING THE SPRING OF CAPILLARY ELECTROPHORESIS

Feng Qu (Keynote)

Beijing Institute of Technology, China

15:40-16:00 D17 WELL-DEFINED MAGNETIC SURFACE-IMPRINTED POLYMERS FOR
SELECTIVE SEPARATION OF TARGETS IN BIOSAMPLES

Rui Zhao (Keynote)

Institute of Chemistry, Chinese Academy of Sciences, China

16:00-16:15 D18 FABRICATION OF COPOLYMER BASED ENZYME REACTORS FOR
SCREENING D-AMINO ACIDS OXIDASE INHIBITORS WITH CAPILLARY
ELECTROPHORESIS APPROACH

Li Qi (Invited)

Institute of Chemistry, Chinese Academy of Sciences, China

16:15-16:30 D19 NOVEL NANOMATERIALS AND THEIR APPLICATIONS IN PEPTIDES
ENRICHMENT

Yu Bai (Invited)

Peking University, China

16:30-16:45 D20 ENRICHMENT OF IgG GALACTOSYLATION WITH PEANUT AGGLUTININ-
 β -CYCLODEXTRIN FUNCTIONALIZED MONOLITH

Qiong Jia (Invited)

Jilin University, China

16:45-17:00 D21 IONIC LIQUID-BASED FILTER-AIDED SAMPLE PREPARATION FOR IN-
DEPTH PROTEOME ANALYSIS

Fei Fang

Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China

17:00- Discussion

Time: Oct. 11, 2017 AM (Wednesday)

Location: Room 311A, China National Convention Center, Beijing

Chairman: Prof. Kazuki Nakanishi and Prof. Qiuquan Wang

09:00-09:20 D22 LATEST APPLICATIONS OF SILICA MONOLITH TO HPLC SEPARATION
AND PURIFICATION/PRE-TREATMENTS OF BIOMOLECULES

Kazuki Nakanishi (Keynote)

Kyoto University, Japan

09:20-09:40 D23 ELEMENT-ENCODED BIOANALYSIS USING ICPMS: QUANTIFICATION
FROM MOLECULES TO CELLS

- Qiuquan Wang (Keynote)**
Xiamen University, China
- 09:40–10:00 D24 COMBINATION OF CAPILLARY ELECTROPHORESIS AND HPLC - MS/
MS PROVIDES A HIGH-THROUGHPUT PLATFORM FOR SCREENING
BIOACTIVE COMPOUNDS IN NATURE EXTRACTS
- Jingwu Kang (Keynote)**
Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, China
- 10:00–10:20 D25 A NOVEL END-CAPPING CONCEPT FOR HIGH PERFORMANCE LIQUID
CHROMATOGRAPHY
- Norikazu NAGAE**
ChromaNik Technologies Inc., Japan
- Chairman: **Prof. Steffen Pauly and Prof. Guowang Xu**
- 10:40–11:00 D26 MOLECULAR STRUCTURES-BASED METABOLOMICS METHODS FOR
IMPROVING METABOLITE COVERAGE AND IDENTIFICATION
- Guowang Xu (Keynote)**
Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China
- 11:00–11:20 D27 DROPLET-BASED MICROFLUIDIC SYSTEMS COUPLED WITH HIGH-
SPEED CAPILLARY ELECTROPHORESIS
- Qun Fang (Keynote)**
Zhejiang University, China
- 11:20–11:40 D28 APPLICATION OF CHROMATOGRAPHY IN QUALITY CONTROL OF
TRADITIONAL CHINESE MEDICINES
- Shaoping Li (Keynote)**
University of Macau, China
- 11:40–12:00 D29 175 YEARS OF SPRINGER - HISTORY AND FUTURE OF ANALYTICAL
SCIENCE PUBLISHING
- Steffen Pauly (Keynote)**
Springer Research Group, Springer Nature, Germany
- Time: **Oct. 11, 2017 PM (Wednesday)**
- Location: **Room 311A, China National Convention Center, Beijing**
- Chairman: **Chairman: Prof. Huwei Liu and Prof. Yi Chen**
- 13:00–13:20 D30 APPLICATIONS OF 2D LC-MS/MS IN CLINICAL LIPIDOMICS
- Huwei Liu (Keynote)**
Peking University, China
- 13:20–13:40 D31 MAKE CE REPRODUCIBLE
- Yi Chen (Keynote)**



- Institute of Chemistry, Chinese Academy of Sciences, China
- 13:40–14:00 D32 DROPLET GENERATION FOR CAPILLARY ELECTROPHORESIS AND ELECTROSPRAY IONIZATION
Jinming Lin (Keynote)
Tsinghua University, China
- 14:00–14:20 D33 SINGLE-CELL DNA METHYLATION PROFILING USING CESI-MS/MS
Xinxiang Zhang (Keynote)
Peking University, China
- 14:20–14:35 D34 COVALENT ORGANIC FRAMEWORKS FOR SAMPLE PREPARATION AND CHROMATOGRAPHIC SEPARATION
Xiuping Yan (Keynote)
Jiangnan University, China
- 14:35–14:50 D35 COUPLING MICROFLUIDIC DROPLETS WITH STANDARD WELL-PLATES BASED HIGH-THROUGHPUT ASSAYS
Wenbin Du
Institute of Microbiology, Chinese Academy of Sciences, China
- 14:50–15:05 D36 SAMPLE PREPARATION METHODS FOR MASS SPECTROMETRY -BASED PROTEOMICS AND GLYCOPROTEOMICS
Yangjun Zhang
State Key Laboratory of Proteomics, National Center for Protein Science, Beijing Institute of Radiation Medicine, China
- 15:05–15:20 D37 CAPTURING AND IMMOBILIZING OF BETA2-ADRENOCEPTOR ON THE SOLID-SURFACE BY A ONE STEP METHOD
Jing Wang
Northwest University, China
- 15:20–15:35 D38 SYNCHRONOUS APTAMERS SELECTION OF DUAL-TARGET PROTEINS BASED ON CAPILLARY ELECTROPHORESIS
Ge Yang
Beijing Institute of Technology, China
- 15:35– Closing Remarks

POSTER SESSION

- D39 L-PHENYLALANINE METHYL ESTER BASED MONOLITHIC COLUMN FOR ENANTIOSEPARATION OF AMINO ACIDS
Mingming Zhang
Institute of Chemistry, Chinese Academy of Sciences, China
- D40 CAPILLARY ELECTROCHROMATOGRAPHY WITH HOMOPOLYMER COATINGS FOR SEPARATION OF ANTIBIOTICS
Liping Zhao
Institute of Chemistry, Chinese Academy of Sciences, China
- D41 OPTEN-TUBULAR CAPILLARY ELECTROCHROMATOGRAPHY FOR SEPARATION OF AMINO ACIDS ENANTIOMERS WITH POLYDOPAMINE COATINGS
Wenya Feng
Institute of Chemistry, Chinese Academy of Sciences, China
- D42 PREPARATION OF POLYMER@AUNPS WITH MICROFLUIDIC DROPLETS SYNTHESIS SYSTEM FOR SENSING OF COPPER IONS
Qianrong Liu
Institute of Chemistry, Chinese Academy of Sciences, China
- D43 CORE-SHELL MOLECULARLY IMPRINTED NANOPARTICLES FOR SELECTIVE ENRICHMENT OF FLUOROQUINOLONES IN HUMAN SERUM
Yulong Jin
Institute of Chemistry, Chinese Academy of Sciences, China
- D44 EXTRACTION OF POLYPHENOL FROM CHESTNUT SHELL AND ITS HIGH PERFORMANCE LIQUID CHROMATOGRAPHY
Xuedong Yang
Beijing institute of technology, China
- D45 INTERACTION CHARACTERIZATION OF CALRETICULIN WITH HUMAN SERUM ALBUMIN AND IMMUNOGLOBULIN G BY CAPILLARY ELECTROPHORESIS
Miao Sun
Beijing institute of technology, China
- D46 INTERACTION COMPARISON OF GLUTAMATE MODIFIED PEPTIDE NUCLEIC ACID WITH HUMAN THROMBIN AND HSA BY AFFINITY CAPILLARY ELECTROPHORESIS
Xiaoqian Wang
Beijing Institute of Technology, China
- D47 SIMULTANEOUS SEPARATION TRYPTOPHAN AND TYROSINE ENANTIOMERS BY α -CYCLODEXTRIN PARTIAL FILLING CAPILLARY ELECTROPHORESIS



Jin Chen

Beijing Institute of Technology, China

D48 PDL-1 ANALYSIS AND APTAMERS SELECTION BASED ON CAPILLARY ELECTROPHORESIS

Pinduo Liu

Beijing Institute of Technology, China

D49 NOVEL ONLINE CE METHOD FOR PROTEINS APTAMERS SELECTION

Chenxu Hao

Beijing Institute of Technology, China

D50 CAPILLARY ELECTROPHORESIS FOR ADENOSINE AND HYDROCORTISONE APTAMERS SELECTION

Xiaohui Liu

Beijing Institute of Technology, China

D51 ANALYSIS OF S100B PROTEIN BY CAPILLARY ELECTROPHORESIS AND APTAMER SELECTION

Ghulam Murtaza

Beijing Institute of Technology, China

D52 INVESTIGATION OF INFLAMMATORY MARKER C-REACTIVE PROTEIN

Aysha Sarfraz Rizvi

Beijing Institute of Technology, China

D53 RAPID CHARACTERIZATION AND OPTIMIZATION OF PROBES FOR PROXIMITY EXTENSION ASSAY BY CAPILLARY ELECTROPHORESIS

Rui Gong

Beijing Institute of Technology, China

D54 ANALYSIS OF FISCHER-TROPSCH WAX BY HIGH TEMPERATURE GAS CHROMATOGRAPHY AND HIGH TEMPERATURE GAS CHROMATOGRAPHY-MASS SPECTROMETRY

Qingqing Gai

National Institute of Clean-and-Low-Carbon Energy, China

D55 SEPARATION AND CHARACTERIZATION OF DIFFERENT COAL TAR ASPHALTENE

Congyun Liu

National Institute of Clean-and-Low-Carbon Energy, China

D56 MAGNETIC ZnFe₂O₄/C DERIVED FROM Zn-Fe-ZIF AS A NOVEL SORBENT FOR DISPERSIVE SOLID PHASE EXTRACTION

Shujun Xia

Xiamen University, China

- D57 NOVEL MONOLITHIC CAPILLARY COLUMNS WITH GOLD-COATED ELECTROSPRAY
EMITTERS FOR HIGHLY SENSITIVE NANOLC-MS PROTEOMIC ANALYSIS
Yu Liang
Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China
- D58 MASS DEFECT-BASED A1 ION SERIES IN TANDEM MS SPECTRA ENABLED HIGHLY
ACCURATE AND MULTIPLEXED PROTEOME QUANTIFICATION
Jianhui Liu
Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China
- D59 GEL-FREE PAPER-BASED ISOELECTRIC FOCUSING FOR MALDI- TOF-MS OF
PROTEINS
Zhiyong Wu
Northeastern University, China
- D60 CARRIER AMPHOLYTE FREE PAPER-BASED ISOELECTRIC FOCUSING FOR MALDI-
TOF-MS OF PROTEINS
Zhiyong Wu
Northeastern University, China
- D61 PREPARATION OF POLY(β -NAPHTHYL ACRYLATE) GRAFTED MAGNETIC
NANOPARTICLES FOR SELECTIVE ENRICHMENT OF INDOMETACIN AND
DICLOFENAC FROM ENVIRONMENT WATER SAMPLES
Chaozhan Wang
Northwest University, China
- D62 HYDROTHERMAL TREATMENT ENHANCED STABILITY OF POLYDOPAMINE COATING
ON MAGNETIC NANOPARTICLES
Chaozhan Wang
Northwest University, China
- D63 KINETIC STUDIES OF FIVE DRUGS BINDING TO BETA2-ADRENOCEPTOR USING
HIGH PERFORMANCE AFFINITY CHROMATOGRAPHY
Yuan Liang
Northwest University, China
- D64 ISOLATION AND PURIFICATION OF FIVE POLYPHENOLIC COMPOUNDS
FROM LEAVES OF MALUS PUMILA USING HIGH-SPEED COUNT-CURRENT
CHROMATOGRAPHY COUPLED WITH SEMI-PREPARATIVE LIQUID
CHROMATOGRAPHY
Yun Wei
Beijing University of Chemical Technology, China
- D65 PREPARATION OF NOVEL ENZYME IMMOBILIZED REACTORS FOR NNAL-O-GLU



HYDROLYSIS

Nan Deng

Zhengzhou Tobacco Research Institute of China National Tobacco Corporation, China

D66 SEPARATION OF 210PO FROM 210PB BY IONIC LIQUID-BASED EXTRACTION CHROMATOGRAPHIC RESIN

Yu Zou

National Institute of Metrology, China

D67 AN AUTOMATED PLATFORM WITH COMBINATION OF ON-LINE PROTEIN PROCESSING WITH PEPTIDE SEPARATION FOR PROTEIN PROFILING

Sandong Yang

Nanjing University of Science and Technology, China

D68 RESEARCH AND EVALUATION OF A NEW SEMI-ONLINE INTERFACE FOR TWO-DIMENSIONAL CHROMATOGRAPHY

Tao Tang

Nanjing University of Science and Technology, China

D69 QUANTITATIVE ESTIMATION OF POLYSACCHARIDE FROM LENTINULA EDODES BASED ON ENZYMATIC RELEASED SPECIFIC OLIGOSACCHARIDES

Yong Deng

University of Macao, China

D70 FUNCTIONALIZATION OF POLYMER MONOLITH WITH COVALENT ORGANIC FRAMEWORK FOR EFFECTIVE ENRICHMENT OF BENZOPHENONES

Qiong Jia

Jilin University, China

D71 DEVELOPMENT OF WETTED PAPER SAMPLING TECHNIQUE AND CAPILLARY ELECTROPHORESIS METHODS FOR CORROSIVE MATERIALS DETERMINATION

Ning Xu

Tsinghua university, China

D72 DETERMINATION OF THE RESIDUAL THIONYL CHLORIDE IN LEVETIRACETAM BY COMBUSTION COMBINED WITH IONCHROMATOGRAPY

Fangfang Zhang

East China University of Science and Technology, China

D73 DETERMINATION OF ACRYLAMIDE IN RICE PRODUCTS AND SLUDGES BY MATRIX SOLID PHASE DISPERSION EXTRACTION (MSPD) - CAPILLARY ELECTROPHORESIS

Youyi Wu

Suzhou University of Science and Technology, China

D74 2D-MOS2-BASED ZWITTERIONIC (ZIC)-HILIC MATERIAL FOR THE HIGHLY SPECIFIC

ENRICHMENT OF N-LINKED GLYCOPEPTIDES

Chaoshuang Xia

Beijing Proteome Research Center, China

**D75 DNA SEPARATION WITH NANAOPARTICLES HYDROGEL BY
CAPILLARYELECTROPHORESIS**

Min Xue

Beijing Institute of Technology, China

**D76 PEPTIDE ANALYSIS USING LIQUID CHROMATOGRAPHY AND MINIATURISED MASS
SPECTROMETRY**

Bin Chen

Microsaic Systems, Great Britain

**D77 USING AGILENT INNOVATIVE TECHNOLOGY (SFC and 2D-LC) TO SOLVE ANY
SEPARATION CHALLENGE WITH MAXIUM EFFICIENCY**

Ying Meng

Agilent Technology, China

**D78 A NOVEL APPROACH TO THE ANALYSIS OF TRADITIONAL CHINESE MEDICINE
BY ONLINE SUPERCRITICAL FLUID EXTRACTION-SUPERCRITICAL FLUID
CHROMATOGRAPHY**

Feng Ji

Shimadzu(China) Co., Ltd. Beijing Branch, China

**D79 IDENTIFICATION OF ADULTERATED GOAT MILK POWDER BY MILK POWDER USING
MICROCHIP ELECTROPHORESIS COMBINED WITH PCR**

Lixiao Li

Shimadzu (China) Co., Ltd., China

**D80 DETERMINATION OF BENZO(a)PYRENE IN INSTANT NOODLES BY
SUPRAMOLECULAR SOLVENTS EXTRACTION AND LIQUID CHROMATOGRAPHY**

Yimeng Tan

Dalian Elite Analytical Instruments Co., Ltd., China

**D81 SIMULTANEOUS DETECTION OF SEVEN ARTIFICAIL SWEETENERS USING A NQAD
DETECTOR**

Qian Yang

Shiseido China CO. Ltd., China



SCHEDULE OF SESSIONS E. MAGNETIC RESONANCE CHAIRMAN: Prof. Maili LIU

ORAL LECTURES

- Time: Oct. 9, 2017 AM (Monday)
- Location: Room 306A, China National Convention Center, Beijing
- 8:30–8:35 Opening Speech by Prof. Maili LIU
- Chairman: Prof. Bin XIA
- 8:35–9:05 E2 High-Field NMR OF Proteins And Protein Complexes
Rolf BOELEN (Keynote)
Bijvoet Center for Biomolecular Research, Faculty of Science, Utrecht University, 3584 CH Utrecht, The Netherlands
- 9:05–9:35 E3 The Important Conformational Plasticity of DsrA sRNA For Adapting Multiple Target Regulation
Pengzhi WU, Xiaodan LIU, Lingna YANG, Yitong SUN, Qingguo GONG, Jihui WU*, Yunyu SHI* (Keynote)
Hefei National Laboratory for Physical Sciences at Microscale and School of Life Sciences, University of Science and Technology of China, Anhui 230027, China
- 9:35–10:05 E4 NMR Studies On Mechanism of Trioxacarcin Chrome-forming Catalyzed by Txn38
Yujiao SONG, Chunyang CAO* (Keynote)
Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling Road, Shanghai, China
- 10:05–10:35 E5 Characterizing Secondary Structure of RNA Excited States by NMR Relaxation Dispersion
Yanjiao WANG, Yi XUE* (Keynote)
School of Life Sciences, Tsinghua-Peking Joint Center for Life Sciences, Beijing Advanced Innovation Center for Structural Biology, Tsinghua University, Beijing 100084, China
- 10:35–10:45 Coffee Break
- Chairman: Prof. Changwen JIN
- 10:45–11:15 E6 Structural Basis for the Phosphorylation of FUNDC1 LIR as a Molecular Switch of Mitophagy
Bin XIA (Keynote)

- Beijing NMR Center, Peking University, Beijing, China, 100871
- 11:15–11:45 E7 Visualizing the Dynamics of Polyubiquitin with Conjoined Use of Ensemble and Single-molecule Based Methods
Zhu LIU, Zhou GONG, Xu DONG, Chun TANG* (Keynote)
Key Laboratory of Magnetic Resonance in Biological Systems, Chinese Academy of Sciences
- 11:45–12:05 E8 Developing NMR Methods to Study Protein Electrostatics
Lishan YAO*, Ning ZHANG, Liaoyuan AN, Yefei WANG
Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, No. 189, Songling Road, Qingdao, Shandong Province, China, 266101
- Time:** Oct. 9, 2017 PM (Monday)
- Location:** Room 306A, China National Convention Center, Beijing
- 13:00–14:00 Poster Session
- Chairman:** Prof. Maili LIU
- 14:00–14:30 E9 Spin Magnetic Resonance Spectroscopy; from Billions of Molecules to Single Molecule
Jiangfeng DU (Keynote)
CAS Key Laboratory of Microscale Magnetic Resonance and Department of Modern Physics, University of Science and Technology of China, Hefei 230026, China
- 14:30–15:00 E10 EPR Studies on Mechanism of Synergistic Catalytic Effects of Copper Salts and Oxygen
Haijun YANG^{1,2*} (Keynote), Xixi LIANG¹, Yong LI¹, Hua FU²
1Beijing Key Laboratory for Analytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, P. R. China
2Key Laboratory of Bioorganic Phosphorus Chemistry and Chemical Biology (Ministry of Education), Department of Chemistry, Tsinghua University, Beijing 100084, P. R. China
- 15:00–15:20 E11 Distance Measurements by PELDOR/DEER in Protein Aggregates Related to Neurodegenerative Diseases
Guoquan LIU^{1,2*}, Soraya PORNSUWAN¹, Stefan BECKER³, Christian GRIESINGER³, Adam LANGE³, Katharina TEPPER⁴, Eckhard MANDELKOW⁴, Marina BENNATI¹
1State Key Laboratory of Natural and Biomimetic Drugs, School of Pharmaceutical Science, Peking University, Beijing 100084, China



2RG EPR Spectroscopy, Max Planck Institute for Biophysical Chemistry,
Goetting 37707 Germany

3Department of NMR-Based Structural Biology, Max Planck Institute for
Biophysical Chemistry, Goettingen 37707, Germany

4German Center for Neurodegenerative Diseases (DZNE), Bonn 53175,
Germany

15:20–15:40 E12 Pulsed-EPR Investigation on Endohedral Fullerene

Shangda JIANG

College of Chemistry and Molecular Engineering, Peking University,
Beijing100871, P. R. China

15:40–15:50

Coffee Break

Chairman:

Prof. Chun TANG

15:50–16:20 E13 Structure and Dynamics in Crystalline Polymer Electrolytes – a Solid-state
NMR Approach

Yefeng YAO* (Keynote), Xiaobin Fu, Lingyun YANG

Shanghai Key Laboratory of Magnetic Resonance, East China Normal
University, Shanghai 200062, P. R. China

16:20–16:50 E14 Understanding Surface and Interfacial Chemistry in Nanomaterials by Solid-
state NMR

Xueqian KONG (Keynote)

Department of Chemistry, Zhejiang University, Hangzhou, China.

16:50–17:20 E15 Some Progress on Understanding Proton Transport Mechanism in Nafion
Renhao CHENG, Shangwu DING* (Keynote)

Department of Chemistry & Center for Nanoscience and Nanotechnology,
National Sun Yat-sen University, 70 Lien-Hai Road, Kaohsiung, 80424,
Taiwan

17:20–17:50 E16 NMR and Electron Crystallography to Address Salt/Cocrystal/Continuum and
Polymorphs Problem

Yusuke NISHIYAMA^{1,2} (Keynote)

1JEOL RESONANCE Inc, Tokyo 196-8558, Japan

2RIKEN CLST-JEOL Collaboration Center, Kanagawa 230-0045, Japan

Time: Oct. 11, 2017 AM (Wednesday)

Location: Room 306A, China National Convention Center, Beijing

Chairman: Prof. Nagarajao SURYAPRAKASH

8:30–9:00 E17 Paramagnetic NMR in 3D Structure Determination of Unstable Enzyme
Intermediate and Application in In-Cell Structural Analysis

- Jialiang CHEN, Binbin PAN, Xiao WANG, Feng YANG, Xuncheng SU*
(Keynote)
State Key Laboratory and Research Institute of Elemento-organic Chemistry,
College of Chemistry, Collaborative Innovation Center of Chemical Science
and Engineering (Tianjin), Nankai University, Tianjin 300071, China
- 9:00–9:30 E18 Cell-like Environmental Effects on Structure and Function of Proteins and
Nucleic Acids
Kai CHENG, Guohua XU, Jiajing ZHAO, Jia BAI, Yansheng YE, Qiong WU,
Conggang LI* (Keynote)
Key Laboratory of Magnetic Resonance in Biological Systems, State Key
Laboratory of Magnetic Resonance and Atomic and Molecular Physics,
National Center of Magnetic Resonance in Wuhan, Wuhan Institute of Physics
and Mathematics, Chinese Academy of Sciences, Wuhan 430071, P.R.
China.
- 9:30–10:00 E19 Nanopore-Confined Lipid Bilayers as a Tool For Magnetic Resonance Studies
of Membrane Proteins in a Native-like Bilayer Environment
Alex I. SMIRNOV (Keynote)
Department of Chemistry, North Carolina State University, 2620 Yarbrough
Drive, Raleigh, NC, 27695, USA
- 10:00–10:30 E20 Solid-state NMR Methods to Determine Glycan Structure and Protein Binding
in Plant Cell Walls
Tuo WANG (Keynote)
Department of Chemistry, Louisiana State University, Baton Rouge, LA,
70803, U.S.
- 10:30–10:40 **Coffee Break**
- Chairman: Prof. Alex I. SMIRNOV
- 10:40–11:10 E21 Renal pH Imaging using Chemical Exchange Saturation Transfer MRI
KowsalyaDevi PAVULURI, Michael T. MCMAHON* (Keynote)
Russell H. Morgan Department of Radiology and Radiological Science, Johns
Hopkins University School of Medicine. #F. M. Kirby Research Center for
Functional Brain Imaging, Kennedy Krieger Research Institute, Baltimore,
Maryland 21205, United States.
- 11:10–11:40 E22 Silica-Supported Lipid Bilayers: Electrostatic Effects at Lipid Interfaces as
Reported by Spin-Labeling EPR.
Erkang OU, Maxim A. VOINOV, Alex I. SMIRNOV, Tatyana I. SMIRNOVA*
(Keynote)



Department of Chemistry, North Carolina State University, 2620 Yarbrough Drive, Raleigh, NC, 27695, USA

11:40–12:00 E23 Fluorinated Silicon Nanoparticles for Accurate Detection of Lung Tumor in ¹⁹F MR and Fluorescence Imaging

Sha LI¹, Yaping YUAN¹, Yuqi YANG¹, Conggang LI¹, Michael T. MCMAHON^{2,3}, Shizhen CHEN^{1*}, Xin ZHOU^{1*}

¹Key Laboratory of Magnetic Resonance in Biological Systems, State Key Laboratory of Magnetic Resonance and Atomic and Molecular Physics, National Center for Magnetic Resonance in Wuhan, Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan 430071, China

²Russell H. Morgan Department of Radiology and Radiological Science, The Johns Hopkins University School of Medicine, Baltimore, Maryland 21287, United States

³F.M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Baltimore, Maryland 21287, United States

12:00–12:20 E24 Multifunctional Mesoporous Silica Nanoparticles for Hyperpolarized Xenon Magnetic Resonance Imaging

Yaping YUAN, Xiaoxiao ZHANG, Qianni GUO, Weiping JIANG, Xin ZHOU*

Key Laboratory of Magnetic Resonance in Biological Systems, State Key Laboratory of Magnetic Resonance and Atomic and Molecular Physics, National Center for Magnetic Resonance in Wuhan, Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan 430071, China

Time: Oct. 11, 2017 PM (Wednesday)

Location: Room 306A, China National Convention Center, Beijing

13:00–14:00 Poster Session

Chairman: Prof. Tatyana I. SMIRNOVA

14:00–14:30 E25 CLEAN G-SERF AND PS-CLEAN-G-SERF NOVEL EXPERIMENTS FOR THE COMPLETE ERADICATION OF AXIAL PEAKS AND UNDESIREDCOUPPLINGS WITH ULTRA-HIGH RESOLUTION FROM THE COMPLEX NMR SPECTRUM

Nagarajarao SURYAPRAKASH (Keynote)

NMR Research Centre, Indian Institute of Science, Bangalore 560012, India

14:30–15:00 E26 EFFECTS OF COMPATIBILITY ON THE TOXICITY OF FUZI REVEALED BY COMPREHENSIVE METABOLOMIC STUDIES

- Bo SUN, Xubin WANG, Ming ZHANG, Qi ZHANG, Fangting DONG,
Xianzhong YAN* (Keynote)
National Center of Biomedical Analysis, Beijing 100850, China
- 15:00–15:20 E27 QUANTITATIVE NMR STUDIES OF MULTIPLE COMPOUND MIXTURES
Kaifeng HU
State Key Laboratory of Phytochemistry and Plant Resources in West China,
Kunming Institute of Botany, Chinese Academy of Sciences, Kunming, P. R.
China
- 15:20–15:40 E28 QUANTITATIVE NMR AND HPLC–NMR FOR LOWER PURITY
COMPOUNDS
Ting HUANG*, Wei ZHANG, Hongmei LI, Can QUAN
Division of Chemical Metrology and Analytical Science, National Institute of
Metrology, Beijing 100029, China.
- 15:40–15:50 **Coffee Break**
- Chairman: Prof. Shenlin WANG
- 15:50–16:20 E29 NMR ISOTHERM ADSORPTION STUDIES OF GAS SHALES
Boqin SUN¹ (keynote), Haijing WANG¹, Shaun GIDCUMB², Yue WU²
¹Chevron Engery Technology Company,
²Physics Department of University of North Calorina
- 16:20–16:50 E30 APPLICATION OF NMR IN BIOREFINERY: THE RECENT DEVELOPMENT
IN INSTITUTE OF COAL CHEMISTRY, CHINESE ACADEMY OF SCIENCES
Yingxiong WANG¹ (Keynote), Christian Marcus PEDERSEN², Xianglin HOU¹,
Yan QIAO^{1*}
¹Institute of Coal Chemistry, Chinese Academy of Sciences, 27 South
Taoyuan Road, Taiyuan 030001, People's Republic of China
²Department of Chemistry, University of Copenhagen, Universitetsparken 5,
DK-2100 Copenhagen, Denmark
- 16:50–17:10 E31 INNOVATIVE DOWNHOLE NMR SCANNING TOOL AND FAST
PROCESSING METHOD
Lizhi XIAO¹, Xin LI², Sihui LUO¹, Weining NI², Zhizhan WANG²
¹State Key Laboratory of Petroleum Resources and Prospecting, China
University of Petroleum, Beijing 102249, China
²State Key Laboratory of Shale Oil and Gas Enrichment Mechanisms and
Effective Development, Sinopec Research Institute of Petroleum Engineering,
Beijing 100101, China
- 17:10–17:30 E32 NMR DEVICE AND ANALYTICAL METHODS FOR DETECTING MULTI-



PHASE FLOW IN OIL/GAS WELLS OR PIPELINES

Feng DENG^{1,2}, Lizhi XIAO¹

1Research Institute of Petroleum Exploration & Development, China National
Petroleum Corporation, Beijing, China

2State Key Laboratory of Petroleum Resources and Prospecting, China
University of Petroleum, Beijing, China

17:30–17:40

Conclusion

POSTER SESSION

Time: Oct. 9, 2017 (Monday), Oct. 11, 2017 (Wednesday)

Location: To Be Determined

E33 SPECTROSCOPIC AND FUNCTIONAL CHARACTERIZATION OF MAGNETORECEPTOR (MAGR)

Qiran ZHAI^{1,2}, Xue KANG^{1,2}, Bin XIA^{1,2*}

1Beijing Nuclear Magnetic Resonance Center, Peking University, Beijing 100871, China

2College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China

E34 DNA BINDING MECHANISM STUDY OF THE XENOGENEIC SILENCER ROK IN BACILLUS SUBTILIS

Bo DUAN, Bin XIA^{*}

Beijing Nuclear Magnetic Resonance Center, Peking University, Beijing 100871, China

E35 AMYLOID FIBRIL FORMATION OF DOMAIN SWAPPING PROTEIN Mpro-C

Zhiliang YUAN¹, Tianyi WANG¹, Xue KANG¹, Qiran ZHAI¹, Jiajun XU¹, Weibin GONG², Bin XIA^{1*}

1School of Life Sciences, College of Chemistry and Molecular Engineering and Beijing

Nuclear Magnetic Center, Peking University, Beijing 100871, China

2National Laboratory of Biomacromolecules, CAS Center for Excellence in

Biomacromolecules, Institute of Biophysics, Chinese Academy of Sciences, Beijing 100101, China

E36 MECHANISM STUDY OF 3D DOMAIN SWAPPING OF C-TERMAL DOMAIN OF SARS-COV MAIN PROTEASE

Tianyi WANG^{1,3}, Zhiliang YUAN^{2,3}, Bin XIA^{1,2,3}

1College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China

2School of Life Sciences, Peking University, Beijing 100871, China

3Beijing Nuclear Magnetic Center, Peking University, Beijing 100871, China

E37 LOCATION OF WATER AT THE ACTIVE SITE OF A EUKARYOTIC LIGHT-DRIVEN PROTON PUMP AS SEEN BY SOLID-STATE NMR

Jing LIU^{1,2}, Chang LIU^{1,2}, Vladimir LADIZHANSKY³, Leonid S. BROWN³, Shenlin WANG^{1,2*}

1College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China

2Beijing NMR Center, Peking University, Beijing 100871, China

3Department of Physics, University of Guelph, Canada.

E38 PARAMAGNETIC LIPIDS ACCELERATES MULTI-DIMENSIONAL SOLID-STATE NMR EXPERIMENTS OF MEMBRANE PROTEINS

Chang LIU^{1,2}, Jing LIU^{1,2}, Shenlin WANG^{1,2*}



- 1Beijing NMR center, Peking University, China
2College of Chemistry and Molecular Engineering, Peking University, China
- E39 PROTON ASSISTED RECOUPLING BASED FAST MAS SSNMR TO DETECT NH...N
HYDROGEN BONDS OF RNA MICROCRYSTALS
Yufei YANG^{1,2}, Shenlin WANG^{1,2*}
1Beijing NMR Center, Peking University
2College of Chemistry and Molecular Engineering, Peking University
- E40 IN-CELL SOLID-STATE NMR STUDY OF BIOLOGICAL MEMBRANES IN A SYSTEM
WITH PARAMAGNETIC TAGS
Tao HAN^{1,2}, Shenlin WANG^{1,2*}
1Beijing NMR center, Peking University, China
2College of Chemistry and Molecular Engineering, Peking University, China
- E41 A SMART pH RESPONSIVEHYPER-CEST NMR PPROBE
Qingbin ZENG, QianniGUO, Yaping YUAN, Bin ZHANG, Xin ZHOU*
Key Laboratory of Magnetic Resonance in Biological Systems, State Key Laboratory of
Magnetic Resonance and Atomic and Molecular Physics, National Center for Magnetic
Resonance in Wuhan, Wuhan Institute of Physics and Mathematics, Chinese Academy of
Sciences, Wuhan, 430071, P. R. China.
- E42 MULTIFUNCTIONAL MESOPOROUS SILICA NANOPARTICLES FOR HYPERPOLARIZED
XENON MAGNETIC RESONANCE IMAGING
Xiaoxiao ZHANG, Qianni GUO, Yaping YUAN, Weiping JIANG, Xin ZHOU*
Key Laboratory of Magnetic Resonance in Biological Systems, State Key Laboratory of
Magnetic Resonance and Atomic and Molecular Physics, National Center for Magnetic
Resonance in Wuhan, Wuhan Institute of Physics and Mathematics, Chinese Academy of
Sciences, Wuhan 430071, China
- E43 CAPTURE THE XE ATOMS IN RETICULAR CROSS-LINKED POLYMER MICELLES FOR
TARGETED 129XE MRI
Long XIAO, Shizhen CHEN, Lianhua LIU, Huaibin ZHANG, Sha LI, Xin ZHOU*
State Key Laboratory of Magnetic Resonance and Atomic and Molecular Physics, Wuhan
Institute of Physics and Mathematics, Chinese Academy of Sciences; Wuhan National
Laboratory for Optoelectronics, Wuhan 430071, China.
- E44 13C NMR METABOLOMICS REVEALS A REDUCTION OF BRAIN GLUCOSE
UTILIZATION IN 10-MONTH-OLD TRANSGENIC MOUSE MODEL OF ALZHEIMER' S
DISEASE
Qi ZHOU, Yao DU, Hong ZHENG, Shengli TANG, Huanhuan XIA, Chen LI, Hongchang
GAO*

Institute of Metabonomics & Medical NMR, School of Pharmacy, Wenzhou Medical University, Wenzhou 325035, China

E45 **METABOLIC RESPONSE TO DENDROBIUM OFFICINALE WATER EXTRACT IN THE SERUM AND LIVER OF STREPTOZOTOCIN-TREATED MICE**

Linlin PAN, Hong ZHENG, Shengli TANG, Rouhan WANG, Chen LI, Hongchang GAO*

Institute of Metabonomics & Medical NMR, School of Pharmacy, Wenzhou Medical University, Wenzhou 325035, China

E46 **OPTIMAL PREPROCESSING OF SERUM AND URINE METABOLOMIC DATA FUSION FOR STAGING PROSTATE**

Aimin CAI, Xi ZHANG, Chen LI, Pengtao XU, Liangcai ZHAO, Hongchang GAO, Hong ZHENG*

Institute of Metabonomics& Medical NMR, School of Pharmacy, Wenzhou Medical University, Wenzhou 325035, China

E47 **EFFECTS OF JOLKINOLIDE B ON HEPG2 CELLS AS REVEALED BY 1H-NMR BASED METABOLIC PROFILING**

Yujing YAN, Can XU, Zhongfeng LI*

Department of Chemistry, Capital Normal University, No.105 Xi San Huan Road, Beijing 100048, P. R. China

E48 **NMR-based Metabolomics studies of Heart and Lung from Mouse Exposed to Ionizing Radiation**

Xiongjie Xiao^{1,2,3}, Mary Hu³, Xin Chai^{1,2}, Linhong Song^{1,2}, Xu Zhang^{1*}, Jian Zhi Hu³

1. Key Laboratory of Magnetic resonance in Biological Systems, State Key Laboratory of Magnetic Resonance and Atomic and Molecular Physics, Centre for Magnetic Resonance, Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, 430071, P. R. China

2. University of Chinese Academy of Sciences, Beijing 100049, China

3. Pacific Northwest National Laboratory, Richland, WA 99352, USA

E49 **Detection of Protein methylation Using Maximum quantum 1H-13C NMR spectroscopy**

Zhongpei FANG^{1,2}, Guangting ZHANG^{1,2}, Peng Sun¹, Qinjun Zhu¹,

Bin Yuan¹, Xu Zhang^{1*}, Maili Liu^{1*}

1.Key Laboratory of Magnetic resonance in Biological Systems, State Key Laboratory of Magnetic Resonance and Atomic and Molecular Physics, Centre for Magnetic Resonance, Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, 430071, P. R. China

2.University of Chinese Academy of Sciences, 100049, Beijing, P. R. China



SCHEDULE OF SESSION F. ELECTROANALYTICAL CHEMISTRY CHAIRMAN: Prof. Jinghong Li

Time:	Oct. 9, 2017 AM (Monday)
Location:	Room 306B, China National Convention Center, Beijing
Chairpersons:	Prof. Xiurong Yang and Prof. Robert A. W. Dryfe
8:00–8:25	F2 A WATER QUALITY MONITORING SYSTEM WITH BIOLOGICAL OXYGEN DEMAND DETECTION (BOD) Erkang Wang (Keynote) Chinese Academy of Science, Changchun Institute of applied Chemistry
8:25–8:50	F3 METAL NANOPARTICLES EMBEDDED CARBON FILM ELECTRODES FOR DETECTING BIOCHEMICAL AND ENVIRONMENTAL SAMPLES Osamu Niwa (Keynote) Saitama Institute of Technology
8:50–9:15	F4 I BIOANALYSIS BASED ON NOVEL INTELLIGENT NANOPROBES OR INTERFACe Xueji Zhang (Keynote) University of Science & Technology Beijing, China
9:15–9:40	F5 NANO-ELECTROCHEMISTRY—FROM SINGLE PARTICLES TO DYNAMIC SYSTEMS Bin Ren (Keynote) Xiamen University, China
9:40–10:05	F6 ELECTROANALYSIS FOR SENSITIVE BIOSENSING AND REAL-TIME ELECTROCHEMICAL REACTION STUDY Baohong Liu (Keynote) Fudan University, China
10:05–10:15	Coffee break
Chairpersons:	Prof. Osamu Niwa and Prof. Xueji Zhang
10:15–10:40	F7 ELECTROCHEMICALLY CONTROLLED FLUORESCENCE SWITCHING IN STIMULI-RESPONSES SYSTEMS Shaojun Dong (Keynote) Chinese Academy of Science, Changchun Institute of applied Chemistry
10:40–11:05	F8 GRAPHENE & 2D MATERIALS IN ELECTROCHEMISTRY: FROM FUNDAMENTALS TO ANALYTICAL APPLICATIONS Robert A. W. Dryfe (Keynote)

- University of Manchester, U.K.
- 11:05–11:30 F9 ASSEMBLY OF NANOSTRUCTURES ON ELECTRODE SURFACE FOR THE ASSAY OF DISEASE MARKER PROTEINS
Genxi Li (Keynote)
Nanjing University, China
- 11:30–11:45 F10 ELECTROANALYSIS BASED ON BORONATE DEPROTECTION
Guobao Xu (Invited)
Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
- 11:45–12:00 F11 ENGINEERED FLUORESCENT PROTEINS AND THEIR MOLECULAR MIMICS AS NEW TOOLKITS FOR BIOSENSING AND BIOIMAGING
Zhou Nie (Invited)
Hunan University, China
- Time:** October 9, 2017 PM (Monday)
- Location:** Room 306B, China National Convention Center, Beijing
- Chairpersons:** Prof. Xiangqun Zeng and Prof. Yitao Long
- 13:30–13:55 F12 SIGNAL SWITCH AND SIGNAL AMPLIFICATION FOR ELECTROCHEMICAL BIOSENSING
Huangxian Ju (Keynote)
Nanjing University, China
- 13:55–14:20 F13 USE OF DENDRIMERS FOR AMPLIFIED ELECTROCHEMILUMINESCENCE
Joohoon Kim (Keynote)
Kyung Hee University, Korea
- 14:20–14:45 F14 In VIVO IMAGING OF HYDROXYL RADICALS GENERATION BY CELLS-SELF-HELPED IN SITU SIGNAL AMPLIFICATION
Ronghua Yang (Keynote)
Changsha University of Science and Technology, China
- 14:45–15:00 F15 ELECTROCHEMICAL ANALYSIS AND MOLECULAR FILTRATION BASED ON SILICA ISOPOROUS MEMBRANES
Bin Su (Invited)
Zhejiang University, China
- 15:00–15:15 F16 ELECTROANALYSIS AND GAS SENSING BASED ON CARBON NANOCOMPOSITES
Wei Chen (Invited)
Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
- 15:15–15:25 **Coffee break**



- Chairpersons: Prof. Joocheon Kim and prof. Huangxian Ju
- 15:25–15:50 F17 ELECTROCHEMICAL SENSING AT SINGLE MOLECULE INTERFACE
Yitao Long (Keynote)
East China University of Science and Technology, China
- 15:50–16:15 F18 APPLICATIONS OF IONIC LIQUIDS IN ELECTROANALYSIS AND
ELECTROCATALYSIS OF GASES
Xiangqun Zeng (Keynote)
Oakland University, U.S.A.
- 16:15–16:40 F19 REAL-TIME TRACING OF CANCER CELLS THROUGH FLUORESCENCE
AND ELECTROCHEMICAL NANOPROBES
Xuemei Wang (Keynote)
Southeast University, China
- 16:40–16:55 F20 NANOZYMES: NEXT GENERATION OF ARTIFICIAL ENZYMES
Hui Wei (Oral)
Nanjing University, China
- 16:55–17:10 F21 DESIGN AND PREPARATION OF NOVEL INTEGRATED ELECTRODES
Li Wang (Oral)
Jiangxi Normal University, China
- 17:10–17:25 F22 ELECTROCHEMICAL CONVERSION OF MAGNETIC NANOPARTICLES
FOR MAGNETIC-SEPARATION/CONCENTRATION-
ELECTROCHEMICAL BIOSENSING OF CHLORAMPHENICOL
Yingchun Fu (Oral)
Zhejiang University, China
- Time: October 11, 2017 AM (Wednesday)
- Location: Room 306B, China National Convention Center, Beijing
- Chairpersons: Prof. Junjie Zhu and Prof. Chuan Zhao
- 8:00–8:25 F23 FABRICATION AND APPLICATION OF NOVEL FUNCTIONALIZED
NANOMATERIALS WITH ENHANCED ELECTROCATALYTIC ACTIVITY
Xiurong Yang (Keynote)
Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
- 8:25–8:50 F24 FABRICATING AND APPLICATION OF HYBRID ELECTRODES
Yuanhua Shao (Keynote)
Peking University, China
- 8:50–9:15 F25 ELECTROGENERATED CHEMILUMINESCENCE OF GRAPHENE
QUANTUM DOTS
Zhifeng Ding (Keynote)

- The University of Western Ontario, Canada
- 9:15–9:40 F26 ELECTROCHEMILUMINESCENCE RATIOMETRY FOR BIOANALYSIS
Jingjuan Xu (Keynote)
Nanjing University, China
- 9:40–10:05 F27 HIGHLY CHEMILUMINESCENT AND MAGNETIC GRAPHENE HYBRIDS
Hua Cui (Keynote)
University of Science and Technology of China, China
- 10:05–10:15 **Coffee break**
- Chairpersons:** Prof. Yuanhua Shao and Prof. Zhifeng Ding
- 10:15–10:40 F28 NANOARCHITECTURED ELECTROCHEMICAL CYTOSENSORS FOR SENSITIVE AND SELECTIVE DETECTION OF CANCER CELLS AND CELL - ASSOCIATED BIOMARKERS
Junjie Zhu (Keynote)
Nanjing University, China
- 10:40–11:05 F29 SALT-ON-A-CHIP: MINIATURISED IONIC LIQUID GAS SENSORS
Chuan Zhao (Keynote)
University of New South Wales
- 11:05–11:30 F30 INSIGHTS INTO THE MULTI-ANTIOXIDATIVE MECHANISMS OF MELANIN NANOPARTICLES
Lehui Lu (Keynote)
Chinese Academy of Science, Changchun Institute of applied Chemistry
- 11:30–11:45 F31 ANALYSIS OF MOLECULAR STRUCTURE AND WEAK INTERACTIONS AT THE INTERFACE OF BIOMIMETIC MEMBRANES
Xiue Jiang (Invited)
Changchun Institute of Applied Chemistry, Chinese Academy of Science
- 11:45–12:00 F11 CELL SURFACE GLYCAN DETECTION: FROM ELECTROANALYSIS TO FLUORESCENCE IMAGING
Lin Ding (Invited)
Nanjing University, China
- Time:** October 11, 2017 PM (Wednesday)
- Location:** Room 306B, China National Convention Center, Beijing
- Chairpersons:** Prof. Wei-ssu Liao and Prof. Yang Tian
- 13:30–13:55 F33 PLASMONICS ENHANCED SPECTROSCOPIC AND ELECTROCHEMICAL DETECTION OF BIOMOLECULES



- Xinghua Xia (Keynote)
Nanjing University, China
- 13:55–14:20 F34 NANOWIRE-BASED E-SKIN WEARABLE SENSING TECHNOLOGY PLATFORM
Wenlong Cheng (Keynote)
Monash University, Australia
- 14:20–14:45 F35 ELECTROCHEMICAL SENSING AND ANALYTICAL INSTRUMENT-INTEGRATED APPLICATIONS
Li Niu (Keynote)
Chinese Academy of Science, Changchun Institute of applied Chemistry
- 14:45–15:00 F36 EXPLOITING FLUORESCENT REPORTERS FOR DNA-BASED BIOSENSORS
Tao Li (Oral)
University of Science and Technology of China, China
- 15:00–15:15 F37 ELECTROCHEMICAL CURRENT TRANSDUCED MOLECULAR DEVICES AND BIOSENSORS
Yaqing Liu (Oral)
Tianjin University of Science and Technology, China
- 15:15–15:25 Coffee break
- Chairpersons: Prof. Xinghua Xia and Prof. Wenlong Cheng
- 15:25–15:50 F38 NOVEL ELECTROCHEMICAL BIOSENSOR WITH DUAL SIGNAL OUTPUTS FOR IN VIVO ANALYSIS IN BRAIN
Yang Tian (Keynote)
East China Normal University, China
- 15:50–16:15 F39 CHEMICAL LIFT-OFF LITHOGRAPHY FOR SENSORS AND DEVICES
Wei-ssu Liao (Keynote)
Nat. Taiwan University
- 16:15–16:30 F40 THE SELF-POWERED “SENSE-ACT-TREAT” SYSTEM THAT IS BASED ON A BIOFUEL CELL AND CONTROLLED BY BOOLEAN LOGIC
Ming Zhou (Oral)
Northeast Normal University, China
- 16:30–16:45 F41 NANOKIT FOR SINGLE CELL ELECTROCHEMICAL ANALYSIS
Dechen Jiang (Oral)
Nanjing University, China
- 16:45–17:00 F42 SOFT ELECTROCHEMICAL/ELECTRONIC DEVICES AND THEIR APPLICATIONS IN POINT-OF-CARE TESTING

Fei Li (Oral)

Xi'an Jiaotong University, China

17:00-17:15 F43 IN VIVO DETECTION OF PLANT HORMONES

Aixue Li (Oral)

Beijing Academy of Agriculture and Forestry Sciences, China

17:15-17:30 F44 SELF-SUPPORTING PTM (M = FE, CO, CU, AND NI) AEROGELS FOR
HIGHLY EFFICIENT ELECTROCATALYSIS

Yanling Zhai (Oral)

Qingdao University, China



POSTER SESSION

Time: PM 12: 30–13: 30, Oct. 9, 2017 (Monday)

F45 ELECTROCHEMILUMINESCENCE EMISSION COLORSWITCH IN EXPLORING MULTI-BIOMARKERS OF PROSTATE CANCER

Yinzhu Wang, Siyuan Ji, Wei Zhao*, Hongyuan Chen, Jingjuan XU*

State Key Laboratory of Analytical Chemistry for Life Science and Collaborative Innovation Center of Chemistry for Life Sciences,

School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, China

F46 DNA DETECTION BASED ON ENZYME DIGESTION IN SINGLE GLASS CONICAL NANOPORE

Xiuhong CAI, Shuohui CAO, Shenglin CAI, Yubin ZHENG, Muhammad AJMAL, Yaoqun LI*

Department of Chemistry and Key Laboratory of Analytical Sciences,

College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, 361005, China

F47 FE₂NI₂N NANOSHEET ARRAY: AN EFFICIENT NON-NOBLE-METAL ELECTROCATALYST FOR NON-ENZYMATIC GLUCOSE SENSING

Chao YOU, Xue JIANG, Hong LUO, Ke HUANG* and Xiaoli XIONG

College of Chemistry and Materials Science, Sichuan Normal University, Chengdu 610068, Sichuan, China

F48 A CYCLIC SIGNAL AMPLIFICATION STRATEGY TO FLUORESCENCE AND COLORIMETRIC DUAL-READOUT ASSAY FOR THE DETECTION OF H₂O₂-RELATED ANALYTES AND APPLICATION TO COLORIMETRIC LOGIC GATE

Hongyu CHEN, Qiuju LU, Youyu ZHANG* and Shouzhao YAO

Key Laboratory of Chemical Biology and Traditional Chinese Medicine Research (Ministry of Education), College of Chemistry and Chemical Engineering, Hunan Normal University, Changsha 410081, P.R. China

F49 AN ULTRASENSITIVE IMMUNOSENSOR FOR INDOLE-3-ACETIC ACID BASED ON PAMAM AND AUNPS-ANTIBODY COMPLEX

Haiyang LI, Ye HU, Aixue LI

1Beijing Research Center of Intelligent Equipment for Agriculture, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100097, China

2National Engineering Research Center for information Technology in Agriculture, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100097, China

F50 IN VIVO BIOSENSOR FOR GLUCOSE DETECTION IN PLANTS

Ye HU, Cheng WANG and Aixue LI*

- 1Institute of Beijing Research Center of Intelligent Equipment for Agriculture, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100097, China
2National Engineering Research Center for information Technology in Agriculture, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100097, China
- F51 **DETERMINATION OF Pb(II) AND Cd(II) IN ENVIRONMENTAL SAMPLES BY MODIFIED ELECTRODE AND DIFFERENTIAL PULSE ANODIC STRIPPING VOLTAMMETRY**
Zhiwei LAI, Yiru WANG, Xi CHEN*
1Department of Chemistry and the MOE Key Laboratory of Spectrochemical Analysis & Instrumentation, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen 361005, China
2State Key Laboratory of Marine Environmental Science, Xiamen University, Xiamen 361005, China
- F52 **PREPARATION OF SINGLE SOLID-NANOPORE ON THE WALL RATHER THAN ON THE TIP OF A GLASS CAPILLARY**
Fang FANG, Yunyun LI, Yanqin HE, Li TIAN and Zhiyong WU
Research Center for Analytical Sciences, Department of Chemistry, College of Sciences, Northeastern University, Shenyang, 110819, China
- F53 **TUNING OF DNA TRANSLOCATION SPEED THROUGH SINGLE PROTEIN NANOPORE BY PROTAMINE**
Huajie WANG, Shanshan SUN, Yuanmin LIU and Zhiyong WU Research Center for Analytical Sciences, Chemistry Department, College of Sciences, Northeastern University, Shenyang 110819, China
- F54 **TRANSLOCATION OF DNA THROUGH SINGLEPROTEIN NANOPORE INTERFACE WITH IONIC LIQUID ELCTROLYTE**
Shanshan SUN, Huajie WANG, Yuanmin LIU and Zhiyong WU
RCAS, College of Sciences, Northeastern University, Shenyang 110819, China
- F55 **RATIOMETRIC FLUORESCENT SENSING OF CHOLESTEROL BASED ON FUNCTIONALIZED SEMICONDUCTING POLYMER DOTS**
Junyong SUN, and Feng GAO*
College of Chemistry and materials Science, Anhui Normal University, Wuhu 241000, Anhui, P. R. China.
- F56 **A NOVEL ELECTROCHEMICAL NON-ENZYMATIC SENSOR BASED ON AU-HKUST-1 COMPOSITES SYNTHESIS WITH A COORDINATION REPLICATION STRATEGY FOR DETERMINATION OF GLUCOSE**
Jun LI, Jianfei XIA*, Zonghua WANG*
College of Chemistry and Chemical Engineering, Shandong Sino-Japanese Center for

Collaborative Research of Carbon Nanomaterials, Collaborative Innovation Center for Marine Biomass Fiber Materials and Textiles, Laboratory of Fiber Materials and Modern Textile, the Growing Base for State Key Laboratory, Qingdao University, Qingdao 266071, P. R. China

F57 **ULTRASENSITIVE HOMOGENEOUS ELECTROCHEMICAL APTASENSOR FOR THROMBIN DETECTION**

Yaxing ZHANG, Jianfei XIA*, Zonghua WANG*

College of Chemistry and Chemical Engineering, Shandong Sino-Japanese Center for Collaborative Research of Carbon Nanomaterials, Collaborative Innovation Center for Marine Biomass Fiber Materials and Textiles, Laboratory of Fiber Materials and Modern Textile, the Growing Base for State Key Laboratory, Qingdao University, Qingdao 266071, P. R. China

F58 **SYNTHESIS OF METHYLENE BLUE@ZIF-8-REDUCED GRAPHENE OXIDE NANOCOMPOSITE AND ITS APPLICATION IN ELECTROCHEMICAL SENSING OF RUTIN**

Gege YU, Jianfei XIA*, Zonghua WANG*

College of Chemistry and Chemical Engineering, Shandong Sino-Japanese Center for Collaborative Research of Carbon Nanomaterials, Collaborative Innovation Center for Marine Biomass Fiber Materials and Textiles, Laboratory of Fiber Materials and Modern Textile, the Growing Base for State Key Laboratory, Qingdao University, Qingdao 266071, P. R. China

F59 **SYNTHESIS OF AU NANOPARTICLES @ POROUS CARBON AND ITS APPLICATION TO CONSTRUCT AN ELECTROCHEMICAL APTASENSOR FOR THROMBIN DETECTION**

Yue YUAN, Jianfei XIA*, Zonghua WANG*

College of Chemistry and Chemical Engineering, Shandong Sino-Japanese Center for Collaborative Research of Carbon Nanomaterials, Collaborative Innovation Center for Marine Biomass Fiber Materials and Textiles, Laboratory of Fiber Materials and Modern Textile, the Growing Base for State Key Laboratory, Qingdao University, Qingdao 266071, P. R. China

F60 **DETECTION AND CHARACTERIZATION OF BIOMOLECULES USING ATOMIC FORCE MICROSCOPY**

Nan Wang, Miaomiao Zhang, Zhe Zhang, Jilin Tang*

State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, P. R. China

F61 **SILVER NANOPARTICLES PLASMONIC ENHANCED FRET RESONANCE ENERGY TRANSFER (FRET) IMAGING OF PROTEIN-SPECIFIC SIALYLATION ON CELL SURFACE SPECIFIC SIALYLATION ON CELL SURFACE**

Tingbi ZHAO, Ting Li, Yang LIU*

1Department of Chemistry, Beijing Key Laboratory for Analytical Methods and

Instrumentation, Tsinghua University, Beijing 100084, China

- F62 SENSITIVE ELECTROGENERATED CHEMILUMINESCENCE (ECL) BIOSENSOR FOR HISTONE ACETYLTRANSFERASE ACTIVITY ANALYSIS AND INHIBITION BASED ON SUPERSANDWICH DNA STABILIZED SILVER CLUSTERS

Yan ZOU, Yang LIU*

1Department of Chemistry, Beijing Key Laboratory for Analytical Methods and Instrumentation, Tsinghua University, Beijing 100084, China

- F63 “DEFECTS” INDUCED ELECTROCHEMILUMINESCENCE(ECL) OF SUPERTETRAHEDRAL CHALCOGENIDE NANOCCLUSERS

Feng WANG, Yang LIU*

1Department of Chemistry, Beijing Key Laboratory for Analytical Methods and Instrumentation, Tsinghua University, Beijing 100084, China

- F64 HIGHLY SENSITIVE PHOTOELECTROCHEMICAL BIOSENSOR FOR KINASE ACTIVITY DETECTION AND INHIBITION BASED ON THE SURFACE DEFECT RECOGNITION AND MULTIPLE SIGNAL AMPLIFICATION OF METAL-ORGANIC FRAMEWORKS

Zhiyong YAN, Yang LIU*

1 Beijing Center for Physical and Chemical Analysis, Beijing 100089, China.

2 Department of Chemistry, Beijing Key Laboratory for Analytical Methods and Instrumentation, Key Lab of Bioorganic Phosphorus Chemistry and Chemical Biology of Ministry of Education, Tsinghua University, Beijing 100084, China.

- F65 HIGHLY DISPERSED ULTRAFINE PT NANOPARTICLES ON NICKEL-COBALT LAYERED DOUBLE HYDROXIDE NANOARRAY FOR ENHANCED ELECTROCATALYTIC METHANOL OXIDATION

Zhenyu WANG, Feifei ZHANG and Zonghua WANG*

College of Chemistry and Chemical Engineering, Qingdao University, Qingdao 266071, China

- F66 NICKEL OXIDE/CARBON NANOTUBE NANOCOMPOSITES PREPARED BY ATOMIC LAYER DEPOSITION FOR ELECTROCHEMICAL SENSING APPLICATION

Lu ZHAO, Jing YU, Shuzhen YUE, Lixue ZHANG*, Pengran GUO, Yanfang MA, Zonghua WANG*

1College of Chemistry and Chemical Engineering, Qingdao University, No. 308 Ningxia Road, 266071 Qingdao, P. R. China

2Guangdong Provincial Key Laboratory of Emergency Test for Dangerous Chemicals, Guangdong Institute of Analysis, 510070 Guangzhou, P. R. China

- F67 METAL-ORGANIC FRAMEWORKS TEMPLATED SYNTHESIS OF CARBON NANODOTS FOR EFFICIENT ENZYME IMMOBILIZATION AND SENSITIVE DETECTION OF GLUCOSE

Chuantao HOU, and Zonghua WANG*



Shandong Sino-Japanese Center for Collaborative Research of Carbon Nanomaterials,
College of Chemistry and Chemical Engineering, Qingdao University, Shandong 266071,
China

F68 SYNTHESIS OF PT NANOPARTICLES IN CO-MOF@CNTS AS AN EFFECTIVE
CATALYST FOR METHANOL ELECTRO-OXIDATION

Huiyan ZOU, Feifei ZHANG*, Zonghua WANG*

College of Chemistry and Chemical Engineering, Qingdao University, Qingdao 266071,
China.

F69 SELF-SUPPORTING PTM (M = FE, CO, CU, AND NI) AEROGELS FOR HIGHLY
EFFICIENT ELECTROCATALYSIS

Yanling ZHAI*, Zhijun ZHU*, Sanjeev MUKERJEE

1Department of Chemistry and Chemical Engineering, Qingdao University, 212 Ningxia
Road, Qingdao, Shandong, P.R.C.

2Department of Chemistry, Northeastern University, Boston, MA, USA

F70 NANOPORE-BASED ANALYSIS OF SINGLE MOLECULES IN A CONFINED SPACE

Yao LIN, Yilun YING*, Xin SHI, Shaochuang LIU, Yitao LONG*

Key Laboratory for Advanced Materials & School of Chemistry and Molecular Engineering,
East China University of Science and Technology

F71 COMPOSITION-, SIZE-, GAP DISTANCE-DEPENDENT FLUORESCENCE
ENHANCEMENT FROM COUPLED METAL NANOSTRUCTURES AND THEIR
APPLICATION IN DETECTION OF DNA

Zhijun ZHU* and Qinghua XU

1Department of Materials and Engineering, Qingdao University, 308 Ningxia Road, Qingdao,
Shandong, P.R.C.

2Department of Chemistry, National University of Singapore, Singapore

F72 THE INTRINSIC PEROXIDASE-LIKE ACTIVITY OF MoS₂ NANOSHEETS LOADED
WITH Co NANODISKS AND ITS APPLICATIONS FOR COLORIMETRIC AND
ELECTROCHEMICAL BIOSENSING

Ying WANG, Kun Qi, Xiaoqiang CUI*

1 State Key Laboratory of Automotive Simulation and Control, Department of Materials
Science, Jilin University, Changchun 130012, China

F73 ULTRATHIN NiCo₂O₄ NANOSHEETS SUPPORTED ON A DISPOSABLE THREE-
DIMENSIONAL NANOPOROUS GOLD MICRONEEDLE FOR ENHANCED NON-
ENZYMATIC GLUCOSE BIOSENSING

Weiwei LI, Xiaoqiang CUI*

Department of Materials Science, Jilin University, Changchun 130012, China

F74 SINGLE MOLECULE INVESTIGATION OF THE SELF-ASSEMBLY SUPRAMOLECULES USING NANOPORES

Funa MENG, Yilun YING*, Junji ZHANG, Yitao LONG*

Key Laboratory for Advanced Materials, School of Chemistry and Molecular Engineering, East China University of Science and Technology, 130 Meilong Road, Shanghai, 200237, P. R. China

F75 OPTICAL-ELECTRO READOUT OF SINGLE MOLECULAR METASTABLE STATES IN CONFINED SPACES

Rui GAO, Yilun YING*, Yuanjie LI, Yongxu HU, Yitao LONG

Key Laboratory for Advanced Materials & School of Chemistry and Molecular Engineering, East China University of Science and Technology, Shanghai, 200237, P. R. China

F76 SELECTIVE AND SENSITIVE DETECTION OF METHYLCYTOSINE IN HUMAN SERUM BY AEROLYSIN NANOPORE

Jie YU, Chan CAO and Yitao LONG*

Key Laboratory for Advanced Materials & School of Chemistry and Molecular Engineering, East China University of Science and Technology, Shanghai 200237, P. R. China.

F77 LABEL-FREE MONITORING OF SINGLE MOLECULE IMMUNOREACTION WITHNANOPIPETTES

Rujia YU, Yilun YING, Yongxu HU, Yitao LONG*

Key Laboratory for Advanced Materials & School of Chemistry and Molecular Engineering, East China University of Science and Technology, Shanghai, 200237, P. R. China

F78 TWO-DIMENSIONAL π -CONJUGATED METAL-ORGANIC FRAMEWORK WITH HIGH ELECTRICAL CONDUCTRICAL FOR ELECTROCHEMICAL SENSING

Jiaoyan XU, Jianfei XIA*, Zonghua WANG*

College of Chemistry and Chemical Engineering, Shandong Sino-Japanese Center for Collaborative Research of Carbon Nanomaterials, Collaborative Innovation Center for Marine Biomass Fiber Materials and Textiles, Laboratory of Fiber Materials and Modern Textile, the Growing Base for State Key Laboratory, Qingdao University, Qingdao 266071, P. R. China.

F79 ELECTROFORMATION OF LIPID ASSEMBLIES AND THEIR APPLICATION

Xiaojun HAN

State Key Laboratory of Urban Water Resource and Environment, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin, 150001 China



SCHEDULE OF SESSIONS

G. ANALYTICAL TECHNIQUES IN LIFE SCIENCES

CHAIRMAN: Prof. Jianwei XIE

ORAL LECTURES

- Time: Oct. 9, 2017 AM (Monday)
- Location: Room 307A, China National Convention Center, Beijing
- Topic: Single molecule/cell/particle analysis & new bioanalytical techniques
- Chairmen: Prof. Zhaoxiang DENG and Prof. Xiaomei YAN
- 8:30–9:00 G3 QUANTITATIVE MULTIPARAMETER ANALYSIS OF SINGLE EXTRACELLULAR VESICLES FOR DISEASE DIAGNOSIS
Xiaomei YAN (Keynote)
The MOE Key Laboratory of Spectrochemical Analysis & Instrumentation, The Key Laboratory for Chemical Biology of Fujian Province, Department of Chemical Biology, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China
- 9:00–9:30 G4 BIOMEDICAL ANALYSIS AND MANIPULATION BY SPM AND TEM: FROM MOLECULE TO CELL
Jie SONG (Keynote)
Shanghai Jiao Tong University, Shanghai, China
- 9:30–10:00 G5 DNA–PROGRAMMABLE PLASMONIC NANOPROBES
Zhaoxiang DENG (Keynote)
Department of Chemistry, University of Science and Technology of China, Hefei, China
- 10:00–10:30 G6 RAMAN AND SURFACE ENHANCED RAMAN SPECTROSCOPY ON CELLULAR BIOSYSTEMS
Bin REN (Keynote)
State Key Laboratory for Physical Chemistry of Solid Surfaces, MOE Key Laboratory of Spectrochemical Analysis and Instrumentation, Collaborative Innovation Center of Chemistry for Energy Materials, College of Chemistry and Chemical Engineering, Xiamen University, China
- 10:30–10:40 **Coffee Break**
- 10:40–11:00 G20 MULTIPLE MODES CAPILLARY ELECTROPHORESIS APPLICATION IN BIOANALYSIS
Feng QU
School of Life Science, Beijing Institute of Technology, Beijing, China

11:00–11:20 G21 THE PHARMACOLOGY RESEARCH OF BIOTECH DRUG BASED ON SPR TECHNOLOGY

Jinjing CHE

Beijing Institute of Pharmacology and Toxicology, and Beijing Institute of Microbiology and Epidemiology, Beijing, China

11:20–11:40 G22 INTRACELLULAR TEMPERATURE SENSING WITH FLUORESCENT POLYMERS

Juan QIAO

Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China

11:40–12:00 G23 MATRIX ISOPOTENTIAL SYNCHRONOUS FLUORESCENCE SPECTROMETRY FOR THE RAPID DETERMINATION OF δ -AMINOLEVULINIC ACID IN URINE SAMPLES

Muhammad AJMAL

Department of Chemistry and Key Laboratory of Analytical Sciences, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China

Time: Oct. 9, 2017 PM (Monday)

Location: Room 307A, China National Convention Center, Beijing

Topic: Precision medical analysis

Chairmen: Prof. Renjun PEI and Prof. Guohua ZHOU

13:30–14:00 G7 HIGHLY SENSITIVE DETECTION OF DNA BIOMARKERS FOR PERSONALIZED MEDICINE

Guohua ZHOU (Keynote)

Department of Pharmacology, Jinling Hospital, State Key Laboratory of Analytical Chemistry for Life Science, Medical School of Nanjing University, Nanjing, China

14:00–14:30 G8 CAPTURE OF DYNAMIC AND TRANSIENT RECA NUCLEOFILAMENTS USING FAST CAPILLARY ELECTROPHORESIS AND SINGLE MOLECULE FRET

Hailin WANG (Keynote)

State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China

14:30–15:00 G9 DETECTION OF LIPIDOMIC CHANGES IN CANCER MICROENVIRONMENT USING MALDI-MSI

Zhili LI (Keynote)



- Department of Biophysics and Structural Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences and School of Basic Medicine, Peking Union Medical College, Beijing, China
- 15:00–15:20 G24 GUT-DERIVED LIPIDS REGULATE METABOLIC DISEASE
Changtao JIANG
Department of Physiology and Pathophysiology, School of Basic Medical Sciences, Peking University, and the Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing, China
- 15:20–15:30 **Coffee Break**
- 15:30–15:50 G10 NANOPARTICLE CATALYZED GAS-GENERATION REACTION FOR RAPID, SENSITIVE, AND PORTABLE BIOMEDICAL ANALYSIS
Chaoyong YANG (Keynote)
Department of Chemical Biology, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China
- 15:50–16:20 G11 HIGH EFFICIENT ISOLATION OF CIRCULATING TUMOR CELLS ON NANO-BIO INTERFACES
Renjun PEI (Keynote)
Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Suzhou, China
- 16:20–16:40 G25 PEROXIDASE-LIKE ACTIVITY OF EDTA AND ITS APPLICATION FOR ULTRASENSITIVE DETECTION OF TUMOR BIOMARKERS
Haowen HUANG
Key Laboratory of Theoretical Organic Chemistry and Function Molecule, Ministry of Education, Hunan University of Science and Technology, Xiangtan, China
- 16:40–17:00 G26 A HIGHLY SENSITIVE EGFR MUTATIONS QUANTIFICATION DETECTION METHOD BY REAL-TIME FLUORESCENCE PCR COUPLED WITH SERIAL INVASIVE REACTION
Zheng XIANG
Key Laboratory of Drug Quality Control and Pharmacovigilance of Ministry of Education, China Pharmaceutical University, and Department of Pharmacology, Jinling Hospital, Nanjing University School of Medicine, Nanjing, China
- Time: Oct. 11, 2017 AM (Wednesday)
Location: Room 307A, China National Convention Center, Beijing
Topic: Health and safety

Chairman:		Prof. Fuyu GUAN and Prof. Yi LU
8:30–9:00	G12	FUNCTIONAL DNA NANOTECHNOLOGY AND ITS APPLICATIONS IN MEDICAL DIAGNOSTICS AND IMAGING Yi LU (Keynote) Department of Chemistry, University of Illinois at Urbana–Champaign, USA
9:00–9:30	G13	INVESTIGATION OF NUCLEIC ACID MODIFICATIONS BY CHEMICAL LABELING–MASS SPECTROMETRY ANALYSIS Bifeng YUAN (Keynote) Key Laboratory of Analytical Chemistry for Biology and Medicine (Ministry of Education), Department of Chemistry, Wuhan University, China
9:30–9:50	G27	NEW TOXICOLOGICAL MECHANISM OF SULFUR MUSTARD AND ROLE OF ITS OXIDATIVE TOXIC MOLECULES Hua XU State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of Toxicant Analysis, Academy of Military Medical Sciences, Beijing, China
9:50–10:10	G28	MULUTI–ANALYSIS: FROM SENSING TO PERCEPTION Fengyu LI Institute of Chemistry, Chinese Academy of Sciences, Beijing, China
10:10–10:30	G29	INTELLIGENT AND RAPID DETECTION OF PATHOGENIC GENES BASED ON MOLECULAR LOGIC SYSTEMS Yaqing LIU Key laboratory of Food Nutrition and Safety (Ministry of Education), Tianjin Key Laboratory of Food Nutrition and Safety, Tianjin University of Science and Technology, Tianjin, China
10:30–10:40		Coffee Break
10:40–11:10	G14	TOWARD UNIVERSAL EXTRACTION AND DETECTION OF EXOGENOUS PEPTIDES IN EQUINE PLASMA AND URINE FOR DOPING CONTROL Fuyu GUAN (Keynote) School of Veterinary Medicine, University of Pennsylvania; and Pennsylvania Equine Toxicology and Research Laboratory, USA
11:10–11:30	G30	MICRO– AND NANO–TECHNOLOGIES FOR POINT–OF–CARE DIAGNOSTICS Feng XU Bionispired Engineering and Biomechanics Center (BEBC), School of Aerospace, and The Key Laboratory of Biomedical Information Engineering of



Ministry of Education, School of Life Science and Technology, Xi'an Jiaotong University, Xi'an, China

11:30–11:50 G31 HEALTH RISK ASSESSMENT OF EUGENOL RESIDUES IN FISH SAMPLES FROM BEIJING AQUATIC PRODUCT MARKETS

Jincheng LI

Chinese Academy of Fishery Sciences, and Beijing University of Agriculture, Beijing, China

11:50–12:10 G32 SURFACE-ENHANCED RAMAN SPECTROSCOPY METHODS ON SCREENING AND DETECTION ON CHEMICAL TOXICANTS

Yingjie ZHU

State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of Toxicant Analysis, Academy of Military Medical Sciences, Beijing, China

Time: Oct. 11, 2017 PM (Wednesday)

Location: Room 307A, China National Convention Center, Beijing

Topic: -omics analysis

Chairman: Prof. Ping XU and Prof. Pengyuan YANG

13:30–14:00 G15 PROTEOMIC IDENTIFICATION OF INTACT GLYCOPEPTIDES

Pengyuan YANG (Keynote)

Institutes of Biomedical Sciences and Department Chemistry, Fudan University, Shanghai, CHINA

14:00–14:30 G16 NOVEL CHROMATOGRAPHIC METHODS FOR THE PROTEOMICS ANALYSIS OF POST-TRANSLATIONAL MODIFICATIONS OF PROTEINS

Mingliang YE (Keynote)

Key Laboratory of Separation Sciences for Analytical Chemistry, National Chromatographic R&A Center, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, China

14:30–14:50 G33 COMPARATIVE EVALUATION THREE TYPES OF SPECTRAL LIBRARIES FOR FAST, DEEP, AND ACCURATE DIA QUANTIFICATION OF PROTEOMES OF HUMAN CELL LINES

Yue ZHOU

ThermoFisher Scientific, Shanghai, China

14:50–15:10 G34 NEW METHODS FOR EFFICIENT ENRICHMENT AND DEEP MAPPING OF PROTEIN PTMS IN HUMAN URINE

Weijie QIN

National Center for Protein Sciences Beijing, State Key Laboratory of

		Proteomics, Beijing Proteome Research Center, Beijing Institute of Radiation Medicine, Beijing, China
15:10–15:20		Coffee Break
15:20–15:50	G17	TEMPORAL REGULATION OF A SALMONELLA TYPHIMURIUM VIRULENCE FACTOR BY THE TRANSCRIPTIONAL REGULATOR YDCR Xiaoyun LIU(Keynote) Institute of Analytical Chemistry and Synthetic and Functional Biomolecules Center, College of Chemistry and Molecular Engineering, Peking University, Beijing, China
15:50–16:20	G18	ABERRANT LIPID METABOLISM IN HEPATOCELLULAR CARCINOMA REVEALED BY LIVER LIPIDOMICS Zhenwen ZHAO (Keynote) Beijing National Laboratory for Molecular Sciences, Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry Chinese Academy of Sciences, Beijing Mass Spectrum Center, Beijing, China
16:20–16:50	G19	DE NOVO SEQUENCING WITH MIRROR IMAGE PROTEASE OF LYSARGINASE AND TRYPSIN FOR LARGE SCALE PROTEOMICS Ping XU (Keynote) National Center for Protein Sciences Beijing; Beijing Proteome Research Center; Beijing, China
16:50–17:00		Closing Remarks

Poster Session

- G35 TUMOR MARKERS FLUORESCENCE ANALYSIS AND DRUG DELIVERY
Yingshu GUO, Xinxin SHANG, Shusheng ZHANG*
Shandong Province Key Laboratory of Detection Technology for Tumor Markers, School of Chemistry and Chemical Engineering, Linyi University, Linyi 276005, China
- G36 EXISTENCE OF MULTIPLE CAPSAICIN POLYMERS BY Q EXACTIVE UPLC-MS/MS AND FLUORESCENCE
Yifei WANG^{1,2}, Ying Gong², Li Tang^{*1}, Lei GUO^{*2}, Jianwei XIE²
1College of Life and Environmental Sciences, Minzu University of China, Beijing 100081, China
2State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China
- G37 THE MECHANISM OF THE EFFECT OF DNA ON THE OXIDASE MIMETIC ACTIVITY OF NANOCERIA WITH DIFFERENT CRYSTAL FACETS
Dingding YANG, Mengmei FA, Li GAO, Ruihuan ZHAO, Yangkai LUO, Xin YAO*
School of Chemistry and Chemical Engineering, University of Chinese Academy of Sciences, Beijing 100049, P.R. China
- G38 VISUALIZED DETECTION OF SINGLE-BASE DIFFERENCE IN MULTIPLEXED LOOP-MEDIATED ISOTHERMAL AMPLIFICATION AMPLICONS BY INVASIVE REACTION COUPLED WITH OLIGONUCLEOTIDE PROBE-MODIFIED GOLD NANOPARTICLES
Yan LU¹, Xueping MA¹, Jianping WANG¹, Nan SHENG², Tianhui DONG², Qinxin SONG³, Jianzhong RUI¹, Bingjie ZOU^{*1}, Guohua ZHOU^{*1}
1Department of Pharmacology, Jinling Hospital, Medical School of Nanjing University, Nanjing 210002, China
2School of Life Science and Technology, China Pharmaceutical University, Nanjing 210009, China
3Key Laboratory of Drug Quality Control and Pharmacovigilance, Ministry of Education, School of Pharmacy, China Pharmaceutical University, Nanjing 210009, China
- G39 IN-SITU STUDY OF INHIBITION AND REACTIVATION PROCESSES OF NERVE AGENTS USING ACETYLCHOLINESTERASE BIOSENSOR
Lijuan BU, Jijun TANG, Jianwei XIE*
State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China
- G40 NVP-BEZ235 DECREASES MUTANT P53 AND AFFECTS miR-23a-24a-27a TO INHIBIT METASTASIS IN BREAST CANCER CELLS

Jiajing CAI^{1,2}, Jingruo XIA¹, Dan XIAO¹, Chang LIU¹, Lei XU³, Xiaolan GUO^{1,2,3,*}, Dongsheng WANG^{2,*}

1 Department of Laboratory Medicine, North Sichuan Medical College, Nanchong, Sichuan, China

2 Department of Laboratory Medicine, Affiliated Hospital of North Sichuan Medical College, Nanchong, Sichuan, China

3 Translational Medicine Research Center, North Sichuan Medical College, Nanchong, Sichuan, China

G41 DISEASE-SPECIFIC β -HAPTOGLOBIN N-GLYCOSYLATION AS PERSONALIZED BIOMARKERS TO DIFFERENTIATE LUNG CANCER FROM BENIGN LUNG DISEASES

Tianjing CHEN, Ruiqing ZHANG, Mo ZHANG, Dan ZHANG, Yujie LIU and Zhili LI

Department of Biophysics and Structural Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences and School of Basic Medicine, Peking Union Medical College, Beijing 100005, China.

G42 DETECTION OF MICRORNA USING A PH TEST PAPER: A POINT-OF-CARE TESTING METHOD BASED ON A PH-RESPONSIVE AND HIGHLY EFFICIENT ISOTHERMAL AMPLIFICATION

Xiaoxia CHEN, Tianshu CHEN, Xiaoli ZHU*

Center for Molecular Recognition and Biosensing, School of Life Sciences, Shanghai University, Shanghai, 200444, China

G43 ENDOPLASMIC RETICULUM-TARGETED AND RATIOMETRIC FLUORESCENT PROBE FOR SPECIFIC ENDOGENOUS H₂O₂ IMAGING

Congcong GAO, Xiaoling ZHANG

Key Laboratory of Cluster Science of Ministry of Education, Beijing Key Laboratory of Photoelectronic/Electrophotonic Conversion Materials, School of Chemistry and Chemical Engineering, Beijing Institute of Technology, Beijing 100081, China

G44 DETERMINATION OF FREE CYANIDE IN CHINESE MEDICINES OF CYANOGENIC GLYCOSIDE: SURFACE-ENHANCED RAMAN SPECTROSCOPY AND GAS CHROMATOGRAPHY – NITROGEN AND PHOSPHORUS DETECTION TECHNIQUES

Ying GONG¹, Yi LIU^{1,2}, Jia CHEN¹, Yingjie ZHU¹, Jianfeng WU¹, Lei GUO^{*1}, Jianwei XIE¹

1 State Key Laboratory of Toxicology and Medical Countermeasures, and Institute of Pharmacology and Toxicology, Academy of Military Medical Sciences, Beijing 100850, China

2 China Clinic of the Military Band of the PLA, Beijing 100089, China

G45 INVESTIGATION ON THE ACTIVE CONFORMATION OF DNA APTAMER AGAINST RECOMBINANT HUMAN ERYTHROPOIETIN- α BY MULTIPLE SPECTROSCOPIC TECHNIQUES



- Xiaoqin HE, Junlin HE, Hua XU, Lei GUO*, Jianwei XIE
State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of
Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China
- G46 **ROLE OF AUNPS IN THE ANTIOXIDANT PROPERTIES OF AU/CEO2**
Mengmei FA, Li GAO, Dingding YANG, Ruihuan ZHAO, Yangkai LUO, Xin YAO*
School of Chemistry and Chemical Engineering, University of Chinese Academy of Sciences,
Beijing 100049, China
- G47 **DETERMINATION OF NUCLEOTIDE MODIFICATIONS BY CHEMICAL LABELING
COUPLED WITH MASS SPECTROMETRY ANALYSIS**
Hanpeng JIANG, Jun XIONG, Chengjie MA, Bifeng YUAN* and Yuqi FENG
Key Laboratory of Analytical Chemistry for Biology and Medicine (Ministry of Education),
Department of Chemistry, Wuhan University, Wuhan 430072, China
- G48 **DETECTION OF SUCCINYLCHOLINE CHLORIDE IN BIOLOGICAL MATRIX BY SURFACE
ENHANCEMENT RAMAN SPECTROSCOPY**
Kai WANG, Yingjie ZHU, Lei GUO*, Jianwei XIE
State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of
Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China
- G49 **ENCAPSULATED LIQUID CRYSTAL DROPLETS FOR IMAGING OF ENDOTOXIN
EFFECT ON CELL**
Mashooq KHAN, Jin-Ming LIN*
Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Department of
Chemistry, Tsinghua University, Beijing, 100084, China
- G50 **CATHEPSIN B AND S ANALYSIS AND APTAMER SELECTION VIA CAPILLARY
ELECTROPHORESIS**
Rizwan Ullah Khan, Feng Qu*, Ghulam Murtaza and Ayesha Sarfaraz Rizvi
School of Life Sciences, Beijing Institute of Technology, Beijing 100081, China
- G51 **LIPIDOMIC AND PROTEOMIC ANALYSIS OF PLASMA LIPOPROTEIN FRACTIONS IN
HIGH-FAT DIET-INDUCED HYPERLIPIDEMIC HAMSTERS**
Miao LIN, Menglin LI, Ning SHENG, Jinlan ZHANG*
Key Laboratory of Bioactive Substances and Resources Utilization of Chinese Herbal
Medicine, Institute of Materia Medica, Chinese Academy of Medical Sciences & Peking Union
Medical College, Beijing 100050, China
- G52 **PROFILING METABOLIC PATTERN OF CAPSAICIN IN HUNAM LIVER MICROSOMES
USING Q EXACTIVE UPLC-HR MS/MS COMBINED WITH DIAGNOSTIC IONS FILTER**
Lingling QIN¹, Yifei WANG^{1,2}, Ying GONG¹, Bin XU¹, Lei GUO*¹ and Jianwei XIE¹
¹State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of

Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China

2College of Life and Environmental Sciences, Minzu University of China, Beijing 100081, China

G53 RAPID AND HIGH AUTOMATIC QUALITATIVE AND SEMI-QUANTITATIVE ANALYSIS OF DRUGS IN URINE BY THE COUPLING OF ATLAS-USIS AND SHIMADZU METHOD PACKAGE FOR RAPID TOXICOLOGY SCREENING

Lun SONG¹, Hongyuan HAO¹, Jinting YAO², Taohong HUANG¹

1Shimadzu Global COE for Application & Technical Development, Shimadzu (China) Co., Ltd, Shanghai, China

2Shimadzu Global COE for Application & Technical Development, Shimadzu (China) Co., Ltd, Guangzhou, China

G54 A LOW-COST METHOD FOR SIMULTANEOUS DETECTION OF CONTINUOUSLY ADJACENT AND MULTIPLE ESR1 MUTATIONS IN A SINGLE CIRCULATING TUMOR CELL

Yiyun SHEN¹, Bingjie ZOU², Guohua ZHOU², Qinxin SONG^{*1}

1Key Laboratory of Drug Quality Control and Pharmacovigilance, Ministry of Education, School of Pharmacy, China Pharmaceutical University, Nanjing 210009, China. E-mail: songqinxin@sina.com

2Department of pharmacology, Jinling Hospital, Medical School of Nanjing University, Nanjing 210002, China.

G55 SIMULTANEOUS DETERMINATION OF TWELVE ANTICOAGULANT RODENTICIDES IN CLINICAL DRIED BLOOD SPOTS BY LIQUID CHROMATOGRAPHY-TRIPLE QUADRUPOLE MASS SPECTROMETRY

Yijun WANG¹, Lei GUO¹, Bin XU¹, Jia CHEN¹, Jiawei LI², Zewu QIU², Jianwei XIE^{1*}

1Institute of Pharmacology and Toxicology, Academy of Military Medical Sciences, and State Key Laboratory of Toxicology and Medical Countermeasures, Beijing 100850, China

2Department of Poisoning and Treatment, the Affiliated Hospital of Military Medical Sciences, Beijing 100071, China

G56 SENSITIVE COLORIMETRIC DETERMINATION OF NITRITE FROM SALIVA AND WATER SAMPLES BY PAPER-BASED ANALYTICAL DEVICE WITH SMARTPHONE

Xiuxiu ZHANG, Yizhen SONG, Fang FANG, Zhiyong WU*

Research Center for Analytical Sciences, Chemistry Department, College of Sciences, Northeastern University, Shenyang 110819, China

G57 SENSITIVE FLUORESCENT COLORIMETRIC DETECTION OF FLUORESCENT WHITENING AGENT BY PAPER-BASED ANALYTICAL DEVICE WITH SMARTPHONE CAMERA

Yizhen SONG, Xiuxiu ZHANG, Fang FANG, Zhiyong WU*

Research Center for Analytical Sciences, Chemistry Department, College of Sciences,
Northeastern University, Shenyang 110819, China

G58 SENSITIVE COPPER ION DETECTION BY ELECTROKINETIC STACKING AND ONLINE
REACTION ON PAPER-BASED ANALYTICAL DEVICE WITH SMARTPHONE

Lei LIU, Han GAO, Fang FAN, Zhiyong WU*

Research Center for Analytical Sciences, Department of Chemistry, College of Sciences,
Northeastern University, Shenyang 110819, China

G59 AN INSIGHT INTO SONO-ACTIVATED NANOLIPOSOMES-MEDIATED METABOLIC
REPROGRAMMING IN LIVER OF TUMOR-BEARING MICE

Xiaoyang XU, Shuangyan WEI, Weijie ZHANG, Zhaojing YIN, Xia XU*

School of Pharmaceutical Sciences, Zhengzhou University, Zhengzhou 450001, China

G60 IN SITU UNTARGETED ANALYSIS TO THE MEMBRANE LIPID PHENOTYPE OF
MACROPHAGES STIMULATED BY DIFFERENT CELLS-DERIVED CULTURE
SUPERNATANTS

Yupin XU, Qing WANG, Zhili LI*

Department of Biophysics and Structural Biology, Institute of Basic Medical Sciences,
Chinese Academy of Medical Sciences & School of Basic Medicine, Peking Union Medical
College, Beijing 100005, China.

G61 A COLOMETRIC AND FLUORESCENT PROBE FOR SELECTIVE AND QUANTITATIVE
BIOTHIOLS ANALYSIS AND ITS BIOIMAGING APPLICATIONS

Yong TIAN, Xiaoling ZHANG*

Key Laboratory of Cluster Science of Ministry of Education, Beijing Key Laboratory of
Photoelectronic/Electrophotonic Conversion Materials, School of Chemistry, Beijing Institute
of Technology, Beijing 100081, China

G62 MONOSACCHARIDE COMPOSITION OF WATER-SOLUBLE POLYSACCHARIDES
FROM FERULA SINKIANGENSIS K. M. SHEN REVEALED BY SIMULTANEOUS
QUANTIFICATION IN HPLC COUPLED WITH TANDEM MASS SPECTROMETRY

Lijun YUE^{1,2}, Yating HUANG¹, Chunlan LIU^{*1,2}

¹College of Life and Environmental Sciences, Minzu University of China, Beijing 100081,
China

²Beijing Engineering Research Center of Food Environment and Public Health, Minzu
University of China, Beijing 100081, China

G63 NON-TARGETED SCREENING OF FENTANYL-RELATED OPIOID ANALGESICS USING
DIAGNOSTIC IONS STRATEGY BY HIGH-RESOLUTION MASS SPECTROMETRY

Meijuan ZHANG, Bin XU, Lei GUO, Jianwei XIE*

State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of
Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China

G64 **SINGLE-PARTICLE STUDY OF SIDE-SCATTERED LIGHT IN THE SUBMICRON SIZE RANGE**

Wenqiang ZHANG, Xiuxiu HU, Ye TIAN, Chaoxiang CHEN, Shaobin ZHU, and Xiaomei YAN*

Department of Chemical Biology, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, Fujian 361005, China

G65 **AMELIORATION OF CRC PROLIFERATION WITH PROBIOTICS IN AN INTESTINAL MICROFLUIDIC DEVICE**

Lin ZHOU^{1,2}, Sifeng MAO², Xiangwei HE*, Jin-Ming LIN^{2,*}

1. College of Biological Sciences and Biotechnology, Beijing Forestry University, Beijing 100083, China

2. Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, China

G66 **A FACILE AND SENSITIVE MEASUREMENT OF GSH AND GSSG IN CELLS BY SURFACE-ENHANCED RAMAN SPECTROSCOPY**

Yingjie ZHU#, Jianfeng WU#, Zhongcai GAO, Hua XU, Lei GUO*, Jianwei XIE*

State Key Laboratory of Toxicology and Medical Countermeasures, and Laboratory of Toxicant Analysis, Academy of Military Medical Sciences, Beijing 100850, China

G67 **ULTRA PERFORMANCE LIQUID CHROMATOGRAPHY TANDEM TRIPLE QUADRUPOLE MASS SPECTROMETRY ANALYSIS OF N6-METHYL-2'-DEOXYLADENOSINE**

Weiye LAI, Baodong LIU, Hailin WANG*

Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences 18 Shuangqing Road, Haidian District, Beijing, China 100085

G68 **SENSITIVELY DETECTING SOMATIC MUTATION BY INVASIVE REACTION ASSISTED GOLD NANOPARTICLE ASSEMBLY**

Bingjie ZOU¹, Jianping WANG¹, Nan SHENG¹, Qinxin SONG², Guohua ZHOU*¹

1Department of Pharmacology, Jinling Hospital, Medical School of Nanjing University, Nanjing 210002, China

2Key Laboratory of Drug Quality Control and Pharmacovigilance, Ministry of Education, China Pharmaceutical University, Nanjing 210009, China



SCHEDULE OF SESSIONS H. ENVIRONMENTAL ANALYSIS CHAIRMAN: Prof. Liang-Hong GUO

ORAL presentation

Time:	Oct. 9, 2017 (Monday)
Location:	307B, China National Convention Center, Beijing
Chairman:	Dr. Liang-Hong Guo and Dr. Derek Muir
8:30-8:40	Opening Address
8:40-9:10	H2 EXPANDING THE NUMBER OF CHEMICALS MEASURED IN ENVIRONMENTAL MEDIA: CHALLENGES FOR ANALYTICAL MASS SPECTROMETRY Dr. Derek Muir (Invited) Environment and Climate Change Canada, Canada
9:10-9:40	H3 SPME TECHNIQUES FOR IN VIVO SAMPLING AND ANALYSIS Dr. Gangfeng Ouyang (Invited) Sun Yat-sen University, China
9:40-10:10	H4 INVESTIGATION ON OCCURRENCE AND FATE OF CHLORINATED POLYFLUOROALKYL ETHER SULFONATES BY HIGH RESOLUTION MASS SPECTROMETRY Dr. Ting Ruan (Invited) Research Center for Eco-environmental Sciences, CAS, China
10:10-10:30	Coffee Break
10:30-11:00	H5 Research on Porphyrin-Based Electrochemistry and a Naked-Eye Colorimetric Nanosensor Dr. Xiaoquan Lu (Invited) Tianjin University, China
11:00-11:20	H6 Determination of Polychlorinated Biphenyls (PCBs) in Soils by Accelerated Solvent Extraction and GC-MS/MS Dr. Zhongyang Hu (Oral) Thermo Fisher Scientific, China
Lunch	
Chairman:	Dr. Chris Le and Dr. Jay Gan
14:00-14:30	H7 HPLC-MS/MS identification of new halogenated nitrogenous disinfection byproducts - halogenated peptides in drinking water Dr. Xingfang Li (Invited)

- University of Alberta, Canada
- 14:30–15:00 H8 Antimicrobials and Antimicrobial Resistance in Urban Waters
Dr. Karina Y. H. GIN (Invited)
- National University of Singapore, Singapore
- 15:00–15:30 H9 EXPLORING TRANSFORMATION PATHWAYS OF EMERGING
CONTAMINANTS IN PLANTS
Dr. Jay Gan (Invited)
- University of California, USA
- 15:30–15:50 **Coffee Break**
- 15:50–16:20 H10 Recent advances in environmental analysis of arsenic species
Dr. Chris Le (Invited)
- University of Alberta, Canada
- 16:20–16:50 H11 Prioritize and Predict Toxicities of Chemical Using Reduced Transcriptome
Approach
Dr. Xiaowei Zhang (Invited)
- Nanjing University, China
- Time:** Oct. 11, 2017 AM (Wednesday)
- Location:** Room 307B, China National Convention Center
- Chairman:** Dr. Zongwei Cai and Dr. Nobuyoshi Yamashita
- 8:30–9:00 H12 Metabolomics for investigation on TCDD toxicity and associated diseases
Dr. Zongwei Cai (Invited)
- Hong Kong Baptist University, China
- 9:00–9:30 H13 Analytical and Toxicological Approaches for Airborne Particulate Matter
Pollution in Urban China
Dr. Xiangdong Li (Invited)
- Hong Kong Polytechnic University, Hong Kong, China
- 9:30–10:00 H14 Use of Integrated Systems for Solving Aerosol Problems
Dr. Maosheng Yao (Invited)
- Peking University, China
- 10:00–10:20 **Coffee Break**
- 10:20–10:50 H15 NON-TARGET ANALYSIS of AMBIENT AIR USING CRYOGENIC AIR
SAMPLER
Dr. Nobuyoshi Yamashita (Invited)
- National Institute of Advanced Industrial Science and Technology (AIST),
Japan
- 10:50–11:20 H16 APPLICATION OF SOLID-STATE NMR SPECTROSCOPY IN THE



ENVIRONMENTAL PHOSPHORUS SPECIATION

Dr. Wei Li (Invited)

Nanjing University, China

11:20–11:40 H17 Fractions and BIOAVAILABILITY OF ARSENIC IN ATMOSPHERIC fine particles

Dr. Chungang Yuan (Oral)

North China Electric Power University, China

Lunch

Chairman: Dr. Tiangang Luan and Dr. Kiwao Kadokami

14:00–14:30 H18 Development of Automated Identification and Quantification System (AIQS) for Target Screening and Its Application to Environmental Samples

Dr. Kiwao Kadokami (Invited)

The University of Kitakyushu, Japan

14:30–15:00 H19 Challenges in the analysis of microplastic in environmental samples

Dr. Yan Lin (Invited)

Norwegian Institute for Water Research, Norway

15:00–15:30 H20 DIRECT ANALYSIS OF LIPIDS IN SMALL ORGANISMS AND CELLS BY SURFACE-COATED PROBE NANO-ELECTROSPRAY IONIZATION MASS SPECTROMETRY

Dr. Tiangang Luan (Invited)

Sun Yat-sen University, China

15:30–16:00 H21 NON-INVASIVE HUMAN BIOMONITORING TECHNIQUES FOR PER- AND POLYFLUOROALKYL SUBSTANCES

Dr. Yali Shi (Invited)

Research Center for Eco-environmental Sciences, CAS, China

16:00–16:10 Closing Remarks

POSTER SESSION

Time: Oct. 11, 2017 PM (Wednesday)

H22 URINARY METABOLITES OF ORGANOPHOSPHATE FLAME RETARDANTS IN CHINA AND THEIR ASSOCIATIONS WITH OXIDATIVE STRESS

Tao ZHANG^{1*}, Shao-you LU², Yan-xi LI¹, Chuan-zi GAO¹, Rong-liang QIU

1School of Environmental Science and Engineering, Guangdong Provincial Key Laboratory of Environmental Pollution Control and Remediation Technology, Sun Yat-sen University, Guangzhou 510275, PR China

2Shenzhen Center for Disease Control and Prevention, Shenzhen, 518055, China

H23 A PRACTICAL METHOD FOR THE DETECTION OF NDMA BY THE LIQUID CHROMATOGRAPHY - TANDEM MASS SPECTROMETRY IN MULTIPLE WATER MATRICES

DianBao YU¹, LingLing SHEN¹, Jiting YAO¹ and Taohong HUANG²

1Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Guangzhou branch, 7FL, T.P. Plaza, 9/109, Liuhua Road, Guangzhou, P.R. China

2Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Shanghai branch, Huaxin C801 building, No. 180, Yizhou Road, Shanghai, P.R. China

H24 DETERMINATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN CHINESE HERBAL MEDICINE BY GC-MS/MS

Wenyu KANG¹, Ying YE¹, Jinting YAO¹, Jun FAN² and Taohong HUANG²

1Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Guangzhou branch, 7FL, T.P. Plaza, 9/109, Liuhua Road, Guangzhou, P.R. China

2Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Shanghai branch, Huaxin C801 building, No. 180, Yizhou Road, Shanghai, P.R. China

H25 LABEL-FREE SENSING OF 2, 4, 6-TRINITROTOLUENE BASED ON HIGHLY CHEMILUMINESCENT MAGNETIC BEADS

Weijun KONG¹, Xiaoning ZHAO², Qiuju ZHU¹, Lingfeng GAO¹, Hua CUI¹

1CAS Key Laboratory of Soft Matter Chemistry, Collaborative Innovation Center of Chemistry for Energy Materials, Department of Chemistry, University of Science and Technology of China, Hefei, Anhui 230026, P. R. China

2Beijing Yunci Technology Co., Ltd. Room 308 Building 2, 8 Life Science Park Road, PKUcare Industrial Park Changping District. Beijing, 102200, P. R. China

H26 DETERMINATION OF LEAD AND OTHER METAL ELEMENTS IN PM_{2.5} BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY

Yuehan ZHONG¹, Lihua WANG¹, Qilong LI¹, Youbao SUN², Jiting YAO¹, and Taohong HUANG²



- 1Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Guangzhou branch, 7FL,T.P.Plaza,9/109,Liuhua Road, Guangzhou, P.R. China
- 2Analytical Instruments Dept. Analytical Center, Shimadzu (China) Co., LTD. Shanghai branch, Huaxin C801 building,No.180, Yizhou Road, Shanghai, P.R. China
- H27 SPECIATION ANALYSIS OF MERCURY IN HUMAN HAIR BY COUPLING GAS CHROMATOGRAPHY TO POINT DISCHARGE ATOMIC EMISSION SPECTROMETRY
Yuan YANG¹, Xiandeng HOU^{*1,2} and Chengbin ZHENG^{*1}
1College of Chemistry, Sichuan University, 29 Wangjiang Road, Chengdu 610064, China
2Analytical & Testing Center, Sichuan University, 29 Wangjiang Road, Chengdu 610064, China
- H28 ARGININE DECARBOXYLASE: A NOVEL BIOLOGICAL TARGET OF MERCURY COMPOUNDS IDENTIFIED IN PC12 CELLS
Sufang WANG, Yu YANG*, Liang-Hong GUO*
State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center of Eco-Environmental Sciences, Chinese Academy of Science, Beijing 100085, China
- H29 LUMINESCENT SENSING OF CU(II) ION BY A PORPHYRINIC METAL-ORGANIC FRAMEWORK WITH A RAPID RESPONSE
Linnan LI, Sensen SHEN, Ruoyun LIN, Yu BAI, and Huawei LIU*
Beijing National Laboratory for Molecular Sciences, Key Laboratory of Bioorganic Chemistry and Molecular Engineering of Ministry of Education, Institute of Analytical Chemistry, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, P. R. China.
- H30 A PHOSPHORYLETHANOLAMINE-FUNCTIONALIZED SUPER-HYDROPHILIC 3D GRAPHENE-BASED FOAM FILTER FOR WATER PURIFICATION
Yiying CHEN¹, Xi CHEN^{*1,2}
1Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen 361005, China;
2State Key Laboratory of Marine Environmental Science, Xiamen University, Xiamen 361005, China.
- H31 STUDY THE ESTROGENIC EFFECTS OF BPA ANALOGUES VIA G PROTEIN COUPLED ESTROGEN RECEPTOR (GPER) PATHWAY
Xiao-Min REN*, Ling-Ying CAO, Liang-Hong GUO
State Key Laboratory of Environmental Chemistry and Eco-toxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China
- H32 HYDROLATED POLYBROMINATED BIPHENYL ETHERS EXERT ESTROGENIC EFFECTS VIA NON-GENOMIC G PROTEIN-COUPLED ESTROGEN RECEPTOR MEDIATED PATHWAYS

- Linying CAO, Xiaomin REN*, Lianghong GUO*
- State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China
- H33 **DYNAMIC TRACKING OF HIGHLY TOXIC INTERMEDIATES IN PHOTOCATALYTIC DEGRADATION OF PENTACHLOROPHENOL BY CONTINUOUS FLOW CHEMILUMINESCENCE**
- Haiyan MA, Lixia ZHAO*, Lianghong GUO*
- State Key Laboratory of Environmental Chemistry and Ecotoxicology of Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China
- H34 **DETECTION OF AFLATOXIN B1 USING FLUORESCENT APTAMER STRUCTURE SWITCH**
- Qiang ZHAO*, Yapiao LI, Linlin SUN
- State Key Laboratory of Environmental Chemistry and Eco-toxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China
- H35 **QUANTITATION OF ARISTOLOCHIC ACIDS IN CORN, WHEAT GRAIN, AND SOILS SAMPLES COLLECTED IN SERBIA: IDENTIFYING A NOVEL EXPOSURE PATHWAY IN THE ETIOLOGY OF BALKAN ENDEMIC NEPHROPATHY**
- Wan CHAN*¹, and Nikola M. Pavlovic²
- 1Department of Chemistry, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong
- 2Serbian Medical Society, Branch Nis, 18000 Nis, Serbia
- H36 **A MOLECULARLY IMPRINTED TWO-DIMENSIONAL PHOTONIC CRYSTAL HYDROGEL SENSOR FOR OXYTETRACYCLINE DETECTION**
- Tengsheng XIE, Zihui MENG*
- School of Chemistry and Chemical Engineering, Beijing Institute of Technology, Beijing 100081, China.
- H37 **Bioavailability And Speciation Of Arsenic In Atmospheric PM2.5 In Baoding City, China**
- Jiaojiao XIE, Yiwen Shen, Kaiqiang He, Chungang Yuan*, Hongtao Zhu, Kegang Zhang
- Department of Environmental Science & Engineering, North China Electric Power University, Baoding 071000, Hebei, China
- H38 **A COMPARATIVE STUDY ON SPECIES ANALYSIS OF ARSENIC IN INDOOR/OUTDOOR**
- Kaiqiang HE, Lianqing YIN, Kegang ZHANG, Peiyao XU, Jiaojiao XIE, Yiwen SHEN, Chungang YUAN
- Department of Environmental Science & Engineering, North China Electric Power University, Baoding 071000, Hebei, China
- H39 **OCTADECY-MODIFIED ORDERED MESOPOROUS CARBON AS A MASS**



SPECTROMETRY PROBE FOR HIGH-THROUGHPUT SCREENING OF DOPING
AGENTS IN A SINGLE DROP OF HUMAN WHOLE BLOOD

Jing WANG¹, Qian LIU^{1,2*}

1Institute of Environment and Health, Jiangnan University, Wuhan 430056, China

2State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for
Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China

H40 USE OF ISOTOPE FRACTIONATION TO REVEAL THE MECHANISM OF THE
PERSISTENCE OF SILVER NANOPARTICLES IN NATURAL WATER

Tuoya ZHANG^{1,2}, Qian LIU^{*1,2} and Guibin JIANG^{1,2}

1State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for
Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China

2University of Chinese Academy of Sciences, Beijing 100049, China

AGENDA OF SESSION I

I. CHEMICAL METROLOGY AND REFERENCE MATERIALS

Date	Time	Location & Activities
Oct. 9 (Mon.)	AM 9:00–11:45	Oral Presentation Location: Room 308, China National Convention Center, Beijing I2 – I6
	PM 13:30–16:30	Oral Presentation Location: Room 308, China National Convention Center, Beijing I7 – I12
Oct. 11 (Wed.)	AM 9:00–11:35	Oral Presentation Location: Room 308, China National Convention Center, Beijing I13 – I17
	PM 13:30–16:30	Oral Presentation Location: Room 308, China National Convention Center, Beijing I18 – I23



SCHEDULE OF SESSIONS CHEMICAL METROLOGY AND REFERENCE MATERIALS

Time:		Oct. 9, 2017 AM (Monday) (DAY1 for Session)
Location:		Room 308, China National Convention Center, Beijing
9:00–9:10		Welcome Speech (Prof. Hongmei Li, NIM)
Chairman:		Dr. Zoltan MESTER, Dr. Ting HUANG
9:10–9:35	I2	Challenges of NMIJ to Organic Purity Assessment Dr. Masahiko NUMATA (Keynote) Leader of Organic Primary Standards Group, Research Institute for Material and Chemical Measurement, National Metrology Institute of Japan (NMIJ), AIST
9:35–10:00	I3	New Methods of NMR for Metrology Dr. Ting HUANG (Keynote) Researcher of the Organic Analysis Laboratory in the Division of Chemical Metrology and Analytical Science of the National Institute of Metrology (NIM), China
10:00–10:30		Coffee Break
Chairman:		Dr. Zoltan Mester, Dr. Ting HUANG
10:30–10:55	I4	The Ultimate Goal of Elemental Analysis Towards Absolute Quantification Dr. Yong-Hyeon YIM (Keynote) Head of the Center for Inorganic Analysis, Korea Research Institute of Standards and Science (KRISS)
10:55–11:20	I5	Quantitative Analysis of Impurities by GD-MS and Total Purity Analysis of High Pure Metal Dr. Tao ZHOU (Keynote) PhD in analytical chemistry. Research fellow of National Institute of Metrology, China (NIM)
11:20–11:45	I6	Metrology of Stable Isotope Characterization Dr. Zoltan MESTER (Keynote) Vice President of Analytical Chemistry Division, International Union of Pure and Applied Chemistry (IUPAC)
Time:		Oct. 9, 2017 PM (Monday) (DAY1 for Session)
Location:		Room 308, China National Convention Center, Beijing
Chairman:		Dr. Derek CRASTON, Prof. Wenxiang CHEN

- 13:30–13:55 I7 Traceability in Proficiency Testing: Trueness Verification Programs in Laboratory Medicine
Prof. Wenxiang CHEN (Keynote)
Director of National Center for Clinical Laboratories
- 13:55–14:20 I8 Traceability Requirements for Proficiency Testing Provider and Reference Material Producer Accreditations
Dr. Wang-wah WONG (Keynote)
Executive Administrator, Hong Kong Accreditation Service, Innovation and Technology Commission, HKSAR
- 14:20–14:45 I9 Metrology Research on Protein Quantification and Bioimaging by Using Isotope Dilution ICP–MS
Dr. Liuxing FENG (Keynote)
PhD in analytical chemistry. Associated research follow of National Institute of Metrology, China (NIM)
- 14:45–15:15 Coffee Break
- Chairman:** **Dr. Derek CRASTON, Prof. Wenxiang CHEN**
- 15:15–15:40 I10 Food Allergens: Measurement and Reference Material Challenges
Dr. Derek CRASTON (Keynote)
Chief Scientific Officer and Government Chemist, Science & Innovation, LGC
- 15:40–16:05 I11 Development of a Matrix-based Reference Material of Total Homocysteine in Human Serum
Dr. Dewei SONG (Keynote)
PhD in analytical chemistry. Associated research follow of National Institute of Metrology, China (NIM)
- 16:05–16:30 I12 CDC's Clinical Standardization Programs
Dr. Uliana DALINENKO (Keynote)
Associate Service Fellow, Centers for Disease Control and Prevention, CDC
- Time:** Oct. 11, 2017 AM (Wednesday) (DAY2 for Session)
- Location:** Room 308, China National Convention Center, Beijing
- Chairman:** **Dr. Steve WISE, Dr. Angelique BOTHA**
- 9:00–9:25 I13 Principles for Implementing the Requirements of ISO 17034:2016 in the New ISO Guide 35:2017
Dr. Angelique BOTHA (Keynote)
Chief metrologist, Inorganic Analysis, National Metrology Institute of South Africa (NMISA)
- 9:25–9:50 I14 International Laboratory Proficiency Testing of POPs in Foods and



		Development of Reference Materials
		Prof. Jingguang LI (Keynote)
		China National Center for Food Safety Risk Assessment (CFSA)
9:50–10:20		Coffee Break
Chairman:		Dr. Steve WISE, Dr. Angelique BOTHA
10:20–10:45	I15	Establishing Metrological Traceability in Chemical Measurements for Food Safety
		Dr. Tanglin TEO (Keynote)
		Director of Chemical Metrology Laboratory, Health Sciences Authority(HSA), Singapore
10:45–11:10	I16	Application of Chemical Purification Technique in Preparation of Reference Materials
		Dr. Lei ZHANG
		Alta Scientific Co., Ltd
11:10–11:35	I17	Reference Materials for Dietary Supplements – Why, What, and How
		Dr. Steve WISE (Keynote)
		Scientific Consultant, Office of Dietary Supplements (ODS), National Institutes of Health (NIH)
Time:		Oct. 11, 2017 PM (Wednesday) (DAY2 for Session)
Location:		Room 308, China National Convention Center, Beijing
Chairman:		Dr. Maria Fernandes–WHALEY, Prof. Hongmei LI
13:30–13:55	I18	An Overview of Food and Environmental Reference Measurements at NMISA – the Southern African Perspective
		Dr. Maria Fernandes–WHALEY (Keynote)
		Section Head of Organic Analysis & Reference Material Programme Manager of National Metrology Institute of South Africa (NMISA)
13:55–14:20	I19	The Effects of Isotope-labeled Analogs on the LC-IDMS Measurement by Comparison of ESI Responses and Matrix Effect of Melamine, ¹³ C ₃ –melamine, ¹³ C ₃ + ¹⁵ N ₃ –melamine, and ¹⁵ N ₃ –melamine
		Dr. Xiuqin LI (Keynote)
		PhD in analytical chemistry. Associated research follow of National Institute of Metrology, China (NIM)
14:20–14:45	I20	Application of ICP–MS in Food Analysis: Removal of Matrix Effects for Accuracy and Precision
		Dr. Yanbei ZHU (Keynote)
		Senior Researcher, Environmental Standards Research Group, Research

		Institute for Material and Chemical Measurement, NMIJ, AIST
14:45–15:15		Coffee Break
Chairman:		Dr. Maria Fernandes–WHALEY, Prof. Hongmei LI
15:15–15:40	I21	The Certification of the Mass Fraction of Arsenobetaine in Water: ERM®–AC626
		Dr. Jens BOERTZ
		LGC Standards GmbH
15:40–16:05	I22	Development of Food CRMs for Nutrient Analysis
		Dr. Byungjoo KIM (Keynote)
		Head of the Center for Organic Analysis, Korea Research Institute of Standards and Science (KRISS)
16:05–16:30	I23	Development of Isotope Dilution Mass Spectrometry Method
		Prof. Hongmei Li (Keynote)
		Director, Division of Chemical Metrology & Analytical Science/National Institute of Metrology(NIM), China

Poster Session

- I24 PURITY DETERMINATION OF 9 ALCOHOLS AND ETHERS BY DIFFERENTIAL SCANNING CALORIMETRY
Heng SU¹, Ting Wang¹, Haifeng Wang², Baijun Liu¹, Wei Liu¹, Xiaoping Song², Kang Ma², Wei Zhang²
1China University of Petroleum-Beijing, Beijing 102249, China
2National Institute of Metrology of China, Beijing 100029, China
- I25 IMPROVED CONTINUOUS PACKING OF THE LIQUID CERTIFIED REFERENCE MATERIAL FOR WATER CONTENT
Ting WANG¹, Haifeng WANG², Xingliang HUANG¹ and Xiaoping SONG²
1Chemical Engineering, College of Chemical Engineering, China University of Petroleum, Beijing 102249, China
2Institute of Nano, National Institute of Metrology of China, Beijing 100029, China
- I26 DETERMINATION OF WATER CONTENT OF CRUDE OIL BY AZEOTROPIC DISTILLATION-KARL FISCHER COULOMETRIC TITRATION
C. Y. PEI¹, H. F. WANG², Q. YE¹, X. P. SONG², Z. Y. LI², K. MA²
1 Beijing University of Technology 100022, China
2 National institute of metrology of China, Beijing 100013, China
- I27 ESTABLISHMENT OF SERUM FERRITIN TRACEABILITY SYSTEM
Tao YANG, Wanju LI, Deqian YANG, Qian Li
Maccura Biotechnology Co., Ltd.
- I28 SIMULTANEOUS DETERMINATION OF PERFLUOROALKYL SUBSTANCES IN FISH TISSUE BY ISOTOPE DILUTION MASS SPECTROMETRY AND STANDARD ADDITION ISOTOPE DILUTION MASS SPECTROMETRY
Yan GAO, Xiuqin LI and Qinghe ZHANG*
Division of Metrology in Chemistry, National Institute of Metrology, Beijing 100029, P. R. China
- I29 MASS SPECTROMETRIC FRAGMENTATION OF BROMINATED FLAME RETARDANT METABOLITES
Tingting MA^{1,2}, Chi Zhang², Xiuqin LI², Qinghe ZHANG^{2*}
1Department of Biological Engineering, Beijing University of Chemical Technology, Beijing 100029, P. R. China
2Division of Metrology in Chemistry, National Institute of Metrology, Beijing 100029, P. R. China
- I30 QUANTIFICATION OF PROGESTERONE IN URINE BY ISOTOPE DILUTION MASS

SPECTROMETRY AND IT UNCERTAINTY EVALUATION

Lianhua SHI, Youxun JIN, Xinhua DAI, Bei XU, Hongmei LI

Division of Chemical metrology and Analytical Science, NIM, China

I31 APPLICATION OF POLONIUM STANDARD REFERENCE MATERIALS IN SAMPLE ANALYSIS

Fuyou FAN, Yu ZOU, Juncheng LIANG*, Jian ZHANG*

Division of Ionizing Radiation Metrology, National Institute of Metrology, Beijing 100013, China

I32 DETERMINATION OF $\delta^{13}\text{C}$ OF ETHANOL BY ELEMENT ANALYSIS-ISOTOPE RATIO MASS SPECTROMETRY AND LIQUID CHROMATOGRAPHY-ISOTOPE RATIO MASS SPECTROMETRYXiao LI, Hai LU

Division of Chemical metrology and Analytical Science, NIM, China

I33 A NOVEL LIQUID-LIQUID EXTRACTION METHOD FOR ISOLATING PHTHALATES FROM INFANT FORMULA

Bingbing XU¹, Weihuang ZHU¹, Xiaomin LI^{2,*}, Qinghe ZHANG² and Xiuqin LI²

1School of Environmental and Municipal Engineering, Xi'an University of Architecture & Technology, Xi'an, 710055, China

2Division of chemical metrology, National Institute of Metrology (NIM), Beijing, 100029, China

I34 A NOVEL TYPE OF MAGNETIC COVALENT ORGANIC FRAMEWORKS-BASED APPROACH FOR IDENTIFICATION AND QUANTITATION OF TUMOR BIOMARKER HEAT SHOCK PROTEIN 90 α AND ITS INTERACTION PROTEINSRui ZHAI, Xiaoyun GONG, You JIANG, Zejian HUANG, Xiang FANG *

National Institute of Metrology, Beijing 100013, China

I35 CERTIFIED REFERENCE MATERIALS FOR WATER CONTENT IN SOLID

Haifeng WANG^{*1}, Heng SU², Ting WANG², Xiaoping SONG¹ and Kang MA¹

1 National Institute of Metrology of China, Beijing 100029, China

2 China University of Petroleum-Beijing, Beijing 102249, China

I36 PROGRESS AND APPLICATION OF PROTEIN METROLOGY

Liqing WU, Youxun JIN, Wei MI and Jing WANG

Division of Medical and Biological Measurements, National Institute of Metrology, P.R. China, Beijing 100029, China

I37 PREPARATION OF TRANSFERRIN REFERENCE MATERIAL WITH HIGH PURITY AND FUNCTION FROM COHN FRACTION IV

Jinlong KONG¹, Can QUAN^{*1}, Hongmei LI¹, Qidi WANG¹, Jian LUO², Yongyue SUN³

1National Institute of Metrology, Beijing, 100029, China;



2Institute of Process Engineering, Chinese Academy of Sciences (IPE-CAS), Beijing,
100190, China

3Tianjin University of Technology

I38 ACCURATE DETERMINATION OF PAHs IN MATE TEA BY GAS CHROMATOGRAPHY-
ISOTOPE DILUTION MASS SPECTROMETRY

Hua TANG^{*1}, Dazhou CHEN¹, Chunxin LI¹, Changjun YE²

1Division of Metrology in Chemistry, National Institute of Metrology, Beijing, China

2Beijing University of Chemical Technology, Beijing, China

I39 STUDY OF KEFENG 8-86 GM RICE REFERENCES MATERIALS

Yunhua GAO¹, Hyong-Ha Kim², Mamoru Kawaharasaki³, Sachie Shibayama³

1National Institute of Metrology, Beijing, 100029, China.

2Korea Research Institute of Standards and Science Daejeon 34113, Republic of Korea.

3National Metrology Institute of Japan, Tsukuba, 305-8563, Japan.

I40 STUDY ON THE METHOD OF ACCELERATING SOLVENT EXTRACTION TO ANALYZE
POLYCYCLIC AROMATIC HYDROCARBONS IN MARINE SEDIMENTS

Jing Li¹, Hua Tang², Dazhou Chen², Lei Li^{*1}

1Beijing University of Chemical Technology, Chaoyang, Beijing 100029, China

2China Institute of Metrology, Chaoyang, Beijing 100013, China

I41 APPLICATION OF SPE ON ANALYZING PFOS RESIDUES IN ENVIRONMENTAL
SAMPLES

Shengling Si, Dazhou CHEN, HuaTANG*

Division of Metrology in Chemistry, National Institute of Metrology, Beijing, China

I42 STUDY ON THE ACCURATE DETERMINATION OF AFLATOXIN M1 IN MILK POWDER

Zhen GUO, Xiuqin LI, Qinghe ZHANG

National Institute of Metrology, Beijing 100029, China

I43 DETERMINATION OF VARIOUS HALOGENATED FLAME
RETARDANTS IN ATMOSPHERIC PARTICULATE MATTERS WITH ASE - SPE-GCMS

Changjun YE¹, Hua TANG², Dazhou CHEN², Lei LI^{*1}

1Beijing University of Chemical Technology, Beijing, China

2Division of Metrology in Chemistry, National Institute of Metrology, Beijing, China

I44 APPLICATION OF SEMI-QUANTITATIVE ANALYSIS USING ICP-MS IN STANDARD
REFERENCE MATERIAL DEVELOPMENT

Huan GUO, Xiubing HUA, Houxiang CUI, Ling CHEN and Junbin XU

Guangdong Provincial Institute of Metrology, Guangzhou, Guangdong, China

I45 DEVELOPMENT OF A METHOD FOR SIMULTANEOUS DETERMINATION OF
MULTICLASS BANNED VETERINARY DRUGS IN PORK BY HIGH-PERFORMANCE

LIQUID CHROMATOGRAPHY COUPLED WITH TANDEM MASS SPECTROMETRY

Jie XIE¹, Ailing ZHU², Haiyang JIANG², Bing SHAO², Xiang FANG*¹

1National Institute of Metrology, Beijing, China

2Beijing Advanced Innovation Center for Food Nutrition and Human Health, College of Veterinary Medicine, China Agricultural University, Beijing, China

I46 DETERMINATION OF PATULIN IN APPLE JUICE BY SINGLE-DROP LIQUID-LIQUID-LIQUID MICROEXTRACTION COUPLED WITH LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY

Xianjiang LI, Hongmei LI*, Guo ZHEN, Xiaomin LI, Xiuqin LI and Qinghe ZHANG

Food Safety Laboratory, Division of Metrology in Chemistry, National Institute of Metrology, Beijing 100029, China

I47 DETERMINATION OF SULFA DRUG RESIDUES IN MILK BY ISOTOPE DILUTION ULTRA PERFORMANCE LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETRY

Chaonan HAN^{1,2}, Xiuqin LI², Liqiang SU¹, Xiaomin LI², and Qinghe ZHANG^{2*}

1 College of chemistry and chemical engineering, Qiqihaer University, Heilongjiang, 161000, China

2Division of chemical metrology, National Institute of Metrology (NIM), Beijing, 100029, China

I48 PREPARATION OF CRM CANDIDATES OF ENROFLOXACIN AND CIPROFLOXACIN IN THE WHOLE LIQUID EGG

Fang LIU, Mengrui YANG, Min WANG *, Jian ZHOU, Liyuan ZHANG, Peng LI

Institute of Quality Standard and Testing Technology for Agro-Products, Key Laboratory of Agro-Product Quality and Safety, Chinese Academy of Agriculture, Beijing 100081, China

I49 EVALUATION THE LINEARITY OF THIN LAYER CHROMATOGRAPHIC SCANNER USING AMARANTH SOLUTION

Hong TAO*

Division of Metrology in Chemistry, National Institute of Metrology, Beijing 100029, P.R.China

I50 UPLC-HILIC AND MASS SPECTROMETRY ANALYSIS OF HEPARIN DISACCHARIDES BUILDING BLOCKS

Tianji ZHANG^{1,2}, JinPing LI^{2,3}, Hongmei LI¹, Tianwei TAN²

1National Institute of Metrology, China

2Beijing University of Chemical Technology, Beijing, China

3Department of Medical Biochemistry and Microbiology, University of Uppsala, Uppsala, Sweden

I51 DEVELOPMENT OF REFERENCE MATERIAL FOR PROTEIN IN MILK POWDER

Bo ZHAO, Xiaomin LI, Qinghe ZHANG

National Institute of Metrology, Beijing 100029, China



I52 SIMULTANEOUS DETERMINATION OF BISPHENOLS IN SERUM SAMPLES BY HPLC-CAD

Shanjun SONG, Huiyu WANG and Mingwu SHAO*

Division of Metrology in Chemistry, National Institute of Metrology, Beijing 100029, P. R. China

I53 STUDIES ON STABILITY AND DEGRADATION PRODUCT OF TRIAMCINOLONE IN METHANOL

Maomao WANG¹, Juling CHEN¹, Yanbo JIA², Yin XU¹, Lei ZHANG^{1*}

1Alta Scientific Co., Ltd, Tianda S&T Park, Suite C5-405, 80 The Fourth Street, TEDA, Tianjin 300457, China.

2Sciex, Beijing 100015, China

I54 AN INTRODUCTION OF ORGANIC ELEMENTAL ANALYZER AND GRAPHENE TEST

Haihong He, Yajuan He and Haifeng Zhou

Division of Chemical Metrology and Analytical Science, National Institute of Metrology, Beijing 100029, China

I55 PREPARATION OF CHOLESTEROL REFERENCE MATERIAL

Juling CHEN, Maomao WANG, Lei ZHANG*

Alta Scientific Co., Ltd, Tianda S&T Park, Suite C5-405, 80 The Fourth Street, TEDA, Tianjin 300457, China.

I56 APPLICATION OF REFERENCE MATERIALS IN MOBILE TESTING

Jun YAN^{1,2}, Boping LI^{1,2}, Jianyong CUI^{1,2}, Dongfa GUO^{1,2}

1Beijing Research Institute of Uranium Geology, Beijing 100029, China

2 National Sharing Platform for Reference Materials, Beijing 100029, China

I57 METHOD VALIDATION: DNA BASED PCR DETECTION METHODS

Na AN¹, Fangfang LIU², Mei DONG², Yusong WAN², Wujun JIN², Yang HAN¹ and Liang LI^{*2}

1School of Life Science, Liaoning University, Shenyang, 110036, China

2Biotechnology Research Institute, Chinese Academy of Agricultural Sciences, Beijing, 100081, China

SCHEDULE OF SESSIONS

J. LABELED IMMUNOASSAY TECHNOLOGY

CHAIRMAN: Prof. Guangtao Yan

ORAL LECTURES

Time:	Oct. 9, 2017 AM (Monday)
Location:	Room 311B, China National Convention Center, Beijing
Topic:	Development of Immuno-technology and Biomarkers
Chairmen:	Prof. Xingyu JIANG and Prof. Meiping ZHAO
8:30-9:00	J2 Microfluidic synthesis of hybrid nanoparticles with controlled lipid layers: understanding flexibility-regulated cell-nanoparticle interaction Xingyu JIANG (Keynote) Beijing Engineering Research Center for BioNanotechnology & CAS Key Laboratory for Biological Effects of Nanomaterials and Nanosafety National Center for Nanoscience and Technology, Beijing 100190, China,
9:10-9:40	J3 Sub-cellular distribution of tetraspanin NET-6 and CD151 and metastatic relevance in breast cancer Huayi Huang (Keynote) 1. Department of Laboratory Medicine, the People's Hospital of Guangxi Zhuang Autonomous Region, Nanning, Guangxi, 530021 China ; 2. Department of Surgical Oncology, Roswell Park Cancer Institute, Buffalo, New York, 14263 USA
9:50-10:20	J4 ULTRA-SENSITIVE DETECTION OF NEUROACTIVE SMALL MOLECULES BY USING SIGNAL-AMPLIFIED HOMOGENEOUS FLUORO-IMMUNOASSAY Meiping ZHAO (Keynote) College of Chemistry and Molecular Engineering Peking University
10:30-10:50	Coffee Break
10:50-11:20	J5 Biomarkers for early diagnosis of lung cancer Zhen Yang (Keynote) Department of respiratory disease, Chinese PLA general hospital
11:20-11:50	J6 BEAVER Nano-magnetic Particles Sample Processing Solutions Arthur Ren (Keynote) Beaver Biomedical Engineering Co., Ltd
Time:	Oct. 9, 2017 PM (Monday)



Location:	Room 311B,China National Convention Center, Beijing
Topic:	Translational medicine/ Diagnosis and Treatment of cancer
Chairmen:	Prof. Ruifu Yang and Prof. Chengchao Shou
13:00–13:30	J7 Study on telomeres in gastrointestinal tumors Guo Xiaolan(Keynote) 1. Department of Laboratory Medicine, North Sichuan Medical College; 2. Department of Clinical Laboratory, the Affiliated Hospital of North Sichuan Medical College; 3. Translational Medicine Research Center, North Sichuan Medical College, Nanchong 637000, China)
13:40–14:10	J8 POCT and translational medicine Ruifu Yang (Keynote) Academy of Military Medical Sciences, Beijing, China
14:20–14:50	J9 The predictive value of chemokines on atrial fibrillation - related thromboembolism and bleedings in elderly patients Yutao Guo (Keynote) Department of cardiology,Chinese PLA General Hospital
15:00–15:20	Coffee Break
15:20–15:50	J10 The application research of SNCG in cancer auxiliary diagnosis and prognosis judgment Chengchao Shou(Keynote) Peking University Cancer Hospital & Institute , Beijing, China
16:00–16:30	J11 Research on Correlation between Observation of Curative Effect and Dynamic Change in Peripheral Blood Cytokines of Patient with Advanced Malignant Tumor Treated by PD-1 Resistant Monoclonal Antibody Guoqing Zhang (Keynote) The department of clinical oncology, chinese PLA general hospital
Time:	Oct. 11, 2017 AM (Wednesday)
Location:	Room 311B,China National Convention Center, Beijing
Topic:	Liquid Biopsy/ Liquid Biochip/Biomarkers for Cancer
Chairman:	Prof. Jian-Feng Wang and Prof.Yanhong Gao
8:30–9:00	J12 Sampling Science: Liquid Biopsy for Circulating Pathologic Entity Zhaoqiang WANG (Keynote) AusBio Laboratories, LTD., Yantai 264006, China
9:10–9:40	J13 A Hyperplexed Immunofluorescence Assay for Comprehensive Biomarker Profiling on a Single FFPE Slide

		Jian-Feng Wang(Keynote) NeoGenomics Laboratories,31 Columbia, Aliso Viejo, CA 92656, USA
9:50-10:20	J14	Liquid Biochip coding by Impedance of Microspheres and Its Application on Laboratory Medicine
		Zhanke Wang(Keynote) Department of clinical laboratory, the 94th hospital of PLA
10:30-10:50		Coffee Break
10:50-11:20	J15	Detection of methylated SHOX2 and RASSF1A genes for diagnosis of lung cancer
		Fangjin Wang (Keynote) Tellgen corporation, Shanghai
11:20-11:50	J16	Establishment and verification of miRNAs expression molecules for breast cancer and its distant metastasis
		Yanhong Gao (Keynote) Department of Clinical Biochemistry, Chinese PLA General Hospital
Time:		Oct. 11, 2017 PM (Wednesday)
Location:		Room 311B,China National Convention Center, Beijing
Topic:		Immunoassay Technology and application / Diagnosis and treatment of cancer
Chairman:		Prof. Qinong YE and Prof. Xingwang Jia
13:00-13:30	J17	A novel family of proteins regulates tumor radiosensitivity
		Qinong YE (Keynote) Department of Medical Molecular Biology, Beijing Institute of Biotechnology, Collaborative Innovation Center for Cancer Medicine, Beijing 100850, China.
13:40-14:10	J18	Lifotronic Electro-Chemiluminescence Immunoassay Technology and Clinical Applications
		Allen Han(Keynote) Director of International Business, Lifotronic Technology Co., Ltd.
14:20-14:50	J19	Detection of Aggressive Prostate Cancer Associated Glycoproteins in Urine using Glycoproteomics and Mass Spectrometry
		Xingwang Jia (Keynote) 1.Department of Pathology, Johns Hopkins University, Baltimore, MD, USA 2.Department of Clinical Biochemistry, Chinese PLA General Hospital, Beijing, China
15:00-15:20		Coffee Break
15:20-15:50	J20	SP1 promotes tumor angiogenesis and invasion by activating VEGF



		expression in an acquired trastuzumab-resistant ovarian cancer model
		Ming LV (Keynote)
		Department of Molecular Immunology, Institute of Basic Medical Science, Academy of Military Medical Sciences, Haidian, Beijing 100850, P.R. China
16:00-16:30	J21	Accurate diagnosis of bladder tumor by en bloc transurethral resection
		Shengkun Sun (Keynote)
		The department of urology, chinese PLA general hospital
16:40-17:00		Closing Remarks

Poster Session

- J22 Research of the diagnostic value of serum polypeptide peaks analysis for IgA nephropathy based on MALDI-TOF MS

Jing Gao^{1,2}, Guangtao Yan^{1,2}, Yong Wang², Jingzhu Nan^{1,2}, Jin Dong^{1,2}, Yaping Tian^{1,2*}

1. Department of Clinical Biochemistry, State Key Laboratory of Kidney Disease, Chinese PLA General Hospital, Beijing 100853, China

2. Division of Nephropathy, State Key Laboratory of Kidney Disease, Chinese PLA General Hospital, Beijing 100853, China

- J23 Study on changes of tissue pathological immune protein fluorescence intensity and their serum values in three kinds of primary glomerular nephritis

Jin Dong^{*1}, Tianhao Peng^{*2}, Jing Gao¹, Yong Wang^{#3}, Guangtao Yan^{#1}

1. Department of Clinical Biochemistry, State Key Laboratory of Kidney Disease, Chinese PLA General Hospital, Beijing 100853, China

2. Institute of Health Management, Chinese PLA General Hospital, Beijing 100853, China

3. Division of Nephropathy, State Key Laboratory of Kidney Disease, Chinese PLA General Hospital, Beijing 100853, China

- J24 Relationship between BMI and serum biochemical indexes in patients with hyperhomocysteinemia

Cuihong Song¹, Yanhong Gao¹, Guangtao Yan^{*1}

1Department of Clinical Biochemistry, Division of Medical Technology, PLA General hospital, Beijing 100853, China

- J25 Study on the correlation between serum lipoprotein-associated phospholipase A2 and female patients of systemic lupus erythematosus with anemia

WANG Kun, JIA Xing-wang, DONG Jin, YAN Guang-tao

Department of Clinical Biochemistry, PLA General Hospital, Beijing 100853, China

- J26 DETECTION OF MICRORNA USING A PH TEST PAPER: A POINT-OF-CARE TESTING METHOD BASED ON A PH-RESPONSIVE AND HIGHLY EFFICIENT ISOTHERMAL AMPLIFICATION

Chang FENG¹, Xiaoxia MAO², Hai SHI², Bing BO³, Xiaoxia CHEN², Tianshu CHEN², Xiaoli ZHU² and Genxi LI¹

1State Key Laboratory of Pharmaceutical Biotechnology and Collaborative Innovation Center of Chemistry for Life Sciences, Department of Biochemistry, Nanjing University. Nanjing, 210093, China

2Center for Molecular Recognition and Biosensing, School of Life Sciences, Shanghai University. Shanghai, 200444, China

3Department of Medical Oncology, Shanghai Pulmonary Hospital Tongji University School of Medicine, Shanghai, 200433, China

- J27 The diagnostic value of CEA and Ferritin for sigmoid colon adenocarcinoma by ROC curve and logistic regression

Feng Jie, JIA Xing-wang, DONG Jin, WANG Kun, YAN Guang-tao

(Department of Clinical Biochemistry, PLA General Hospital, Beijing 100853, China)

- J28 Leptin alleviates ischemic stroke by promoting CGRP expression in vivo and vitro

Zhang JinYing^{1*}, Si YiLing^{1*}, Wang LuHuan¹, Song CuiHong², Deng ZiHui¹, Liang Chen¹, Lennart Zabeau³, Jan Tavernier³, Xia Lei^{4#}, Yan GuangTao^{2#}

1 Institute of Basic Medicine Science, College of Life Science, Chinese PLA General Hospital, Beijing 100853, China;

2 Biochemistry section, Chinese PLA General Hospital, Beijing 100853, China;

3 Flanders Institute for Biotechnology, Department of Medical Protein Research, Ghent University, Faculty of Medicine and Health Sciences, A. Baertsoenkaai 3, 9000 Ghent, Belgium;

4 Department of Medical Administration, Chinese PLA General Hospital, Beijing 100853, China;

- J29 Research on clinical application of serum polypeptide peaks for hospital-acquired acute kidney injury causing by cardiac surgery

Yong Wang¹, Guangyan Cai¹, Jing Gao², Xiangmei Chen^{1*}

1.Division of Nephropathy, State Key Laboratory of Kidney Disease, Chinese PLA General Hospital, Beijing 100853, China

2. Department of Clinical Biochemistry, State Key Laboratory of Kidney Disease, Chinese PLA General Hospital, Beijing 100853, China

酒店到展馆班车时刻表 (10月9-12日)

SHUTTLE BUSES BETWEEN HOTELS AND CONFERENCE ROOM (October 9-12)

NO.	Date	Time	Depart Place	Destination
1	10.9-10.12	AM 7:45	五洲大酒店 (Beijing Continental Grand Hotel)	国家会议中心 (China National Convention Center ,Beijing)
		PM 17:00	国家会议中心 (China National Convention Center ,Beijing)	五洲大酒店 (Beijing Continental Grand Hotel)
		PM 18:00	国家会议中心 (China National Convention Center ,Beijing)	五洲大酒店 (Beijing Continental Grand Hotel)
2	10.9-10.12	AM 7:45	民族园智选假日酒店 (Holiday Inn Express Beijing Minzuyuan)	国家会议中心 (China National Convention Center ,Beijing)
		PM 17:00	国家会议中心 (China National Convention Center ,Beijing)	民族园智选假日酒店 (Holiday Inn Express Beijing Minzuyuan)
		PM 18:00	国家会议中心 (China National Convention Center ,Beijing)	民族园智选假日酒店 (Holiday Inn Express Beijing Minzuyuan)
3	10.9-10.12	AM 7:45	北京北辰亚运村宾馆 (Yayuncun Hotel(Business hotel))	国家会议中心 (China National Convention Center ,Beijing)
		PM 17:00	国家会议中心 (China National Convention Center ,Beijing)	北京北辰亚运村宾馆 (Yayuncun Hotel(Business hotel))
		PM 18:00	国家会议中心 (China National Convention Center ,Beijing)	北京北辰亚运村宾馆 (Yayuncun Hotel(Business hotel))
4	10.9-10.12	AM 7:45	北京汇园酒店公寓 (Huiyuan Prime Hotel)	国家会议中心 (China National Convention Center ,Beijing)
		PM 17:00	国家会议中心 (China National Convention Center ,Beijing)	北京汇园酒店公寓 (Huiyuan Prime Hotel)
		PM 18:00	国家会议中心 (China National Convention Center ,Beijing)	北京汇园酒店公寓 (Huiyuan Prime Hotel)
5	10.9-10.12	AM 7:45	锦江之星奥体中心店 (Jinjiang Inn Olympic Sports Center Business hotel)	国家会议中心 (China National Convention Center ,Beijing)
		PM 17:00	国家会议中心 (China National Convention Center ,Beijing)	锦江之星奥体中心店 (Jinjiang Inn Olympic Sports Center Business hotel)
		PM 18:00	国家会议中心 (China National Convention Center ,Beijing)	锦江之星奥体中心店 (Jinjiang Inn Olympic Sports Center Business hotel)
6	10.9-10.12	AM 7:45	凯迪克格兰云天大酒店 (Grand Skylight Catic Hotel Beijing)	国家会议中心 (China National Convention Center ,Beijing)
		PM 17:00	国家会议中心 (China National Convention Center ,Beijing)	凯迪克格兰云天大酒店 (Grand Skylight Catic Hotel Beijing)
		PM 18:00	国家会议中心 (China National Convention Center ,Beijing)	凯迪克格兰云天大酒店 (Grand Skylight Catic Hotel Beijing)



酒店到展馆班车时刻表 (10月13日) SHUTTLE BUSES BETWEEN HOTELS AND CONFERENCE ROOM (October 13)

NO.	Date	Time	Depart Place	Destination
1	10.13	AM 7:45	五洲大酒店 (Beijing Continental Grand Hotel)	国家会议中心 (China National Convention Center ,Beijing)
		PM 11:00	国家会议中心 (China National Convention Center ,Beijing)	五洲大酒店 (Beijing Continental Grand Hotel)
		PM 15:00	国家会议中心 (China National Convention Center ,Beijing)	五洲大酒店 (Beijing Continental Grand Hotel)
2	10.13	AM 7:45	民族园智选假日酒店 (Holiday Inn Express Beijing Minzuyuan)	国家会议中心 (China National Convention Center ,Beijing)
		PM 11:00	国家会议中心 (China National Convention Center ,Beijing)	民族园智选假日酒店 (Holiday Inn Express Beijing Minzuyuan)
		PM 15:00	国家会议中心 (China National Convention Center ,Beijing)	民族园智选假日酒店 (Holiday Inn Express Beijing Minzuyuan)
3	10.13	AM 7:45	北京北辰亚运村宾馆 (Yayuncun Hotel(Business hotel))	国家会议中心 (China National Convention Center ,Beijing)
		PM 11:00	国家会议中心 (China National Convention Center ,Beijing)	北京北辰亚运村宾馆 (Yayuncun Hotel(Business hotel))
		PM 15:00	国家会议中心 (China National Convention Center ,Beijing)	北京北辰亚运村宾馆 (Yayuncun Hotel(Business hotel))
4	10.13	AM 7:45	北京汇园酒店公寓 (Huiyuan Prime Hotel)	国家会议中心 (China National Convention Center ,Beijing)
		PM 11:00	国家会议中心 (China National Convention Center ,Beijing)	北京汇园酒店公寓 (Huiyuan Prime Hotel)
		PM 15:00	国家会议中心 (China National Convention Center ,Beijing)	北京汇园酒店公寓 (Huiyuan Prime Hotel)
5	10.13	AM 7:45	锦江之星奥体中心店 (Jinjiang Inn Olympic Sports Center Business hotel)	国家会议中心 (China National Convention Center ,Beijing)
		PM 11:00	国家会议中心 (China National Convention Center ,Beijing)	锦江之星奥体中心店 (Jinjiang Inn Olympic Sports Center Business hotel)
		PM 15:00	国家会议中心 (China National Convention Center ,Beijing)	锦江之星奥体中心店 (Jinjiang Inn Olympic Sports Center Business hotel)
6	10.13	AM 7:45	凯迪克格兰云天大酒店 (Grand Skylight Catic Hotel Beijing)	国家会议中心 (China National Convention Center ,Beijing)
		PM 11:00	国家会议中心 (China National Convention Center ,Beijing)	凯迪克格兰云天大酒店 (Grand Skylight Catic Hotel Beijing)
		PM 15:00	国家会议中心 (China National Convention Center ,Beijing)	凯迪克格兰云天大酒店 (Grand Skylight Catic Hotel Beijing)



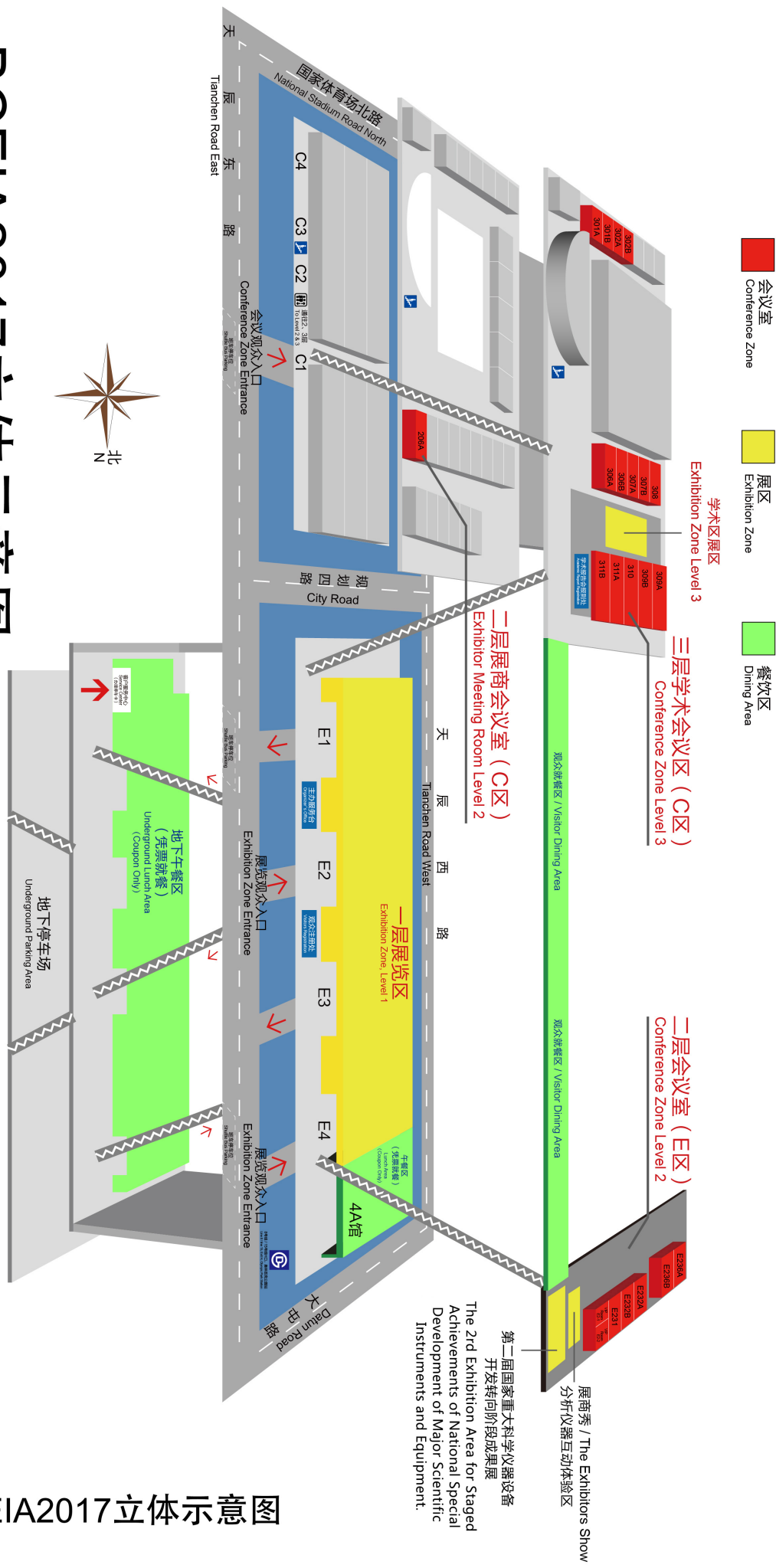
BCEIA 2017

The 17th Beijing Conference and Exhibition
on Instrumental Analysis (BCEIA2017)

October.09-13, 2017



BCEIA2017 立体示意图



BCEIA2017 立体示意图



BCEIA2017学术区

时间：2017年10月09日 地点：国家会议中心C区3楼

Date: 9-11 October 2017

Location: China National Convention Center, Beijing



Moving Towards a Green Future

欢迎参加国际分析技术的盛会！

Welcome to a Great International Technical Conference & Exhibition!