



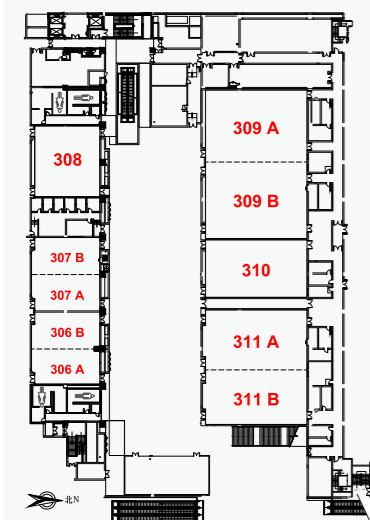
## BCEIA 2019 分会报告

### Parallel Sessions

BCEIA2019 设立电子显微学及材料科学、质谱学、光谱学、色谱学、磁共振波谱学、电分析化学、生命科学中的分析技术、环境分析、化学计量与标准物质以及标记免疫分析 10 个分会，每个分会将邀请 20 至 50 位科学家到会作报告，交流、讨论本学科领域前沿新技术、新方法。

Parallel Sessions including 10 fields will be held, comprising electron microscopy and materials sciences, mass spectrometry, optical spectroscopy, chromatography, magnetic resonance spectroscopy, electroanalytical chemistry, analytical techniques in life sciences, environmental analysis, chemical metrology and reference materials, labeled immunoassay. About 20 to 50 experts will be invited to introduce advanced technologies and methods each session.

时间	分会报告及墙报	会议室
10. 25 - 26	电子显微学及材料科学 Electron Microscopy and Materials Sciences	309A
	质谱学 / Mass Spectrometry	309B
	光谱学 / Optical Spectroscopy	310
	色谱学 / Chromatography	311A
	波谱学 / Magnetic Resonance	306A
	电分析化学 / Electro-analytical Chemistry	306B
	生命科学中的分析技术 / Analytical Techniques in Life Sciences	311B
	环境分析 / Environment Analysis	307B
	化学计量与标准物质 / Chemical Metrology & Reference Materials	308
	标记免疫 / Labeled Immunoassay	307A



#### A、电子显微学及材料科学

会议主题：显微学加速材料进化  
专题：材料界面、表面和缺陷  
显微结构与功能材料  
显微方法学  
负责人：韩晓东 教授 北京工业大学  
xdhan@bjut.edu.cn

#### B、质谱学

会议主题：质谱助力健康生活  
专题：基础理论与方法  
新仪器与新技术  
生命科学与组学  
环境与能源分析  
食品安全与药物分析  
临床质谱  
负责人：刘虎威 教授 北京大学  
hwliu@pku.edu.cn

#### C、光谱学

会议主题：涌现的机会  
专题：新思路 / 分子及原子光谱  
新应用 / 光谱分析与材料  
新方法 / 高分辨光学成像  
新仪器 / 光谱仪与显微镜  
负责人：何彦 教授 清华大学  
yanhe2021@mail.tsinghua.edu.cn

#### D、色谱学

会议主题：分离分析谱写健康未来  
专题：样品制备方法  
高效分离方法  
高灵敏检测方法  
色谱应用  
负责人：张丽华 研究员 中科院大连化学物理研究所  
lihuazhang@dicp.ac.cn

#### E、波谱学

会议主题：波谱学原理与技术的发展和應用  
专题：生物核磁共振专题  
电子顺磁共振专题  
原位磁共振专题  
磁共振成像专题  
代谢学专题  
磁共振分析新方法专题  
负责人：王申林 研究员 北京大学  
wangshenlin@pku.edu.cn

#### F、电分析化学

会议主题：电分析化学的发展与未来  
专题：生物电分析化学  
生物传感  
纳米电化学  
单分子检测  
单细胞分析化学  
电化学联用技术  
负责人：李景虹 教授 清华大学  
jhli@mail.tsinghua.edu.cn

#### G、生命科学中的分析技术

会议主题：关注生命，聚焦方法  
专题：精准医学分析与医疗诊断  
健康与安全  
组学分析  
单分子单细胞单颗粒分析  
负责人：谢剑炜 研究员 军事科学院军事医学研究院  
xiejiw@bmi.ac.cn

#### H、环境分析

会议主题：大数据连接环境与生活  
专题：环境分析化学  
环境毒理及健康效应  
环境化学过程  
大气细颗粒物 / PM 2.5  
负责人：汪海林 研究员 中国科学院生态环境研究中心  
hlwang@rcees.ac.cn

#### I、化学计量与标准物质

会议主题：精准改变世界，计量增进互信  
专题：标准物质与化学计量新技术  
临床诊断与生物医药  
环境分析与计量  
食品安全计量  
负责人：李红梅 研究员 中国计量科学研究院  
lihm@nim.ac.cn

#### J、标记免疫分会

会议主题：创新转化 精准诊断  
专题：标记免疫技术  
基因检测技术  
生物材料  
标记免疫技术  
基因检测技术  
生物材料制备  
负责人：颜光涛 研究员 中国人民解放军总医院  
ygt301@163.com

## SCHEDULE OF SESSIONS

### A ELECTRON MICROSCOPY AND MATERIALS SCIENCES

**CHAIRMAN:**  
Prof. Han Xiaodong

#### ORAL LECTURES

**Dates:** Oct.25-26,2019

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

**Keynote:**

25 min talk + 5 min questions

**Invited:**

20 min talk + 5 min questions

Date: October 25, 2019 AM		
Chairman: Professor Xiaodong Han (Session 1)		
8:30-8:40	Opening address by Professor Ze Zhang	
8:40-9:10	A2	DESIGNING FUNCTIONAL MATERIALS VIA ATOMIC-RESOLUTION MICROSCOPY AND SPECTROSCOPY <b>Prof. Stephen J. Pennycook</b> National University of Singapore, Singapore
9:10-9:40	A3	UNDERSTANDING THE GROWTH OF LOW-DIMENSIONAL NANOSTRUCTURES USING ELECTRON MICROSCOPY <b>Prof. Jin Zou</b> The University of Queensland, Brisbane, Queensland, Australia
9:40-10:00	Coffee break	
Chairman: Professor Stephen J Pennycook (Session 2)		
10:00-10:30	A4	THE ESTABLISHMENT OF LORENTZ TEM AND IN SITU MAGNETISM <b>Prof. Renchao Che</b> Fudan University, Shanghai, China
10:30-11:00	A5	PHASE ENGINEERING OF NANOMATERIALS <b>Prof. Hua Zhang</b> City University of Hong Kong, Hong Kong, China
11:00-11:30	A6	TEM STUDIES ON EPITAXIAL MAGNETIC THIN FILMS <b>Prof. Richeng Yu</b> Chinese Academy of Sciences, Beijing, China
11:30-14:00	Lunch	
Date: October 25, 2019 PM		
Chairman: Professor Jin Zou (Session 3)		
14:00-14:30	A7	TBC <b>Prof. Keesam Shin</b> National changwon university, South Korea
14:30-15:00	A8	RECENT PROGRESS IN QUANTITATIVE STEM-ENERGY LOSS MAGNETIC CHIRAL DICHOISM MEASUREMENT <b>Prof. Shunsuke Muto</b> Nagoya University, Furo-cho, Chikusa-ku, Nagoya, Japan
15:00-15:30	A9	IN SITU STUDY THE CHANGE OF NANOSTRUCTURE IN LIQUID <b>Prof. Qing Chen</b> Peking University, Beijing, China
15:30-15:50	Coffee break	
Chairman: Professor Keesam Shin (Session 4)		
15:50-16:20	A10	STRUCTURAL MODULATION: FROM LONG-RANGE ORDER TO SHORT-RANGE ORDER <b>Prof. Binghui Ge</b> Chinese Academy of Sciences, Beijing, China
16:20-16:50	A11	DEVELOPMENT AND APPLICATION OF UTEM IN MATERIAL SCIENCE <b>Prof. Huaixin Yang</b> Chinese Academy of Sciences, Beijing, China
16:50-17:20	A12	IN-SITU OBSERVATION OF THE DYNAMIC BEHAVIORS OF NANOCATALYSTS BY ENVIRONMENTAL TEM <b>Prof. Yong Wang</b> Zhejiang University, Hangzhou, China
17:30-21:00	Banquet	

Date: October 26, 2019 AM		
Chairman: Professor Shunsuke Muto (Session 5)		
9:00-9:30	A13	IN-SITU TEM STUDY ON SOLAR CELL <b>Prof. Litao Sun</b> Southeast University, Nanjing, China
9:30-10:00	A14	REVEALING THE DYNAMIC OF RADIATION DEFECTS USING IN SITU NANOMECHANICAL TESTING INSIDE TEM <b>Prof. Weizhong Han</b> Xi'an Jiaotong Univeristy, Xi'an, China
10:00-10:20	Coffee break	
Chairman: Professor Richeng Yu (Session 6)		
10:20-10:50	A15	INTERFACE EFFECTS ON MECHANICAL PROPERTIES OF STRUCTURAL MATERIALS <b>Prof. Shijian Zheng</b> Chinese Academy of Sciences, Shenyang, China
10:50-11:20	A16	TBC <b>Prof. Xiaoyan Li</b>
11:20-11:50	A17	NEW POLAR STRUCTURES IN FERROELECTRIC FILMS: FROM PREPARATION TO ATOM <b>Prof. Yunlong Tang</b> Chinese Academy of Sciences, Shenyang, China
11:50-14:00	Lunch	
Date: October 26, 2019 PM		
Chairman: Professor Qing Chen (Session 7)		
14:00-14:30	A18	LOW-VOLTAGE STEM FOR 2D MATERIALS <b>Prof. Wu Zhou</b> University of Chinese Academy of Sciences, Beijing, China
14:30-15:00	A19	APPLICATIONS OF MONOCHROMATED STEM EELS IN FERROELECTRIC MATERIALS AND DEVICES <b>Prof. He Tian</b> Zhejiang University, Hangzhou, China
15:00-15:20	Coffee break	
Chairman: Professor Litao Sun (Session 8)		
15:20-15:50	A20	ATOMIC-PLANE RESOLVED ELECTRON MAGNETIC CIRCULAR DICHOISM BY CHROMATIC-ABERRATION-CORRECTED ELECTRON ENERGY LOSS SPECTROSCOPY <b>Prof. Xiaoyan Zhong</b> Tsinghua University, Beijing, China
16:20-16:50	A21	ATOMIC-SCALE MECHANISM OF BRITTLINESS BEHAVIOR IN NANO-POROUS METAL MATERIALS <b>Prof. Pan Liu</b> Shanghai Jiaotong University, Shanghai, China
	A22	ATOMIC RESOLUTION IN SITU EXPERIMENTS ACROSS WIDE TEMPERATURE AND STRESS <b>Prof. Xiaodong Han</b> Beijing University of Technology, Beijing, China
16:50	Closing Remarks	

## SCHEDULE OF SESSIONS

### B MASS SPECTROMETRY

**CHAIRMAN:**  
Prof. Huwei LIU

### ORAL LECTURES

**Dates:** Oct.25-26,2019

**Location:** Room 309B, China  
National Convention Center,  
Beijing

Date: Oct. 25, 2019 AM (Friday)		
Topic: BioMS— “-omics”		
Chairman: Prof. Huiru TANG and Prof. Yasushi ISHIHAMA		
8:30-8:35	Opening Remarks	
8:35-9:00	B2	CHALLENGES TO ILLUMINATE HUMAN PROTEOME AND PROTEOFORM <b>Yasushi ISHIHAMA (Keynote)</b> Kyoto University, Kyoto, Japan
9:00-9:25	B3	ANALYSIS OF BIOMOLECULES USING MASS SPECTROMETRY WITH ELECTRON TRANSFER DISSOCIATION <b>Chien-Chen LAI (Keynote)</b> National Chung Hsing University
9:25-9:50	B4	QUANTITATING HUMAN METABONOMIC PHENOTYPES AND CHALLENGES <b>Huiru TANG (Keynote)</b> Fudan University
9:50-10:05	B29	APPLICATION OF CYCLIC ION MOBILITY MASS SPECTROMETRY FOR HIGH PEAK CAPACITY SEPARATIONS OF NATIVE AND DEUTERATED PEPTIDE MIXTURE <b>Steve PREECE</b> Waters Corporation
10:05-10:20	B30	DISCOVERY OF STEMNESS BIOMARKERS OF MCF-7 CANCER STEM CELLS USING QUALITATIVE SITE- AND STRUCTURE-SPECIFIC N-GLYCOPROTEOMICS <b>Zhixin TIAN</b> Tongji University
10:20-10:30	Coffee Break	
Topic: Fundamental I		
Chairman: Prof. Zongxiu NIE and Prof. Wei HANG		
10:30-10:55	B5	LASER-BASED MASS SPECTROMETRY FOR HIGH RESOLUTION MASS SPECTROMETRY IMAGING <b>Wei HANG (Keynote)</b> Xiamen University
10:55-11:20	B6	CHARACTERIZING AND MAPPING PARTICLES BY MASS SPECTROMETRY <b>Zongxiu NIE (Keynote)</b> Institute of Chemistry, Chinese Academy of Sciences
11:20-11:45	B7	EXAMINATIONS ON CHEMICAL REACTIONS BY AMBIENT MASS SPECTROMETRY <b>Na NA (Keynote)</b> Beijing Normal University
11:45-12:00	B31	APPLICATION OF ULTIMO MINIATURIZED MASS SPECTROMETRY IN RAPID SCREENING AND MOBILE DETECTION <b>Jianzhong LI</b> Agilent Technologies (China)
12:00-13:30	Lunch Time/Poster Session	
Time: Oct. 25, 2019 PM (Friday)		
Topic: MS Applications		
Chairman: Prof. Qingsong Lin and Prof. Zhongping YAO		
13:30-13:55	B8	QUALITATIVE AND QUANTITATIVE ANALYSIS OF EDIBLE OILS BY MALDI-MS <b>Zhongping YAO (Keynote)</b> The Hong Kong Polytechnic University

13:55-14:20	B9	DEVELOPMENT OF “VIRTUAL TANDEM MS” WITH SINGLE Q-MS FOR SCREENING TECHNIQUE IN MATERIAL QUALITY CONTROL <b>Takahisa TSUGOSHI (Keynote)</b> National Institute of Advanced Industrial Science and Technology
14:20-14:45	B10	MECHANISTIC ELUCIDATION OF ANTIMALARIAL AND ANTICANCER ACTIVITIES OF ARTEMISININ BY MASS SPECTROMETRY <b>Qingsong LIN (Keynote)</b> National University of Singapore
14:45-15:10	B11	PRECISE AND ACCURATE DETERMINATION OF ALL 54 MAJOR, MINOR AND TRACE ELEMENTS IN SILICATES INDEPENDENTLY BY LA-Q ICP-MS <b>Zhongxing CHEN (Keynote)</b> Harvard University
15:10-15:25	B32	SEQUENTIAL DETECTION OF ORGANIC AND INORGANIC COMPOUNDS IN MISCELLANEOUS SAMPLES BY MASS SPECTROMETRY <b>Jiaquan XU</b> East China Institute of Technology
15:25-15:40	B33	A POTENTIAL WORKING REFERENCE FOR LA-MC-ICP-MS CASSITERITE U-PB DATING <b>Ruiping LIU</b> Beijing Research Institute of Uranium Geology
15:40-16:00	Coffee Break	
Topic: Fundamental II		
Chairman: Prof. Yu BAI and Prof. Ivan K. CHU		
16:00-16:25	B12	PROTEIN TYROSINE NITRATION IN ISCHEMIC STROKE: FROM BIOANALYTICAL CHEMISTRY, TO BIOINFORMATICS, AND TO FUNDAMENTAL ELUCIDATION <b>Ivan K. CHU (Keynote)</b>
16:25-16:50	B13	REAL-TIME, DROPLET-SCALE MASS SPECTROMETRIC SCREENING PLATFORM FOR REACTION MECHANISM STUDIES <b>Jie JIANG (Keynote)</b> Harbin Institute of Technology at Weihai
16:50-17:15	B14	ULTRA-SENSITIVE DETECTION AND IMAGING OF CLINICAL BIOMARKERS USING AMBIENT MASS SPECTROMETRY <b>Yu BAI (Keynote)</b> Peking University
17:15-17:40	B15	AIR-WATER INTERFACE MASS SPECTROMETRY COMBINED WITH PHASED-ARRAY ACOUSTIC TWEZERS <b>Xinxing ZHANG (Keynote)</b> Nankai University
17:45-17:55	B34	THE MARRIAGE OF “SOFT” AND “HARD” IN MASS SPECTROMETRY <b>Lei YUE</b> Technische Universität Berlin

Time: Oct. 26, 2019 AM (Saturday)		
Topic: BioMS		
Chairman: Prof. Yinlong GUO and Prof. Xinrong ZHANG		
8:30-8:55	B16	LABEL-FREE MASS CYTOMETRY: METHOD AND APPLICATION <b>Xinrong ZHANG (Keynote)</b> Tsinghua University
8:55-9:20	B17	PREOPERATIVE CLASSIFICATION OF THYROID NODULES USING MASS SPECTROMETRY IMAGING OF FINE NEEDLE ASPIRATION BIOPSIES <b>Jialing ZHANG (Keynote)</b> The University of Texas at Austin
9:20-9:45	B18	SINGLE CELL “ON-PROBE” DERIVATIZATION: UNRAVELING CELLULAR HETEROGENEITY OF STEROL METABOLITES <b>Yinlong GUO (Keynote)</b> Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences
9:45-10:00	B35	INNOVATIVE ION SOURCE TECHNOLOGY EXPANDS MASS SPECTROMETRY APPLICATIONS <b>Li DENG</b> Shimadzu (China) Co., Ltd.
10:00-10:15	B36	EARLY DETECTION AND PREDICTION OF DIABETIC NEPHROPATHY BY URINARY PROTEIN AND METABOLITE BIOMARKERS <b>Chao-Jung Chen</b> China Medical University Hospital
10:15-10:30	Coffee Break	
Topic: Fundamental III		
Chairman: Prof. Cheng LIN and Prof. Han Bin OH		
10:30-10:55	B19	LC-MS/MS SOFTWARE FOR SCREENING UNKNOWN ERECTILE DYSFUNCTION DRUGS AND ANALOGS: ANN CLASSIFICATION AND HYBRID SIMILARITY SEARCH ALGORITHMS <b>Han Bin OH (Keynote)</b> Sogang University
10:55-11:20	B20	PROBING STRUCTURE AND UNFOLDING OF A TRIMERIC COILED COIL IN THE GAS PHASE BY NATIVE TOP-DOWN MASS SPECTROMETRY <b>Huilin LI (Keynote)</b> Sun Yat-Sen University
11:20-11:45	B21	THE DEVELOPMENT OF AN AUTOMATED GLYCAN SEQUENCER <b>Cheng LIN (Keynote)</b> Boston University School of Medicine
11:45-12:00	B37	HOMOLOGOUS SERIES STRATEGY IN PETROCHEMISTRY STUDY USING ION MOBILITY MASS SPECTROMETRY <b>Yehua HAN</b> China University of Petroleum-Beijing

12:00-13:30		Lunch time/Poster Session
Time: Oct. 26, 2019 PM (Saturday)		
Topic: BioMS----- “-omics”		
Chairman: Prof. Lihua ZHANG and Prof. Xiaohong QIAN		
13:30-13:55	B22	THE DEVELOPMENT AND APPLICATION OF MASS SPECTROMETRY-BASED TECHNIQUES IN PROTEOMICS AND GLYCOPROTEIN STUDY <b>Xiaohong QIAN (Keynote)</b> Beijing Proteome Research Center
13:55-14:20	B23	MODIFICATION-FREE APPROACHES TO SCREEN DRUG TARGETS AT PROTEOME LEVEL <b>Mingliang YE (Keynote)</b> Dalian Institute of Chemical Physics, Chinese Academy of Sciences
14:20-14:45	B24	NEW METHODS FOR DEEP-COVERAGE ANALYSIS OF PROTEIN-PROTEIN INTERACTION BY CROSS-LINKING MASS SPECTROMETRY <b>Lihua ZHANG (Keynote)</b> Dalian Institute of Chemical Physics, Chinese Academy of Sciences
14:45-15:10	B25	SALMONELLA PROTEOMIC PROFILING DURING INFECTION DISTINGUISHES THE INTRACELLULAR ENVIRONMENT OF HOST CELLS <b>Xiaoyun LIU (Keynote)</b> Peking University Health Science Center

15:10-15:25	B38	TRAPPED ION MOBILITY ENHANCED 4-DIMENSIONAL PROTEOMICS AND SPATIALOMX <b>Ning CHEN</b> Bruker (Beijing) Scientific Technology Co., Ltd.
15:25-15:40	B39	Metabolomics-Proteomics Reveals Novel Functional Targets of Endogenous Compounds in Cancer Metabolism <b>Hui YE</b> China Pharmaceutical University
15:40-16:00	Coffee Break	
Topic: BioMS----- “-omics”		
Chair: Prof. Yu XIA and Prof. Gavin REID		
16:00-16:25	B26	TOWARD UNDERSTANDING THE FUNCTIONAL ROLE OF ABBERRANT LIPID METABOLISM IN COLORECTAL CANCER BY ADVANCED MASS SPECTROMETRY BASED LIPIDOMIC ANALYSIS <b>Gavin E. REID (Keynote)</b> The University of Melbourne
16:25-16:50	B27	ANALYSIS OF ETHER GLYCEROPHOSPHOLIPIDS DOWN TO C=C LOCATIONS <b>Yu XIA (Keynote)</b> Tsinghua University
16:50-17:15	B28	MASS SPECTROMETRY FOR ANALYSIS OF NUCLEIC ACID MODIFICATIONS <b>Bifeng YUAN (Keynote)</b> Wuhan University
17:15-17:30	/	Poster Awards/Closing Remarks <b>Chair: Prof. Huwei LIU</b>



## SCHEDULE OF SESSIONS

### C OPTICAL SPECTROSCOPY

CHAIRMAN:  
Prof. He Yan

### ORAL LECTURES

Dates: Oct.25-26,2019

Location: Room 310, China National Convention Center, Beijing

Date: October 25, 2019 AM		
Chairman: Yan He \ Wenwan Zhong		
8:30-8:55	C2	SURFACE PLASMON RESONANCE IMAGING FOR FINGERPRINTING ANALYSIS <b>Yi Chen</b> Institute of Chemistry, Chinese Academy of Sciences
8:55-9:20	C3	VARIOUS WAVELENGTH-DEPENDENT PLASMONIC SCATTERING ILLUMINATION-BASED 3D SUPER-RESOLUTION MICROSCOPY <b>Seong Ho Kang</b> Kyung Hee University
9:20-9:45	C4	FREE-STANDING 2D PLASMONIC NANOASSEMBLIES <b>Wenlong Cheng</b> Monash University
9:45-10:00	C5	ABN QD-BASED VISUAL ELECTROCHEMILUMINESCENCE NANOSENSORS WITH AMPLIFIED SURFACE PLASMON COUPLING STRATEGY FOR GENE DETECTION <b>Qiang Ma</b> Jilin University
10:00-10:20	Coffee break	
Chairman: Yi Chen \ Seong Ho Kang		
10:20-10:45	C6	CHEMILUMINESCENCE OF PEROXYNITROUS ACID AND ITS APPLICATION IN ANALYTICAL CHEMISTRY <b>Jin-Ming Lin</b> Tsinghua University
10:45-11:10	C7	DROPLET ENHANCED FLUORESCENCE AND ITS APPLICATION TO BIO-ANALYSIS <b>Katsumi Uchiyama</b> Tokyo Metropolitan University
11:10-11:35	C8	FLUORESCENCE DISPLACEMENT ASSAY FOR ANALYSIS OF PROTEIN MODIFICATION <b>Wenwan Zhong</b> University of California
11:35-11:50	C9	GOLD NANOBIPYRAMIDS@ZIF-8 FOR HYDROGEN SULFIDE GAS SENSING: A SPECIAL SERS RESPONSE AT THE LOW WAVENUMBER <b>Longhua Guo</b> Fuzhou University
11:50-12:05	C10	SPECTRAL SOLUTION FOR MICROPLASTIC AND EXTRANEIOUS MATTER ANALYSIS <b>Wei Zheng</b> Shimadzu Corporation
12:05-13:30	Lunch	
Date: October 25, 2019 PM		
Chairman: Max Lei Geng \ Fan Xia		
13:30-13:55	C11	ULTRASENSITIVE NON-LABEL DETECTION METHOD FOR NANOFLUIDICS USING NANOCHANNEL OPTICAL DIFFRACTION <b>Kazuma Mawatari</b> The University of Tokyo
13:55-14:20	C12	Quantitative Analysis of Protein Dynamics and Interactions by Live-Cell Single-Molecule Fluorescence Microscopy <b>Xiaohong Fang</b> Institute of Chemistry, Chinese Academy of Sciences
14:20-14:45	C13	FLUORESCENT BIOSENSORS BASED ON SINGLE-MOLECULE COUNTING <b>Chun-yang Zhang</b> Shandong Normal University
14:45-15:00	C14	INTRACELLULAR DYNAMICS REVEALED BY SINGLE-PARTICLE TRACKING <b>Hui Li</b> Beijing Normal University

15:00-15:15	C15	INSTRUMENT INNOVATION OF FLUORESCENCE TRIPLET CORRELATION SPECTROSCOPY AND ITS APPLICATIONS <b>Chaoqing Dong</b> Shanghai Jiao Tong University
15:15-15:35	Coffee break	
Chairman: Huan-Tsung Chang \ Xiaohong Fang		
14:45-15:10	C16	SPECTROSCOPY THROUGH A MICROSCOPE: PROBING HETEROGENEITY IN NANOPOROUS SILICA PARTICLES <b>Max Lei Geng</b> University of Iowa
16:00-16:25	C17	SINGLE MOLECULE STUDY OF HETEROGENEOUS CATALYSIS IN NANOCONFINING MATERIAL <b>Ning Fang</b> Georgia State University
16:25-16:50	C18	ANALYSIS AND DETECTION BASED ON SOLID NANOPORE/CHANNEL <b>Fan Xia</b> China University of Geosciences
16:50-17:05	C19	PREPARATION AND PROPERTIES OF SURFACE ENHANCED RAMAN SPECTROSCOPIC ACTIVE SUBSTRATES <b>Jian-Wei Zhao</b> Jiaxing University
17:05-17:20	C20	ENDOPLASMIC RETICULUM-TARGETABLE RATIO-METRIC TIME-GATED LUMINESCENCE PROBE FOR SUPEROXIDE ANION BASED ON LANTHANIDE COMPLEXES <b>Bo Song</b> Dalian University of Technology
Date: October 26, 2019 AM		
Chairman: Ning Fang \ Chun-yang Zhang		
8:30-8:55	C21	DESIGN AND SYNTHESIS OF FLUORESCENT PROBES BASED ON POLYARGININES <b>Sichun Zhang</b> Tsinghua University
8:55-9:20	C22	DEVELOPMENTS OF METAL COMPLEX-BASED ORGANELLE TARGETABLE LUMINESCENT PROBES FOR TIME-GATED LUMINESCENCE BIOASSAYS <b>Jingli Yuan</b> Dalian University of Technology
9:20-9:45	C23	FLUORESCENT BIOSENSORS FOR METAL DETECTION USING DNAZYMES <b>Juewen Liu</b> University of Waterloo
9:45-10:00	C24	COLORIMETRIC METAL ION SENSORS BASED ON THE PARTITION OF METAL COMPLEXES INTO POLYMERIC HYDROGELS: APPLICATION IN COMPLEX MATRIXES <b>Cesar Alfredo Barbero</b> Universidad Nacional de Río Cuarto
10:00-10:20	Coffee break	
Chairman: Hua-Zhong Yu \ Juewen Liu		
10:20-10:45	C25	BIOMEDICAL APPLICATIONS OF FLUORESCENT NANOMATERIALS <b>Huan-Tsung Chang</b> National Taiwan University

10:45-11:10	C26	SENSITIVE DETECTION OF NUCLEIC ACID AND PROTEIN BIOMARKERS WITH LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) <b>Zhengping Li</b> University of Science and Technology Beijing
11:10-11:35	C27	G-QUADRUPLEX-BASED BIOIMAGING <b>Zhou Nie</b> Hunan University
11:35-11:50	C28	FLUORESCENCE IMAGING OF SUBCELLULAR STRUCTURES VIA MOLECULAR AND NANOSCALE PROBES <b>Fu-Gen Wu</b> Southeast University
11:50-12:05	C29	MAKING AN IMPACT THROUGH PUBLISHING: EDITOR TIPS FROM ANALYST AND THE ROYAL SOCIETY OF CHEMISTRY <b>Jeanne Andres</b> Royal Society of Chemistry
12:05-13:30	Lunch	
Date: October 26, 2019 PM		
Chairman: Xi Chen \ Xiandeng Hou		
13:30-13:55	C30	MOBILE ELECTRONICS AS QUANTITATIVE POINT-OF-CARE DIAGNOSTIC TOOLS: FROM OPTICAL DISC READING TO SMARTPHONE IMAGING <b>Hua-Zhong Yu</b> Simon Fraser University
13:55-14:20	C31	IN SITU ANALYSIS OF NANOASSEMBLIES UNDER DYNAMICS STATUS <b>Tie Wang</b> Institute of Chemistry, Chinese Academy of Sciences
14:20-14:45	C32	WATCHING THE ELECTRON TRANSFER OF SINGLE NANOPARTICLES OPTICALLY <b>Wei Wang</b> Nanjing University
14:45-15:00	C33	SEPARATION-FREE DIFFERENTIATION OF ANALOGUES BY FLUORESCENT SENSOR ARRAY <b>Zhiqin Yuan</b> Beijing University of Chemical Technology
15:00-15:20	Coffee break	
Chairman: Wei Wang \ Tie Wang		
15:20-15:45	C34	HIGH EFFICIENCY MICROPLASMA SPECTROCHEMISTRY <b>Xiandeng Hou</b> SiChuan University
15:45-16:10	C35	WAVELENGTH-SHIFT BASED COLORIMETRIC SENSING USING CSPBBR3 PEROVSKITE NANOCRYSTALS <b>Xi Chen</b> Xiamen University
16:10-16:25	C36	INTEGRATED SMARTPHONE-APP-CHIP SYSTEM FOR ON-SITE PPB-LEVEL COLORIMETRIC QUANTITATION OF AFLATOXINS <b>Li Xiaochun</b> Taiyuan University of Technology
16:25-16:40	C37	DEVELOPMENT OF PHOTOLUMINESCENCE AND ELECTROCHEMILUMINESCENCE DUAL-SIGNALING PROBES BASED-ON TRANSITION METAL COMPLEXES <b>Wenzhu Zhang</b> Dalian University of Technology
16:40-16:55	C38	TEMPORAL AND SPATIAL DNA IN ANALYTICAL CHEMISTRY <b>Xin Su</b> Beijing University of Chemical Technology
16:55-17:10	C39	SERS ANALYSIS BASED ON NONMETALLIC COMPOSITE NANOMATERIALS <b>Tingting Zheng</b> East China Normal University
17:10-17:20	Poster Award	

## SCHEDULE OF SESSIONS

### D CHROMATOGRAPHY

CHAIRMAN:  
Prof. Lihua Zhang

### ORAL LECTURES

Dates: Oct.25-26,2019

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

Date: Oct. 25, 2019 AM ( Friday )		
Chairman: Prof. Gérard Hopfgartner and Prof. Antje J. Baeumner		
09:00-09:20	D2	MODIFIER ASSISTED DIFFERENTIAL MOBILITY SPECTROMETRY FOR HIGH THROUGHPUT QUANTIFICATION AND MULTIDIMENSIONAL ANALYSIS <b>Gérard Hopfgartner (Keynote)</b> University of Geneva, Switzerland
09:20-09:40	D3	NANOMATERIALS FOR A LAB-ON-A-CHIP INCLUDING SEPARATION, MIXING AND DETECTION <b>Antje J. Baeumner (Keynote)</b> University of Regensburg, Germany
09:40-10:00	D4	ASSESSING VITAMIN D STATUS - ANALYTICAL CHALLENGES AND ACCOMPLISHMENTS <b>Stephen A. Wise (Keynote)</b> National Institutes of Health, USA
10:00-10:20	D5	INTRODUCTION AND CASE SHARING OF INTELLIGENT DATA ANALYSIS METHOD FOR LIQUID CHROMATOGRAPHY <b>Hongrui Yin</b> SHIMADZU (China) Co., Ltd.
Chairman: Prof. Adam T. Woolley and Prof. Steffen Pauly		
10:30-10:50	D6	3D PRINTED MICROFLUIDIC SYSTEMS FOR BIOMARKER ANALYSIS <b>Adam T. Woolley (Keynote)</b> Brigham Young University, USA
10:50-11:10	D7	PUBLISHING ANALYTICAL SCIENCE WITH SPRINGER NATURE <b>Steffen Pauly (Keynote)</b> Springer Nature, Germany
11:10-12:00		ABCS OF PUBLISHING: TIPS FOR GETTING YOUR MANUSCRIPT ACCEPTED <b>Adam T. Woolley (Keynote)</b> Brigham Young University, USA
Date: Oct. 25, 2019 PM ( Friday )		
Chairman: Prof. Gongke Li and Prof. Yi Chen		
13:30-13:50	D8	SAMPLE PREPARATION METHODS BASED ON MICROPOROUS ORGANIC POLYMERS IN CHROMATOGRAPHIC ANALYSIS <b>Gongke Li (Keynote)</b> Sun Yat-sen University, China
13:50-14:10	D9	HEMOGLOBIN CE FOR SCREENING OF ANEMIA <b>Yi Chen (Keynote)</b> Institute of Chemistry, Chinese Academy of Sciences, China
14:10-14:30	D10	MULTIPLE MODES CAPILLARY ELECTROPHORESIS: THE EFFICIENT TECHNOLOGY FOR APTAMERS SELECTION <b>Feng Qu (Keynote)</b> Beijing Institute of Technology, China
14:30-14:50	D11	MOLECULAR EVOLUTION FOR LIQUID BIOPSY <b>Chaoyong James YANG (Keynote)</b> Xiamen University, China
14:50-15:10	D12	STIMULI-RESPONSIVE POLYMER ENZYME REACTORS FOR SCREENING DAAO INHIBITORS WITH CHIRAL CAPILLARY ELECTROPHORESIS TECHNIQUE <b>Li Qi (Keynote)</b> Institute of Chemistry, Chinese Academy of Sciences, China
15:10-15:30	D13	IMMOBILIZED GPCR: A RELIABLE PLATFORM FOR DRUGGABILITY EVALUATION OF BIOACTIVE COMPOUNDS THROUGH BINDING INTERACTION ANALYSIS <b>Xinfeng Zhao (Invited)</b> Northwest University, China

15:30-15:50	D14	HIGHLY EFFICIENT AUTOMATED SAMPLE PREPARATION SOLUTIONS FOR GC/MS AND LC/MS IN FOOD SAFETY FIELD <b>Yunyun Nie</b> GERSTEL (Shanghai) Co. Ltd
Chairman: Prof. Huwei Liu and Prof. Guowang Xu		
16:00-16:20	D15	A NOVEL ONLINE SFC/HPLC TWO DIMENSIONAL METHOD FOR LIPID PROFILING <b>Huwei Liu (Keynote)</b> Peking University, China
16:20-16:40	D16	A NOVEL ANALYTICAL METHOD FOR QUANTITATIVE ANALYSIS OF OVER 1,000 METABOLITES BASED ON TWO-DIMENSIONAL LC-MS <b>Guowang Xu (Keynote)</b> Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China
16:40-17:00	D17	ULTRASENSITIVE DETERMINATION OF MODIFIED NUCLEOTIDES BY SHEATHLESS INTERFACED CAPILLARY ELECTROPHORESIS-TANDEM MASS SPECTROMETRY <b>Xinxiang Zhang (Keynote)</b> Peking University, China
17:00-17:20	D18	PREPARATION AND CHARACTERIZATION OF PEPTIDE-GUIDED CONJUGATE FOR IN VIVO IMAGING AND TUMOR INHIBITION <b>Rui Zhao (Keynote)</b> Institute of Chemistry, Chinese Academy of Sciences, China
17:20-17:40	D19	ISOLATION AND PURIFICATION OF ALKALOIDS FROM FRUITS OF MACLEAYA CORATA BY IONIC-LIQUID-MODIFIED HSCCC <b>Yun Wei (Keynote)</b> Beijing University of Chemical Technology, China
17:40-18:00	D20	CONSTANT PERFORMANCE HPLC DEGASSING <b>Saba Jazeeli</b> IDEX Health & Science
Date: Oct. 26, 2019 AM ( Saturday )		
Chairman: Prof. Lingjun Li and Prof. Weiguo Andy Tao		
09:00-09:20	D21	DEVELOPING IMPROVED STRATEGIES FOR SELECTIVE ENRICHMENT AND LARGE-SCALE PROFILING OF PEPTIDES WITH MULTIPLE PTMS <b>Lingjun Li (Keynote)</b> University of Wisconsin-Madison, USA
09:20-09:40	D22	EXTRACELLULAR VESICLE-BASED DISEASE BIOMARKERS: PROMISE AND CHALLENGES <b>Weiguo Andy Tao (Keynote)</b> Purdue University, USA
09:40-10:00	D23	PROFILING OF DNA MODIFICATIONS FOR EPIGENETICS <b>Hailin Wang (Keynote)</b> Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China
10:00-10:20	D24	SYNTHESIS AND PURIFICATION OF FUNCTIONAL PROTEIN-DNA CONJUGATES WITH 1:1 STOICHIOMETRY <b>Xiaowen Yan (Keynote)</b> Xiamen University, China

Chairman: Prof. Myeong Hee Moon and Prof. Yongchien Ling		
10:30-10:50	D25	ISOTOPE-LABELED METHYLATION FOR THE RESOLUTION ENHANCEMENT AND RELATIVE QUANTIFICATION OF POLYGLYCEROPHOSPHOLIPIDS BY NUHPLC-ESI-MS/MS <b>Myeong Hee Moon (Keynote)</b> Yonsei University, Korea
10:50-11:10	D26	ANALYTICAL SEPARATION AND CHARACTERIZATION OF CARBON QUANTUM DOTS <b>Yongchien Ling (Keynote)</b> National Tsing Hua University
11:10-11:30	D27	APPLICATION OF NANO-ELECTRODES IN ANALYTICAL CHEMISTRY <b>Jingyuan Chen (Keynote)</b> University of Fukui, Japan
11:30-11:50	D28	AGILENT INTELLIGENT GC - 8890 GC <b>Jinqiang Zhang</b> Agilent Technology
Date: Oct. 26, 2019 PM ( Saturday )		
Chairman: Prof. Xiayan Wang and Prof. Yong Wang		
13:30-13:50	D29	MACHINE VISION ASSISTED FOCUSING FOR HIGHLY SENSITIVE LASER-INDUCED FLUORESCENCE DETECTION OF NANOCAPILLARIES <b>Xiayan Wang (Keynote)</b> Beijing University of Technology, China
13:50-14:10	D30	FUNCTIONALITY TUNING OF STRUCTURALLY WELL-DEFINED CYCLODEXTRIN CHIRAL SEPARATION PHASES <b>Yong Wang (Keynote)</b> Tianjin University, China
14:10-14:30	D31	PREPARATION OF MAGNETIC COVALENT ORGANIC POLYMER AND MESOPOROUS CARBON <b>Chaozhan Wang (Invited)</b> Northwest University, China
14:30-14:45	D32	INTEGRATION OF MOLECULAR RECOGNITION WITH TOPOLOGICAL INTERACTIONS FOR SEPARATING CIRCULATING TUMOR CELLS FROM CLINICAL SAMPLES <b>Yanyan Huang (Invited)</b> Institute of Chemistry, Chinese Academy of Sciences, China
14:45-15:00	D33	NEW FRAGMENT ION-BASED QUANTITATION METHODS FOR ACCURATE PROTEOME ANALYSIS <b>Jianhui Liu</b> Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China
15:00-15:15	D34	DETERMINATION OF SALIVARY AND SERUM GLYCATED ALBUMIN BY AGAROSE-BORONIC ACID FUNCTIONALIZED CAPILLARY ELECTROPHORESIS <b>Ghulam Murtaza</b> Beijing Institute of Technology, China
15:15-		Closing Remarks

## SCHEDULE OF SESSIONS

### E MAGNETIC RESONANCE

CHAIRMAN:  
Prof. Maili LIU

### ORAL LECTURES

Dates: Oct.25-26,2019  
Location: Room 306A, China  
National Convention Center,  
Beijing

Date: Oct. 25, 2019 (AM)		
8:25-8:30	Opening Speech by Prof. Maili LIU	
Chairman: Prof. Shenlin WANG		
8:30-8:55	E2	DYNAMIC PROTEIN-PROTEIN INTERACTIONS AT THE MEMBRANE INTERFACE BY NMR <b>Ayyalusamy (Rams) Ramamoorthy (Keynote)</b> University of Michigan
8:55-9:20	E3	INHIBITION OF AMYLOID SELF-ASSEMBLY BY LIQUID-LIQUID PHASE SEPARATION <b>Bernd Reif (Keynote)</b> Helmholtz-Zentrum München (HMZ)
9:20-9:45	E4	THE POWER OF PROTON-DETECTED SOLID-STATE NMR METHODS: STRUCTURAL STUDIES OF NUCLEOSOMES AND CYTOSKELETON PROTEINS <b>ShengQi XIANG (Keynote)</b> University of Science and Technology of China
9:45-10:05	E20	NOVEL SSNMR-BASED METHODOLOGY TOWARDS RNA STRUCTURE STUDY <b>Sha ZHAO</b> Peking University
10:05-10:25	Coffee Break	
Chairman: Prof. Guangjin HOU		
10:25-10:50	E5	TO BE DECIDED <b>Hartmut Oschkinat (Keynote)</b> Free University of Berlin
10:50-11:15	E6	SOLID-STATE NMR STUDIES OF SEVEN-TRANSMEMBRANE ION-PUMPING RHODOPSIN AND SELF-ASSEMBLED PEPTIDE <b>Izuru Kawamura (Keynote)</b> Yokohama National University
11:15-11:40	E7	PROGRESS OF THE STRUCTURAL CHARACTERIZATION ON A EUKARYOTIC RHODOPSIN BY SOLID-STATE NMR <b>Shenlin WANG (Keynote)</b> Peking University
11:40-12:00	E21	EXPLORING (MEMBRANE) PROTEIN STRUCTURES BY DNP-ENHANCED METHYL SSNMR SPECTROSCOPY <b>Jiafei MAO</b> Goethe University of Frankfurt am Main
Date: Oct. 25, 2019 PM		
Chairman: Prof. Conggang LI		
14:00-14:25	E8	A RAPID QUANTITATIVE 1H NMR METHOD FOR LARGE COHORT METABOLIC FLUXOMICS WITH UNAMBIGUOUS IDENTIFICATION OF ALL 13C-LABELED METABOLITES AND LABELING CITES <b>Huiru TANG (Keynote)</b> Zhongshan Hospital & School of Life Sciences, Fudan University
14:25-14:50	E9	NMR-BASED METABONOMICS IN HBV INFECTION <b>Yulan Wang (Keynote)</b> Nanyang Technological University
14:50-15:15	E10	NMR METHODOLOGIES AND WATER COMPATIBLE WEAK CHIRAL ALIGNING MEDIA FOR ENANTIOMERIC DISCRIMINATION <b>N. Suryaprakash (Keynote)</b> NMR Research Centre, Indian Institute of Science
15:15-15:40	E11	RECENT ADVANCED APPROACHES AND APPLICATIONS OF QNMR <b>Ting HUANG (Keynote)</b> National Institute of Metrology
15:40-16:00	Coffee Break	

Chairman: Prof. Shengqi XIANG		
16:00-16:25	E12	SIZE AND MORPHOLOGY CONTROL OF BONE-RELEVANT HYDROXYAPATITE NANOCRYSTALS AND CHARACTERIZATION WITH SOLID NMR, XRD, IR, SEM <b>Shangwu DING (Keynote)</b> National Sun Yat-sen University
16:25-16:50	E13	HETERONUCLEAR DIPOLAR RECOUPLING METHODOLOGY DEVELOPMENT AND APPLICATION IN MAS NMR SPECTROSCOPY <b>Guangjin HOU (Keynote)</b> Dalian Institute of Chemical Physics
16:50-17:10	E22	MOLECULAR CHARACTERIZATION OF PHARMACEUTICAL PRODUCTS BY ULTRAFAST MAGIC-ANGLE SPINNING NMR <b>Xingyu LU</b> Westlake University
17:10-17:30	E23	NOVEL SOLID-STATE NMR METHODS FOR STRUCTURE AND DYNAMIC INFORMATION IN BIOSOLIDS <b>Kai XUE</b> Max-Planck Institute for Biophysical Chemistry
Date: Oct. 26, 2019 (AM)		
Chairman: Prof. Chunyang CAO		
8:30-8:55	E14	STRUCTURAL AND FUNCTIONAL STUDIES OF THE PHOSPHORYLATED SYNUCLEIN IN VITRO AND IN CELLS BY NMR SPECTROSCOPY <b>Conggang LI (Keynote)</b> Wuhan Institute of Physics and Mathematics
8:55-9:20	E15	3D STRUCTURAL DETERMINATION OF UNSTABLE ENZYMIC INTERMEDIATE COMPLEX VIA PARAMAGNETIC TAGGING <b>XunCheng SU (Keynote)</b> Nankai University
9:20-9:40	E24	UNDERSTANDING THE MOLECULAR BASIS OF EPIGENETIC MECHANISMS BY NMR <b>Yi ZHANG</b> University of Colorado School of Medicine
9:40-10:00	E25	MONITORING OF CHOLINE PHOSPHORYLATION IN INTACT CELLS BY NMR <b>Xin CHAI</b> Wuhan Institute of Physics and Mathematics
10:00-10:20	Coffee Break	
Chairman: Prof. Qi ZHANG		
10:20-10:45	E16	CHARACTERIZATION OF RESIDUE SPECIFIC PROTEIN CONFORMATIONAL DYNAMICS IN CELLS <b>Lishan YAO (Keynote)</b> Qingdao Institute of Bioenergy and Bioprocess Technology

10:45-11:10	E17	INTRINSIC SLOW DYNAMICS OF RAS PROBED BY RELAXATION-BASED NMR SPECTROSCOPY <b>Dong LONG (Keynote)</b> University of Science and Technology of China
11:10-11:30	E26	DNA BINDING MECHANISM OF THE C-CLAMP TYPE ZINC FINGER PROTEINS <b>Bo DUAN</b> Peking University
Date: Oct. 26, 2019 PM		
Chairman: Prof. Lishan YAO		
14:00-14:25	E18	VISUALIZING TRANSIENT REGULATORY STATES IN RNA RIBOSWITCHES <b>Qi ZHANG (Keynote)</b> University of North Carolina at Chapel Hill
14:25-14:50	E19	MECHANISTIC STUDIES ON HUMAN APOBEC3 FAMILY MEMBERS CATALYZED DEAMINATION OF CYTIDINES IN DNA BY NUCLEAR MAGNETIC RESONANCE <b>Chunyang CAO (Keynote)</b> Shanghai Institute of Organic Chemistry
14:50-15:10	E27	THE CONFORMATION OF CYTOCHROME C - A ROS SCAVENGER IN MITOCHONDRIA <b>Jianhua ZHAN</b> Wuhan Institute of Physics and Mathematics

## SCHEDULE OF SESSIONS

### F ELECTROANALYTICAL CHEMISTRY

**CHAIRMAN:**  
Prof. Jinghong Li

**ORAL LECTURES**  
**Dates:** Oct.25-26,2019  
**Location:** Room 306B, China National Convention Center, Beijing

Date: Oct. 25, 2019 AM (Friday)		
Chairmen: Prof. Taek Dong CHUNG and Prof. Nongjian TAO		
8:25-8:30	Opening Remarks by Xiurong YANG	
8:30-8:55	F2	A STUDY OF NANOZYMES <b>Erkang WANG (Keynote)</b> State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Jilin 130022, Changchun, China
8:55-9:20	F3	A MINIATURE TEST CELL FOR HYDROGEN FUEL CELLS AND RELATED POLYMER ELECTROLYTE MEMBRANE (PEM) DEVICES <b>Stephen CREAGER (Keynote)</b> Department of Chemistry, Clemson University, Clemson, South Carolina, USA
9:20-9:45	F4	IN VIVO ELECTROCHEMICAL MONITORING OF VITAMIN C <b>Lanqun MAO (Keynote)</b> Beijing National Laboratory for Molecular Sciences, Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences (CAS), Beijing 100190, China.
9:45-10:10	F5	NOVEL ELECTROCHEMICAL BIOSENSOR WITH DUAL SIGNAL OUTPUTS FOR IN VIVO ANALYSIS IN BRAIN <b>Yang TIAN (Keynote)</b> Department of Chemistry, School of Chemistry and Molecular Engineering, East China Normal University, Dongchuan Road 500, Shanghai 200241, P. R. China
10:10-10:25	Coffee Break	
Chairman: Prof. Stephen CREAGER and Prof. Shaojun GUO		
10:25-10:50	F6	SINGLE-ATOM NANOZYMES <b>Shaojun DONG (Keynote)</b> State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, Jilin 130022, China.
10:50-11:15	F7	3D INTEGRATED ELECTRODE ARRAY OF FUNCTIONALIZED INDIUM TIN OXIDE FOR ELECTROCHEMICAL SIGNAL AMPLIFICATION <b>Taek Dong CHUNG (Keynote)</b> Department of Chemistry, Seoul National University, Seoul 08826, Korea
11:15-11:40	F8	MEASURING PROTEIN BINDING WITH PLASMONIC IMAGING OF NANO-OSCILLATORS <b>Nongjian TAO (Keynote)</b> Biodesign Center for Bioelectronics and Biosensors, Arizona State University, Tempe, AZ 85287, USA School of Electrical, Computer and Energy Engineering, Arizona State University, Tempe, AZ 85287
11:40-12:05	F9	STRAIN ELECTROCATALYSIS AND ELECTROANALYSIS <b>Shaojun GUO (Keynote)</b> College of Engineering, Peking University
Date: Oct. 25, 2019 PM (Friday)		
Chairman: Prof. Neso SOJIC and Prof. Hua CUI		
13:30-13:55	F10	PLASMON ENHANCED IR SPECTROSCOPY AND ELECTROCHEMISTRY <b>Xinghua XIA (Keynote)</b> State Key Laboratory of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, China
13:55-14:20	F11	GAS CHROMATOGRAPHY IN THE STUDY OF CO <sub>2</sub> CONVERSION <b>Jing-Li LUO (Keynote)</b> Dept. of Chemical and Materials Engineering, University of Alberta, Edmonton, Alberta, Canada T6G 1H9

14:20-14:45	F12	SINGLE NANOPARTICLE DARK-FIELD AND ELECTROCHEMILUMINESCENCE IMAGING <b>Jing-Juan XU (Keynote)</b> State Key Laboratory of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, China
14:45-15:05	F13	RESEARCH ON THE DELIVERY OF PROTEINS TO LIVING CELLS USING DNA PROGRAMMED MEMBRANE FUSION <b>Di LI (Invited)</b> School of Chemistry and Molecular Engineering, East China Normal University, 200241, Shanghai, China
15:05-15:25	F14	ENGINEERED BIOLOGICAL NANOPROBES FOR IDENTIFYING SINGLE MOLECULE TARGETS <b>Shuo Huang (Invited)</b> Nanjing University
15:25-15:35	Coffee Break	
<b>Chairman: Prof. Jingli LUO and Prof. Xinghua XIA</b>		
15:35-16:00	F15	ELECTROCHEMICAL CATALYTIC PROBES FOR AMPLIFIED BIOSENSING <b>Huangxian JU (Keynote)</b> State Key Laboratory of Analytical Chemistry for Life Science, Department of Chemistry, Nanjing University, Nanjing 210093, P. R. China
16:00-16:25	F16	SURFACE-CONFINED ELECTROCHEMILUMINESCENCE: FROM BEAD-BASED IMMUNOASSAYS TO CELL MICROSCOPY <b>Neso SOJIC (Keynote)</b> University of Bordeaux, Bordeaux INP, ISM, UMR CNRS 5255, Pessac, France
16:25-16:50	F17	POTENTIAL-RESOLVED MULTICOLOR ELECTROCHEMILUMINESCENCE OF NANOCOMPOSITES <b>Hua CUI (Keynote)</b> CAS Key Laboratory of Soft Matter Chemistry, iChEM (Collaborative Innovation Center of Chemistry for Energy Materials), Department of Chemistry, University of Science and Technology of China, Hefei, Anhui 230026, China
16:50-17:10	F18	ELECTROCHEMILUMINESCENCE MULTIPLEXED IMMUNOASSAY BASED ON MOLECULAR COMPLEXES AND QUANTUM DOTS <b>Bin SU (Invited)</b> Department of Chemistry, Zhejiang University, Hangzhou 310058, China
17:10-17:30	F19	PEPTIDE COMPOSITION ADJUST ITS ELECTRON TRANSPORT <b>Cunlan GUO (Invited)</b> Key Laboratory of Analytical Chemistry for Biology and Medicine (Ministry of Education), College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, P. R. China. 430072

<b>Date: Oct. 26, 2019 AM (Saturday)</b>		
<b>Chairman: Prof. Shaowei CHEN and Prof. Yuanhua SHAO</b>		
8:30-8:55	F20	HETERO-INTERFACE ENGINEERING OF METAL AND METAL COMPOUNDS AND THEIR APPLICATIONS IN ELECTROCATALYSIS <b>Xiurong YANG (Keynote)</b> State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, Jilin, China.
8:55-9:20	F21	CARBON BASED BIOSENSORS AND BIOELECTRONICS Madoka TAKAI (Keynote) Department of Bioengineering, School of Engineering, The University of Tokyo, 113-8656, Tokyo, Japan
9:20-9:45	F22	SPECTROELECTROANALYSIS FOR SENSITIVE BIOSENSING AND ELECTROCHEMICAL REACTION STUDY <b>Baohong LIU (Keynote)</b> Department of Chemistry, Fudan University, Shanghai 200433, China
9:45-10:10	F23	CROSSLINKED POLYMERIC HYDROGELS AS BIPHASIC SYSTEMS FOR ELECTROANALYTICAL APPLICATIONS <b>Cesar A. BARBERO (Keynote)</b> Research Institute of Energy Technology and Advanced Materials (UNRC-CONICET) - Campus of Universidad Nacional de Rio Cuarto, Ruta 8, km 601, 5800, Rio Cuarto, Argentina.
10:10-10:25	Coffee Break	
<b>Chairman: Prof. Madoka TAKAI and Prof. Cesar A. BARBERO</b>		
10:25-10:50	F24	FABRICATING AND APPLICATION OF DUAL ULTRAMICROELECTRODES <b>Yuanhua SHAO (Keynote)</b> College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China
10:50-11:15	F25	CARBON-BASED FUNCTIONAL NANOMATERIALS FOR ELECTROCHEMICAL ENERGY TECHNOLOGIES <b>Shaowei CHEN (Keynote)</b> Department of Chemistry and Biochemistry, University of California, 1156 High Street, Santa Cruz, CA 95064, USA.
11:15-11:35	F26	SELF-POWERED ELECTRONICS FOR SENSING <b>Zhou LI (Invited)</b> Beijing Institute of Nanoenergy and Nanosystems, CAS, Beijing 100083, China
11:35-11:55	F27	DYNAMICAL INTERACTIONS OF NANOMATERIALS WITH CELLS <b>Xiue JIANG (Invited)</b> State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, Jilin, China

11:55-12:10	F28	EXPLORING DYNAMIC NATURE OF SINGLE NANOPARTICLE ELECTROCHEMISTRY <b>Hui MA (Oral)</b> State Key Laboratory of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing, 210023, China
<b>Date: Oct. 26, 2019 PM (Saturday)</b>		
<b>Chairman: Prof. Hongda WANG and Prof. Carlos M. PEREIRA</b>		
13:30-13:55	F29	THE PERFORMANCE IMPROVEMENT AND ANALYTICAL APPLICATION EXPANSIONS OF BIOFUEL CELL <b>Jun-Jie ZHU (Keynote)</b> School of Chemistry and Chemical Engineering, State Key Laboratory of Analytical Chemistry for Life Science, Nanjing University, Nanjing, China
13:55-14:20	F30	ELECTROCHEMICAL SENSING AT NANO CONFINED SPACE <b>Yitao LONG (Keynote)</b> State Key Laboratory of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, P. R. China
14:20-14:40	F31	CONSTRUCTION AND APPLICATION OF ELECTROCHEMILUMINESCENCE APTASENSORS USING ELECTRICALLY HEATED ELECTRODE FOR IN SITU TEMPERATURE CONTROL <b>Zhenyu LIN (Invited)</b> MOE Key Laboratory for Analytical Science of Food Safety and Biology, Fujian Provincial Key Laboratory of Analysis and Detection Technology for Food Safety, College of Chemistry, Fuzhou University, Fuzhou, Fujian, 350116, China
14:40-15:00	F32	QUANTITATIVE MEASUREMENTS OF INDIVIDUAL VESICULAR CONTENTS IN SINGLE CELLS WITH INTRACELLULAR VESICLE IMPACT ELECTROCHEMICAL CYTOMETRY <b>Xianchan LI (Invited)</b> Center for Imaging and Systems Biology, College of Life and Environmental Sciences, Minzu University of China, Beijing 100081
15:00-15:20	F33	EFFICIENT SCREENING AND CATALYSIS OF ECs BASED ON ELECTROCHEMICAL APPROACHES WITH NANO-INTERFACE SELECTIVE EFFECT <b>Ying WANG (Invited)</b> Tongji University
15:20-15:30	Coffee Break	

<b>Chairman: Prof. Junjie ZHU and Prof. Yitao LONG</b>		
15:30-15:55	F34	STUDYING THE STRUCTURE OF CELL MEMBRANES BY SINGLE MOLECULE APPROACHES <b>Hongda WANG (Keynote)</b> State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, 5625 Renmin Street, Changchun, Jilin 130022, P.R.ChinaHIGH
15:55-16:15	F35	ELECTROCHEMICAL BIOSENSORS BASED ON MOLECULARLY IMPRINTED POLYMERS AS BIORECOGNITION ELEMENT <b>Carlos M. PEREIRA (Invited)</b> CIQUP - Physical Analytical Chemistry and Electrochemistry group, Departamento de Química e Bioquímica, Porto University, Rua do Campo Alegre 687, 4169 - 007 Porto, Portugal
16:15-16:30	F36	IN VIVO ELECTROANALYSIS OF ELECTROINACTIVE SPECIES IN RAT BRAIN <b>Limin ZHANG (Oral)</b> School of Chemistry and Molecular Engineering, East China Normal University, Dongchuan Road 500, Shanghai 200241 (China)
16:30-16:45	F37	SOFT ELECTROCHEMICAL/ELECTRONIC DEVICES AND THEIR APPLICATIONS IN POINT-OF-CARE TESTING <b>Fei LI (Oral)</b> The Key Laboratory of Biomedical Information Engineering of Ministry of Education, School of Life Science and Technology, Xi'an Jiaotong University, Xi'an 710049, China
16:45-17:00	F38	DYNAMIC PHOTOISOMERIZATION OF AZOBENZENE-MODIFIED OLIGONUCLEOTIDES <b>Zheng-Li HU (Oral)</b> State Key Laboratory of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, P. R. China
17:00-17:15	F39	A NEW ELECTROCHEMICAL REDOX PROBE FOR SELECTIVE REAL-TIME PROFILING OF ENDOGENOUS H <sub>2</sub> O <sub>2</sub> IN LIVE CELLS <b>Kesavan MANIBALAN (Oral)</b> Department of Chemistry, Beijing Key Laboratory of Microanalytical Methods and Instrumentation, MOE Key Laboratory of Bioorganic Phosphorus Chemistry & Chemical Biology, Tsinghua University, Beijing 100084, China.



# SCHEDULE OF SESSIONS

## G

### ANALYTICAL TECHNIQUES IN LIFE SCIENCES

**CHAIRMAN:**  
Prof. Jianwei XIE

### ORAL LECTURES

**Dates:** Oct.25-26,2019  
**Location:** Room 311B, China National Convention Center, Beijing

Date: Oct. 25, 2019 AM (Friday)		
Topic: Single molecule/cell/particle analysis		
Chairmen: Prof. Xiaomei YAN and Prof. Chunying CHEN		
8:30-8:35	Opening Remarks	
8:35-9:00	G2	IDENTIFYING VIRULENCE DETERMINANTS OF ZIKA VIRUS BY USING REVERSE GENETICS PLUS PLATFORM <b>Chengfeng QIN (Keynote)</b> Department of Virology, State Key Laboratory of Pathogen and Biosecurity, Beijing Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences, Beijing, China
9:00-9:25	G3	FLOW CYTOMETRIC ANALYSIS OF SINGLE EXTRA-CELLULAR VESICLES FOR BIOMEDICAL RESEARCH <b>Xiaomei YAN (Keynote)</b> Department of Chemical Biology, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, Fujian 361005, China
9:25-9:50	G4	DISCOVERY AND CHARACTERIZATION OF EXOGENOUS NANOPARTICLES IN HUMAN SERUM AND PLEURAL EFFUSION SAMPLES <b>Qian LIU (Keynote)</b> State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China
9:50-10:15	G5	ANALYSIS AND DETECTION OF NANOPARTICLES IN A SINGLE CELL <b>Chunying CHEN (Keynote)</b> CAS Key Laboratory for Biomedical Effects of Nanomaterials and Nanosafety and CAS Center for Excellence in Nanoscience, National Center for Nanoscience and Technology, Beijing, China
10:15-10:25	Coffee Break	
Chairman: Prof. Peng CHEN and Prof. Jie SONG		
10:25-10:50	G6	SINGLE-MOLECULE MICROSCOPY OF BACTERIAL METAL HOMEOSTASIS <b>Peng CHEN (Keynote)</b> Department of Chemistry and Chemical Biology, Cornell University, Ithaca, New York, USA
10:50-11:15	G7	CREATE PROTEIN PATTERNS WITH DNA ORIGAMI <b>Jie SONG (Keynote)</b> Department of Instrument Science and Engineering in the School of Electronic Information and Electrical Engineering, Shanghai Jiao Tong University, 800 Dongchuan Road, Shanghai, China
11:15-11:30	G22	A NOVEL EXONUCLEASE-ASSISTED ISOTHERMAL NUCLEIC ACID AMPLIFICATION WITH ULTRAHIGH SPECIFICITY MEDIATED BY FULL-LENGTH BST DNA POLYMERASE <b>Jilie KONG</b> Department of Chemistry and Institutes of Biomedical Sciences, Fudan University, Shanghai, China
11:30-11:45	G23	THE UNEXPECTED DISCOVERY OF BIOMARKERS AND MOLECULAR EVENTS BY CELL-SELEX <b>Tao BING</b> Beijing National Laboratory for Molecular Sciences, Key Laboratory of Analytical Chemistry for Living Biosystems, CAS Research/Education Center for Excellence in Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China
11:45-12:00	G24	GRAPHENE ISOLATED BIOMEDICAL ANALYSIS <b>Zhuo CHEN</b> State Key Lab of Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, Hunan University, Changsha, Hunan, China

Date: Oct. 25, 2019 PM (Friday)		
Topic: Analytical Chemistry: Meet the Editor		
Chairman: Prof. Xinrong ZHANG and Prof. Jonathan SWEEDLER		
13:00-13:15	/	FROM AN EDITOR'S PERSPECTIVE <b>Jonathan V. SWEEDLER (Editor-in-Chief)</b> Department of Chemistry and the Beckman Institute, University of Illinois at Urbana-Champaign, Urbana IL, USA
13:15-14:15	/	ONE-HOUR PANEL Q&A <b>Editors of Analytical Chemistry:</b> <b>Jonathan V. SWEEDLER (Editor-in-Chief)</b> <b>Xinrong ZHANG (Asso. Editor-in-Chief)</b> <b>Norman DOVICH (Asso. Editor-in-Chief)</b> <b>Chris Xiaochun LE (Asso. Editor-in-Chief)</b>
Date: Oct. 25, 2019 PM (Friday)		
Topic: Precision medicine analysis and medical diagnosis		
Chairmen: Prof. Yingfu LI and Prof. Chaoyong YANG		
14:30-14:55	G8	IN PURSUIT OF SIMPLE AND ULTRA-SENSITIVE FUNCTIONAL DNA-BASED BIOSENSING SYSTEMS <b>Yingfu LI (Keynote)</b> Department of Biochemistry and Biomedical Sciences, McMaster University, Hamilton, Canada
14:55-15:20	G9	HIGH THROUGHPUT SINGLE CELL SEQUENCING FOR PRECISION MEDICINE <b>Chaoyong YANG (Keynote)</b> Department of Chemical Biology, Xiamen University, Xiamen, China
15:20-15:35	G25	MOLECULAR CANCER IMAGING USING RENAL-EXCRETED NIR-II FLUOROPHORE-PEPTIDE PROBES <b>Weizhi WANG</b> School of Chemistry and Chemical Engineering, Beijing Institute of Technology, Beijing, China
15:35-15:45	Coffee Break	
Chairman: Prof. Chengzhi HUANG and Prof. Fan ZHANG		
15:45-16:10	G10	NANOSCALE OPTICAL PROBES FOR LONG-TERM BIOIMAGING <b>Chengzhi HUANG (Keynote)</b> Key Laboratory of Luminescent and Real-Time Analytical Chemistry (Southwest University), Ministry of Education, College of Pharmaceutical Sciences, Southwest University, Chongqing, China
16:10-16:35	G11	NIR-II LANTHANIDE PROBES FOR IN VIVO MULTI-PLEXED BIO DETECTION <b>Fan ZHANG (Keynote)</b> Department of Chemistry & Laboratory of Advanced Materials & Collaborative Innovation Center of Chemistry for Energy Materials & State Key Laboratory of Molecular Engineering of Polymers, Fudan University, Shanghai, China
16:35-16:50	G26	CAPILLARY ELECTROPHORESIS: AN EFFICIENT TECHNOLOGY FOR BIOSEPARATION AND BIOANALYSIS <b>Feng QU</b> School of Life Science, Beijing Institute of Technology, Beijing, China

16:50-17:05	G27	EXPLORING BINDING SITES ON APTAMERS IN AP-TAMER-IMMUNOGLOBULIN E BINDING BY FLUORES-CENCE ANISOTROPY ANALYSIS <b>Qiang ZHAO</b> State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China
17:05-17:20	G28	FUNCTIONAL NUCLEIC ACIDS TAILORING AND ITS APPLICATION IN BIOHYBRID INTERFACE SENSOR <b>Longjiao ZHU</b> Beijing Advanced Innovation Center for Food Nutrition and Human Health, College of Food Science & Nutritional Engineering, China Agricultural University, Beijing, China
Date: Oct. 26, 2019 AM (Saturday)		
Topic: -omics analysis		
Chairman: Prof. Jonathan V. Sweedler and Prof. Haiteng DENG		
8:30-8:55	G12	HIGH THROUGHPUT SINGLE CELL MASS SPECTROMETRY OF THE BRAIN <b>Jonathan V. SWEEDLER (Keynote)</b> Department of Chemistry and the Beckman Institute, University of Illinois at Urbana-Champaign, Urbana IL, USA
8:55-9:20	G13	SYSTEMATIC ANALYSIS OF BIOLOGICAL FUNCTIONS OF NAD+ IN AGING-ASSOCIATED DISEASE <b>Haiteng DENG (Keynote)</b> MOE Key Laboratory of Bioinformatics and the Center for Synthetic and Systematic Biology, School of Life Sciences, Tsinghua University, Beijing, China
9:20-9:45	G14	DEEP COVERAGE QUANTITATIVE PROTEOMICS REVEALS MULTIPLE BIOLOGICAL FUNCTION OF UBIQUITIN CHAINS <b>Ping XU (Keynote)</b> State Key Laboratory of Proteomics, Beijing Proteome Research Center, National Center for Protein Sciences (Beijing), Institute of Lifeomics, Beijing, China
9:45-10:00	G29	PREDICTING INDIVIDUAL RESPONSE TO WARFARIN WITH PHARMACOMETABOLOMIC, PHARMA-CO-GENETIC METAGENOMIC METHOD <b>Guohua ZHOU</b> Department of Pharmacology, Jinling Hospital, Medical School, Nanjing University, Nanjing, China
10:10-10:15	G30	HIGH THROUGHPUT, INTEGRATIVE SINGLE-CELL SE-CRETOMIC ANALYSIS <b>Yao LU</b> Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, Liaoning, China
10:15-10:25	Coffee Break	
Chairman: Prof. Yang WANG and Prof. Chunliu WU		
10:25-10:50	G15	DESIGN AND SCREENING OF MULTICYCLIC PEPTIDE AFFINITY REAGENTS FOR PROTEIN ANALYSIS <b>Chuanliu WU (Keynote)</b> Department of Chemistry, College of Chemistry and Chemical Engineering, The MOE Key Laboratory of Spectrochemical Analysis and Instrumentation, Xiamen University, Xiamen, China

10:50-11:15	G16	SINGLE NANOPARTICLE DARK-FIELD AND ELECTROCHEMILUMINESCENCE IMAGING <b>Jing-Juan XU (Keynote)</b> State Key Laboratory of Analytical Chemistry for Life Science, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, China
11:15-11:30	G31	RESEARCH ON THE DELIVERY OF PROTEINS TO LIVING CELLS USING DNA PROGRAMMED MEMBRANE FUSION <b>Di LI (Invited)</b> School of Chemistry and Molecular Engineering, East China Normal University, 200241, Shanghai, China
11:30-11:45	G32	ENGINEERED BIOLOGICAL NANOPROBES FOR IDENTIFYING SINGLE MOLECULE TARGETS <b>Shuo Huang (Invited)</b> Nanjing University
<b>Date: Oct. 26, 2019 PM (Saturday)</b>		
<b>Topic: Health and safety / Precise medical diagnosis</b>		
<b>Chairman: Prof. Jinlan ZHANG and Prof. Guangming HUANG</b>		
13:30-13:55	G17	INVESTIGATION OF METABOLIC PATHWAY IN BRAIN WITH NOVEL MASS SPECTROMETRY METHODS <b>Guangming HUANG (Keynote)</b> Medicine School of Chemistry and Materials Science, University of Science and Technology of China, Hefei, China
13:55-14:20	G18	UHPLC-HRMS /MS METHODS FOR DISCOVERY OF NEW CHOLESTERY ESTERS <b>Jinlan ZHANG (Keynote)</b> State Key Laboratory of Bioactive Substances and Functions of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China.
14:20-14:45	G19	IMAGING OF POLAR AND NONPOLAR SPECIES USING COMPACT DESORPTION ELECTROSPRAY IONIZATION/ POSTPHOTOIONIZATION MASS SPECTROMETRY <b>Yang PAN (Keynote)</b> National Synchrotron Radiation Laboratory, University of Science and Technology of China, Hefei, China
14:45-15:00	G33	RAPID SCREENING TECHNOLOGIES FOR HIGHLY TOXIC SUBSTANCES IN FOOD MATRICES <b>Jiefang SUN</b> Beijing Key Laboratory of Diagnostic and Traceability Technologies for Food Poisoning, Beijing Center for Disease Prevention and Control, Beijing, China

15:00-15:15	G34	RESEARCH ON THE ACTIVITY OF TELOMERASE AND SCREENING G-QUADRUPLEX LIGANDS <b>Yan JIN</b> Key Laboratory of Analytical Chemistry for Life Science of Shaanxi Province, School of Chemistry and Chemical Engineering, Shaanxi Normal University, Xi'An, China
15:15-15:30	G35	COMPUTATIONAL ASSISTED PRODUCTION OF ANTI-BODY WITH DESIRED CHARACTERISTICS AND IMMUNOASSAY DEVELOPMENT THEREOF <b>Cunzheng ZHANG</b> Institute of Food Safety and Nutrition, Jiangsu Academy of Agri-cultural Sciences, Nanjing, China
15:30-15:40	Coffee Break	
<b>Chairman: Prof. XiuJun James LI and Prof. Gaolin LIANG</b>		
15:40-16:05	G20	CATHEPSIN B TURNS BIOLUMINESCENCE "ON" FOR TUMOR IMAGING <b>Gaolin LIANG (Keynote)</b> Hefei National Laboratory of Physical Sciences at Microscale, Department of Chemistry, University of Science and Technology of China, Hefei, Anhui, China
16:05-16:30	G21	PAPER/POLYMER HYBRID MICROFLUIDIC PLATFORMS FOR LOW-COST DISEASE DIAGNOSIS <b>XiuJun James LI(Keynote)</b> Department of Chemistry & Biochemistry, Biomedical Engineering, Border Biomedical Research Center, University of Texas at El Paso, Texas, USA
16:30-16:45	G36	THERMAL SENSITIVE FLUORESCENT POLYMERS AND ITS APPLICATION IN INTRACELLULAR TEMPERATURE SENSING <b>Juan QIAO</b> Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China
16:45-17:00	G37	ULTRA-SENSITIVE AND MULTIPLEX DIGITAL-PCR BY USING INVASIVE REACTION TO IDENTIFY AMPLICONS IN EACH REACTION UNIT <b>Bingjie ZOU</b> Department of Pharmacology, Jinling Hospital, Medical School, Nanjing University, Nanjing, China
17:00-17:15	G38	THE APPLICATION OF DROPLET MICROFLUIDICS IN MICROBIAL ANALYSIS <b>Wenbin DU</b> State Key Laboratory of Microbial Resources, Institute of Micro-biology, Chinese Academy of Sciences, Beijing, China
17:15-17:30	G39	GENETIC BIOMARKERS DIAGNOSIS USING COMMERCIAL POCT DEVICES <b>Yan DU</b> State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, Jilin, China
17:30-17:40	Closing Remarks & Session Poster Awards	

## SCHEDULE OF SESSIONS

### ENVIRONMENTAL ANALYSIS

**CHAIRMAN:**  
Prof. Hailin Wang

**ORAL LECTURES**  
**Dates:** Oct.25-26,2019  
**Location:** Room 307B, China National Convention Center, Beijing

<b>Date: Oct. 25, 2019 (Friday) AM</b>		
8:30-8:40	Opening Address	
<b>Chairmen: Dr. Jingwen Chen and Dr. Hailin Wang</b>		
8:30-8:55	H2	MATCHING METALS TO PROTEINS IN CELLS: IDENTIFICATION OF PROTEIN TARGETS AND DISCOVERY OF DRUG CANDIDATES <b>Dr. Hongzhe Sun (Keynote)</b> University of Hong Kong, China
8:55-9:20	H3	ARSENIC SPECIATION IN ATMOSPHERIC PARTICULATE MATTERS <b>Dr. Chungang Yuan (Invited)</b> North China Electric Power University, China
9:20-9:45	H4	TOXICITY AND ANTILEUKEMIC ACTIVITIES OF INORGANIC ARSENICALS AND ITS METABOLITES <b>Dr. Hua Naranmandura (Invited)</b> School of Medicine and Public Health, Zhejiang University, China
9:45-10:10	H5	DIOXIN SUPPRESSES AChE ACTIVITY IN NEURON AND MUSCLE <b>Dr. Qunhui Xie (Oral)</b> Research Center for Eco-Environmental Sciences, CAS, China
10:10-10:30	Coffee Break	
<b>Chairman: Dr. Hongzhe Sun and Dr. Hua Naranmandura</b>		
10:30-10:55	H6	PREDICTION ON HYDROLYSIS MECHANISMS AND KINETICS OF CHEMICALS <b>Dr. Jingwen Chen (Keynote)</b> Dalian University of Technology, China
10:55-11:20	H7	SIMPLE AND INTEGRATED SPINTIP-BASED TECHNOLOGY FOR SPATIAL PROTEOME PROFILING <b>Dr. Ruijun Tian (Invited)</b> Southern University of Science and Technology, China
11:20-11:45	H8	CHARACTERIZATION OF MERCURY-BINDING PROTEINS IN RAT BLOOD <b>Dr. Ligang Hu (Invited)</b> Research Center for Eco-Environmental Sciences, CAS, China
11:45-12:00	H9	NOVEL SENSING PLATFORM BASED ON APTAMERS SELECTIVITY FOR EMERGING CONTAMINANTS DETECTION AND SIGNAL AMPLIFICATION <b>Dr. Ying Wang (Oral)</b> Tongji University, China
<b>LUNCH</b>		
<b>Date: Oct. 25, 2019 (Friday) PM</b>		
<b>Chairman: Dr. Zhen Liu and Dr. Wenjun Ding</b>		
14:00-14:25	H10	NEW APPROACHES FOR IDENTIFICATION OF SMALL PEPTIDES AND THEIR DISINFECTION BYPRODUCTS IN WATER <b>Dr. Xing-Fang Li (Keynote)</b> University of Alberta, Canada
14:25-14:50	H11	IN VIVO, IN SITU, AND MICROSCALE LIPIDOMICS INVESTIGATION OF COMPLEX BIOLOGICAL SAMPLES USING SURFACE-COATED PROBE NANOELECTROSPRAY IONIZATION MASS SPECTROMETRY <b>Dr. Tiangang Luan (Keynote)</b> Guangdong University of Technology, China
14:50-15:05	H12	THREE-DIMENSIONAL IMAGING MASS SPECTROMETRY TO VISUALIZE BIOMARKER DISTRIBUTIONS IN ENVIRONMENTAL TOXICOLOGY <b>Dr. Chao Zhao (Oral)</b> Shenzhen Institutes of Advanced Technology, CAS, China
15:05-15:20	H13	LIPID METABOLISM DISORDERS CONTRIBUTE TO HEPATOTOXICITY OF TRICLOSAN IN MICE <b>Dr. Wei Huang (Oral)</b> Hong Kong Baptist University, China
15:20-15:40	Coffee Break	

Chairman: Dr. Xing-Fang Li and Dr. Tiangang Luan		
15:40-16:05	H14	EPITRANSCRIPTOMIC 5-METHYLCYTOSINE PROFILE IN PM2.5-INDUCED MOUSE PULMONARY FIBROSIS <b>Dr. Wenjun Ding (Keynote)</b> University of Chinese Academy of Sciences, China
16:05-16:30	H15	PRECISE EFFICACY EVALUATION OF ANTI-CANCER DRUGS VIA PROBING APOPTOSIS SIGNALING PROTEINS IN SINGLE LIVING CELLS <b>Dr. Zhen Liu (Keynote)</b> Nanjing University, China
16:30-16:45	H16	STUDY ON THE CARDIAC HYPERTROPHY AND FIBROSIS INDUCED BY PM 2.5 REAL-TIME EXPOSURE <b>Dr. Rong Zhang (Invited)</b> Hebei Medical University, China
16:45-17:00	H17	BIOMARKERS OF AIR POLLUTANT EXPOSURE IN THE CHINESE AGED 60-69 (CHINA BAPE) <b>Dr. Song Tang (Oral)</b> National Institute of Environmental Health, Chinese Center for Disease Control and Prevention, China
17:00-17:15	H18	AGILENT 8700 LASER DIRECT INFRARED IMAGING OF MICROPLASTICS <b>Dr. Xiaodan Zhang (Oral)</b> Agilent Technologies (China) Co., Ltd
Date: Oct. 26, 2019 (Saturday) AM		
Chairman: Dr. Yinsheng Wang and Dr. Shoulin Wang		
8:30-8:55	H19	EPIGENOMIC INSIGHT OF ENVIRONMENTAL DISEASES <b>Dr. Zhibin Wang (Keynote)</b> Johns Hopkins University, USA
8:55-9:20	H20	SINGLE CELL ANALYSIS BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY <b>Dr. Bin Hu (Keynote)</b> Wuhan University, China
9:20-9:45	H21	MERCURY ISOTOPE VARIATIONS IN COASTAL MARINE SEDIMENTS OF CHINA <b>Dr. Jianbo Shi (Invited)</b> Research Center for Eco-Environmental Sciences, CAS, China
9:45-10:00	H22	NON-TARGET SCREENING OF ORGANIC POLLUTANTS IN MULTIMEDIA IN CHINA <b>Dr. Si Wei (Oral)</b> Nanjing University, China
10:00-10:15	H23	HIGH THROUGHPUT SCREENING OF ORGANIC CONTAMINANTS IN ENVIRONMENTAL WATER USING ONLINE SPE COMBINED WITH UHPLC-MS/MS <b>Dr. Meiling Lü (Oral)</b> Agilent Technologies (China) Co., Ltd
10:15-10:30	Coffee Break	

Chairman: Dr. Zhibin Wang and Dr. Bin Hu		
10:30-10:55	H24	ZINC FINGER PROTEINS AS TARGETS FOR ARSENIC TOXICITY AND CARCINOGENICITY <b>Dr. Yinsheng Wang (Keynote)</b> University of California-Riverside, USA
10:55-11:20	H25	EXTRAHEPATIC METABOLIC ENZYMES AND ENVIRONMENTAL CHEMICAL-INDUCED TARGET TOXICITY <b>Dr. Shoulin Wang (Keynote)</b> Nanjing Medical University, China
11:20-11:45	H26	CHEMICAL COMPOSITION AND HEALTH RISK INDICES ASSOCIATED WITH SIZE-RESOLVED PARTICULATE MATTERS <b>Dr. Yuanxun Zhang (Invited)</b> University of Chinese Academy of Sciences, China
11:45-12:00	H27	P2X7 RECEPTOR REGULATES THE EXOCYTOSIS OF SINGLE-WALLED CARBON NANOTUBES IN MURINE MACROPHAGE <b>Dr. Bin Wan (Oral)</b> Research Center for Eco-Environmental Sciences, CAS, China
LUNCH		
Date: Oct. 26, 2019 (Saturday) PM		
Chairman: Dr. Jinian Shu and Dr. Zihui Meng		
14:00-14:25	H28	STUDY ON THE EXPOSURE PATTERN AND POTENTIAL HEALTH RISKS OF OCCUPATIONAL EXPOSURE TO PFASS <b>Dr. Yawei Wang (Keynote)</b> Research Center for Eco-Environmental Sciences, CAS, China
14:25-14:50	H29	CIRCULATING ESSENTIAL METALS AND LUNG CANCER: RISK ASSESSMENT AND POTENTIAL MOLECULAR EFFECTS <b>Dr. Huan Guo (Invited)</b> Huazhong University of Science and Technology, China
14:50-15:05	H30	PFASS AND PPCPS IN A DRINKING WATER PLANT IN THE YANGTZE RIVER DELTA OF CHINA: OCCURRENCE, REMOVAL AND RISK ASSESSMENT <b>Dr. Jun Huang (Oral)</b> Tsinghua University, China
15:05-15:20	H31	CHARACTERIZATION OF PAHS IN SOIL OF THE NON-FERROUS METAL SMELTING AREA, NORTH CHINA: DISTRIBUTION, SOURCES AND POTENTIAL HUMAN HEALTH RISK ASSESSMENT <b>Dr. Ming Liang (Oral)</b> China University of Mining and Technology, China
15:20-15:40	Coffee Break	
Chairman: Dr. Yawei Wang and Dr. Huan Guo		
15:40-16:05	H32	A NEW EFFECTIVE IONIZATION PATHWAY <b>Dr. Jinian Shu (Invited)</b> University of Chinese Academy of Sciences, China
16:05-16:30	H33	STUDY ON THE DETECTION OF ANTIBIOTICS IN THE ENVIRONMENT BY PHOTONIC CRYSTAL <b>Dr. Zihui Meng (Invited)</b> Beijing Institute of Technology, China
16:30-16:45	H34	RAMAN SPECTROSCOPY FOR FINE STRUCTURE CHARACTERIZATION: FROM ELECTRON, MOLECULE, ATOMIC ENSEMBLE TO METAL COMPLEX <b>Dr. Rui Liu (Oral)</b> Research Center for Eco-Environmental Sciences, CAS, China
16:45-17:00	H35	RESEARCH ON REFERENCE MATERIALS OF PESTICIDE METABOLITES IN THE ENVIRONMENT <b>Dr. Lei Zhang (Oral)</b> Alta Technology Co., Ltd., China
POSTER SESSION		

## SCHEDULE OF SESSIONS

### CHEMICAL METROLOGY AND REFERENCE MATERIAL

CHAIRMAN:  
Prof. Hongmei LI

ORAL LECTURES  
 Dates: Oct.25-26,2019  
 Location: Room 308, China National Convention Center, Beijing

Date: October 25, 2019 AM		
9:00-9:10	Welcome Speech (Prof. Hongmei LI)	
9:10-9:35	I 2	New Applications and Techniques for Reference Materials <b>Derek CRASTON(Keynote)</b>
9:35-10:00	I 3	Reference Materials: What's New in ISO Guide 35: 2017? <b>Thomas LINSINGER</b>
10:00-10:45	Coffee Break/Poster session	
10:45-11:10	I 4	AI-Biosensing for Precision Medicine & Health <b>Xueji ZHANG(Keynote)</b>
11:10-11:35	I 5	LCMS Methods and Traceability of CSF Biomarkers Measurements <b>Chiara GIANGRANDE</b>
11:35-12:00	I 6	Light-scattering Detection within the Difficult Size Range of Protein Particle Measurement Using Flow Cytometry <b>Zhishang HU</b>
12:00-13:30	Lunch	
Date: October 25, 2019 PM		
13:30-13:55	I 7	Establishment of a Global Measurement System of Mycotoxin and Its Measurement Techniques <b>Hongmei LI(Keynote)</b>
13:55-14:20	I 8	Statistical Methods for Reference Material Certification <b>Stephen ELLISON</b>
14:20-14:45	I 9	Establishment, Evaluation and Expression of Metrological Traceability of Reference Materials-A Step by Step Guidance <b>Xiaohua LU</b>
14:45-15:10	I 10	Identification of emerging organic pollutants based on certified standards and reference materials <b>Ting RUAN</b>
15:10-15:30	Coffee break	
15:30-15:55	I 11	The Measurand, Quantity Traceability and the Comparability of Clinical Test Results <b>Baorong CHEN</b>
15:55-16:20	I 12	NMIJ's Challenges to Establish Metrological Traceability for in-vitro Diagnosis Analysis <b>Megumi KATO(Keynote)</b>
16:20-16:45	I 13	Measurement of Protein-Health Status Markers Using Mass Spectrometry <b>Andre HENRION</b>
16:45-17:10	I 14	Development of 12 Kinds of Fresh Frozen Serum Reference Materials <b>Xianzhang HUANG</b>
17:10-17:35	I 15	Quantification of DNA Reference Materials Based on Phosphorus Analysis Using ICP-MS <b>Gang LIU</b>
17:35-18:00	I 16	Qualitative and Quantitative Methods for Simultaneous Analyses of 24 Sulfonamides by LC, LCMS and UHPLC <b>Lei ZHANG</b>
18:30	Dinner	
Date: October 26, 2019 AM		
9:00-9:25	I 17	Primary Reference Materials and Calibrants for Mycotoxin Analysis in Foods <b>Robert WIELGOSZ(Keynote)</b>
9:25-9:50	I 18	Reference Materials for Botanical Dietary Supplement Ingredients - Development, Characterization, and Use <b>Stephen A. WISE (Keynote)</b>
9:50-10:15	I 19	Proficiency Testing and Reference Materials within the Africa Food Safety Network <b>Maria Fernandes-WHALEY</b>



10:15-10:35	Coffee break	
10:35-11:00	I 20	Speciation of Trace Elements in Food <b>Zoltan MESTER(Keynote)</b>
11:00-11:25	I 21	KRISS Activities for Establishing National Measurements Standards in Food Safety Area <b>Byungjoo KIM(Keynote)</b>
11:25-11:50	I 22	The Role of Food Safety Metrology Programme in Singapore's War on Diabetes <b>Tanglin TEO</b>
12:00-13:30	Lunch	
<b>Date: October 26, 2019 PM</b>		
13:30-13:55	I 23	TO BE DECIDED <b>Yibing LV</b>
13:55-14:20	I 24	Activities for Elements and Species Analysis in Environmental Area <b>Jingbo CHAO</b>
14:20-14:30	I 25	Accuracy-Based Proficiency Testing Programme on Toxic Elements (Arsenic, Cadmium and Lead) in Herbal Material <b>Meng Kait Benny TONG</b>
14:30-14:40	I 26	Food Safety Metrology Capacity Building at NMISA <b>Maria Fernandes-WHALEY</b>
14:40-15:00	Coffee break	

15:00-15:10	I 27	Development of Heavy Metals in Food for Food Safety Metrology Capacity Building in Malaysia <b>Noor Hidayah binti ABDUL NASIR</b>
15:10-15:20	I 28	Food Safety in Vietnam <b>PHAM Phi Hung</b>
15:20-15:30	I 29	Research and Application of Measurement Standard and Technical System in Agro-Product Safety in Pakistan <b>Tahseen ASLAM</b>
15:30-15:40	I 30	Activities of the INMETRO in the area of Food Safety <b>Rodrigo LEAL</b>
15:40-15:50	I 31	SNSU-BSN's Metrology in Chemistry Activities in Food Safety: A Review from 2014 to the Present <b>Yosi ARISTIAWAN</b>
15:50-16:00	I 32	The impact of Pesticide Standard Solutions for Food Safety in Thailand <b>Nittaya SUDSIRI</b>
16:00-16:10	I 33	Food Safety Metrology Capacity Building in Argentina: INTI Contributions <b>Pablo SANCHEZ</b>
16:00-17:30	Discussion	
17:30-18:00	Wrap-up	
18:30	Dinner	



## SCHEDULE OF SESSIONS

### J LABELED IMMUNOASSAY TECHNOLOGY

CHAIRMAN:  
Prof. Guangtao Yan

### ORAL LECTURES

Dates: Oct.25-26,2019

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

<b>Date: Oct. 25, 2019 AM ( Friday )</b>		
<b>Chairmen: Prof. Hua Jing and Prof. Jiankui Chen</b>		
9:00-9:40	J2	MICROFLUIDICS-BASED DIAGNOSTICS AND PREPARATION OF BIOMATERIALS <b>Xingyu JIANG (Keynote)</b> 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
9:40-10:20	J3	TO EXPLORE THE EARLY WARNING MARKS OF GASTROINTESTINAL TUMORS FROM THE THEORY OF CHINESE MEDICINE CONSTITUTION <b>Jianwei Guo (Keynote)</b> Beijing First Integrated Traditional Chinese and Western Medicine Hospital
10:20-10:40	Coffee Break	
10:40-11:20	J4	ETIOLOGICAL DIAGNOSIS AND EVALUATION OF SEVERE PNEUMONIA <b>Xinxin Lu (Keynote)</b> Beijing Tongren Hospital, Capital Medical University
11:20-12:00	J5	HIV LABORATORY TESTING OPTIMIZES AIDS DIAGNOSIS AND TREATMENT <b>Yajie Wang (Keynote)</b> Director of Beijing Temple of Earth Hospital Affiliated to Capital Medical University

<b>Date: Oct. 25, 2019 PM ( Friday )</b>		
<b>Chairmen: Prof. Hua Jing and Prof. Jiankui Chen</b>		
13:30-14:10	J6	PRECISION MEDICINE FOR CARDIOVASCULAR DISEASES <b>Zhou Zhou (Keynote)</b> Professor and Director of Laboratory Medicine, Fuwai Hospital, National Center for Cardiovascular Diseases
14:10-14:50	J7	IVD KEY RAW MATERIAL - FLUORESCENT DYE <b>Jibo Xia (Keynote)</b> US Everbright Inc., General manager
14:50-15:00	Coffee Break	
15:00-15:40	J8	TUMOR MICROENVIRONMENT REGULATION BY THE ER STRESS TRANSMISSION MEDIATOR GP73 <b>Xiaoli Yang (Keynote)</b> Department of Clinical Laboratory, the Third Medical Centre (Chinese PLA (People's Liberation Army) General Hospital, Beijing 100039, P.R.China.
15:40-16:20	J9	ESTABLISHMENT AND VERIFICATION OF MIRNAS EXPRESSION MOLECULES FOR BREAST CANCER AND ITS DISTANT METASTASIS <b>Yanhong Gao (Keynote)</b> Department of Clinical Laboratory, the First Medical Centre, Chinese PLA (People's Liberation Army) General Hospital, Beijing 100853, P.R.China.
16:20-17:00	Discussion	
<b>Date: Oct. 26, 2019 AM ( Saturday )</b>		
<b>Chairmen: Prof. Guangtao Yan</b>		
09:00-09:40	J10	MICROFLUIDIC CHIPS AND NANOMATERIALS BASED POCT FOR IMMUNOLOGICAL DIAGNOSIS AND CELL ANALYSIS <b>Lei Zhou (Keynote)</b> Professor Lei Zhou, National Key Laboratory of Biochemical Engineering, PLA Key Laboratory of Biopharmaceutical Production & Formulation Engineering, Institute of Process Engineering, Chinese Academy of Sciences, Beijing 100190, China.
09:40-10:20	J11	TROP-2, A DUAL FUNCTION PROTEIN IN TUMOR BIOLOGY <b>Huayi Huang (Keynote)</b> MD, PhD. Senior Director, Medical Academic, Mindray North America; Adjunct Professor of Oncology, Department of Surgical Oncology, Roswell Park Comprehensive Cancer Center, Buffalo, NEW York
10:20-10:40	Coffee Break	

10:40-11:20	J12	APPLICATION OF NUCLEIC ACID MASS SPECTROMETRY IN AMD RELATED GENE POLYMORPHISM <b>Xiangyi Liu (Keynote)</b> Director of Beijing Tongren Hospital, Capital Medical University
<b>Date: Oct. 26, 2019 PM ( Saturday )</b>		
<b>Chairmen: Prof. Guangtao Yan</b>		
13:30-14:10	J13	DEVELOPMENT AND CLINICAL APPLICATION OF IMMUNOLABELING TECHNIQUE <b>Xiuru Guan (Keynote)</b> Director of First Affiliated Hospital of Harbin Medical University
14:10-14:50	J14	APPLICATION OF BIOMARKERS IN IVD INDUSTRY CHAIN FOR PRECISION DIAGNOSTICS AND THERAPEUTICS <b>Liangxiu He (Keynote)</b> Xinxinbio. Com, Ltd (ACTHTEAM, LLC USA); Liangxiu He MBA MS Founder
14:50-15:00	Coffee Break	
15:00-15:40	J15	EXPLORATION AND APPLICATION OF POTENTIAL MARKERS RELATED TO HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS <b>Shunzong Yuan (Keynote)</b> M.D., Ph.D. Department of Laboratory Medicine, The Fifth Medical Center, Chinese PLA General Hospital (Former 307th hospital of the PLA)
15:40-16:20	J16	DIGITAL PCR: INNOVATIONS OF A TO Z AND APPLICATIONS IN PRECISION MEDICINE <b>Guo Yong (Keynote)</b> Department of Biomedical Engineering, Tsinghua University
16:20-17:00	Discussion	
17:00	Closing Remarks	

