Scientific Programme

Scientific Committee

Cai, Yong (USA)

Chai, Zhifang (China)

Caruso, Joseph A (USA)

Chen, Chunying (China)

Feng, Weiyue (China)

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Ogra, Yasumitsu (Japan)

Prange, Andreas (Germany)

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Sperling, Michael (Germany)

Sun, Hongzhe (HK, China)

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Zhang, Sichun (China)

Zhang, Xinrong (China)

Zhao, Yuliang (China)

Local Organizing Committee

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Zhang, Xinrong (Co-chair)

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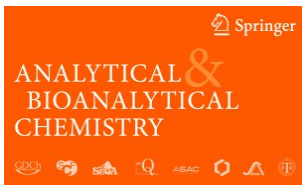
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Metallomics


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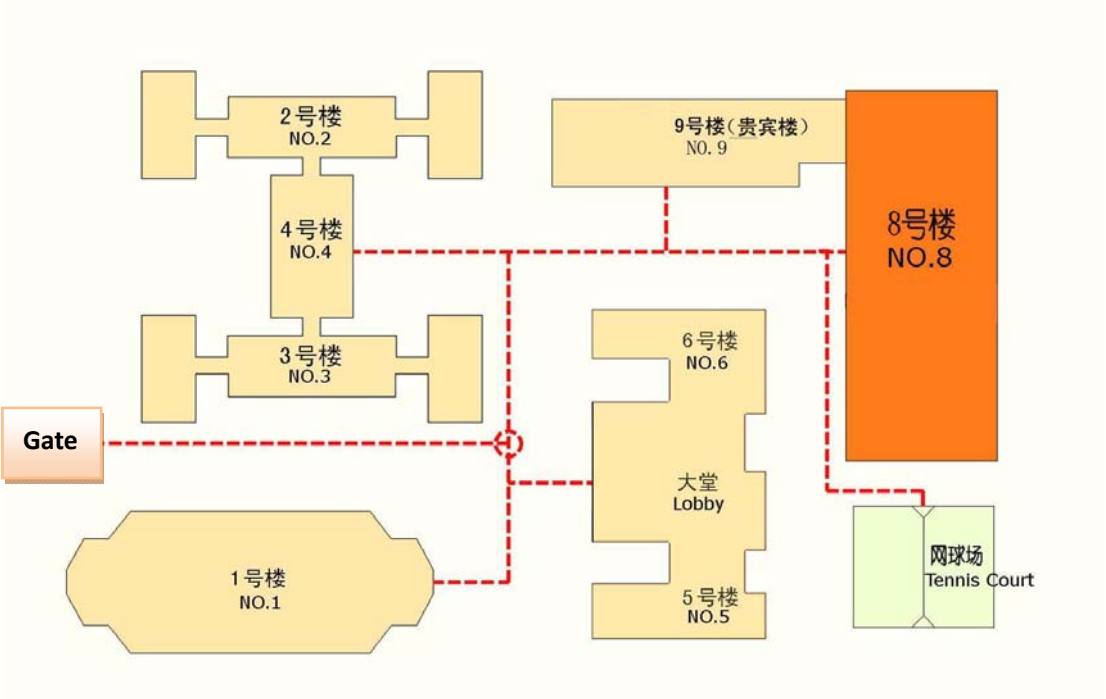
Conference Guide

Conference Venue

The conference venue of the 5th International Symposium on Metallomics (Metallomics 2015) is Beijing Xijiao Hotel. The hotel building plan is shown below.



The Beijing Xijiao Hotel building plan

Room information

9th Sept	
Registration	Lobby (The First Floor, No. 5 & 6 Building)
Opening Ceremony	Ginkgo Hall(银杏厅, The Third Floor, No. 1 Building)
Reception	Shangyuan (赏园, The Second Floor, No. 5 & 6 Building)
10th Sept, 11th Sept	
Scientific Session 1-8	Ginkgo Hall (银杏厅, The Third Floor, No. 1 Building)
Lunch	Shangyuan (赏园, The Second Floor, No. 5 & 6 Building)
Dinner	Shangyuan (赏园, The Second Floor, No. 5 & 6 Building)
12th Sept	
Scientific Session A	Jinyuan Hall (金缘厅,The Second Floor, No. 5 & 6 Building)
Scientific Session B	Huiyuan Hall(荟缘厅,The Second Floor, No. 5 & 6 Building)
Closing Ceremony	Jinyuan Hall (金缘厅,The Second Floor, No. 5 & 6 Building)
Lunch	Dongyuan (东园, The First Floor, No. 5 & 6 Building)

Registration

All participants are kindly asked to register upon arrival. You can register at the registration desk in the Lobby (The first floor, No. 5 & 6 Building, Beijing Xijiao Hotel) between 10:00 - 20:00 on 9th Sept. Registration will be outside of the Ginkgo Hall (The Third Floor, No. 1 Building, Beijing Xijiao Hotel) on 10th - 11th Sept, 2015.

On-site registration fee	
Regular	2400 RMB or 400 USD
Student	1200 RMB or 200 USD
Accompanying person	1200 RMB or 200 USD

Please note **only** cash is accepted for the on-site registration. Please find **all the vouchers** you get at registration desk and keep them safely. Meal vouchers must be presented to hotel personnel before entering meal sites.

Plenary, Keynote and Oral Presentations

The lecture rooms are all equipped with a projector and a laptop using Microsoft PowerPoint 2010 or lower versions. Speakers are kindly requested to hand over their presentations to the technical staff ***at latest*** during the break before the session starts.

The conference program will commence at **8:30 a.m.** every day. Plenary Lectures (PL) will take 30 min, Keynote Lectures (KL) 20 min, and oral presentations (OP) 10 min. The speakers are kindly asked to respect the maximum available time.

Poster Session

Poster size: 90 cm (Width)*120 cm (Height)

All posters will be shown on 10th Sept - 11th Sept, so presenting authors are kindly asked to mount their poster before the noon of 10th Sept. Every presenting poster author is kindly requested to be at her/his poster at the scheduled time:

13:30 - 14:00, 10th Sept 2015, Ginkgo Hall (No. 1 Building, Xijiao Hotel)
13:30 - 14:00, 11th Sept 2015, Ginkgo Hall (No. 1 Building, Xijiao Hotel)

We are happy to announce that six poster awards are available. Three awards are offered by *Metallomics* from Royal Society of Chemistry. The other three awards are provided *Analytical and Bioanalytical Chemistry* from Springer.

General Information

Taxi notes

请带我去北京西郊宾馆。

Please take me to the Beijing Xijiao Hotel.

请带我去北京首都国际机场 T2（或者 T3）航站楼。

Please take me to the Beijing Capital International Airport Terminal 2 (or Terminal 3).

Internet

Free WiFi is available in all rooms of the Beijing Xijiao Hotel.

Tipping

Tipping is not generally expected in China. It is not necessary to tip a taxi driver unless he/she assists with luggage or provides extra service.

Themed Issue in RSC Journal *Metallomics*

The organizers are delighted to announce that the RSC journal *Metallomics* will be publishing a themed issue for the 5th International Symposium on Metallomics. We welcome the submission of communications, full papers and reviews for consideration in the issue, and all articles will be subject to the usual high standards of the journal through peer-review. Manuscripts should be prepared according to the "Author Guidelines" available on the webpage of the RSC journal *Metallomics* (www.rsc.org/metallomics). Submission deadline is 31th Dec 2015.

Scientific Programme

Wednesday, 9th Sept 2015

10:00 - 20:00 Registration

Lobby (The First Floor, No. 5 & 6 Building, Xijiao Hotel)

17:00 - 19:00 Opening Ceremony and Plenary Session

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Xinrong Zhang

17:00 **Opening Ceremony Zhifang Chai**

17:30 **PL 01** **Hiroki Haraguchi** (Nagoya University, Japan)
Metallomics: Current status and perspectives

18:00 **PL 02** **Guibin Jiang** (Chinese Academy of Sciences, China)
Metallomics studies on Hg: From chemical speciation to associated proteins and functions in organisms

18:30 **PL 03** **Ryszard Lobinski** (Centre National de la Recherche Scientifique, France)
The metallomics toolbox: Recent advances and development trends

19:00 - 21:00 Welcome Reception

Shangyuan (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

Thursday, 10th Sept 2015

Scientific Session 1

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Ryszard Lobinski, X Chris Le

08:30 **PL 04** **Gary M. Hieftje** (Indiana University, USA)
New machines and methods for metallomics

09:00 **KL 01** **Chunying Chen** (Chinese Academy of Sciences, China)
Synchrotron radiation-based techniques for revealing cellular trafficking and transformation of nanomaterials in biological systems

09:20 **KL 02** **Michael Sperling** (University of Münster, Germany)
Hyphenated techniques for studying the distribution and metabolism of metallodrugs

09:40 **KL 03** **Yixiang Duan** (Sichuan University, China)
Innovative instrumentation, methods and applications of laser induced breakdown spectroscopy

10:00 **KL 04** **José Manuel Costa-Fernandez** (University of Oviedo, Spain)
Novel elemental MS tools and bionano approaches for enhanced targeted proteomics

10:20 - 10:40 Coffee Break

Scientific Session 2

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Gary M. Hieftje, Yixiang Duan

10:40 **PL 05** **X Chris Le** (University of Alberta, Canada)
Targeted metallomic study of arsenic binding to proteins

11:10 **KL 05** **Philip Doble** (University of Technology Sydney, Australia)
Visualising mouse neuroanatomy using laser ablation-inductively coupled plasma-mass spectrometry imaging

11:30 **KL 06** **Qiuquan Wang** (Xiamen University, China)
Metal-tagged biomolecules and cells analysis based on activity- and metabolism-labeling strategy

11:50 **KL 07** **Christoph J. Fahrni** (Georgia Institute of Technology, USA)
Fluorescence sensing of biological copper and zinc

12:10 **KL 08** **Miao Jing** (Thermo Fisher Scientific)
Analysis of Nanoparticles with ICP-MS

12:30 - 13:30 Lunch

Shangyuan (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

13:30 - 14:00 Poster Session

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Scientific Session 3

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Yasumitsu Ogra, Xiaoda Yang

14:00 **KL 09** **Michael J. Maroney** (University of Massachusetts, USA)
Is *H. pylori* HypA a nickel traffic cop?

14:20 **KL 10** **Mi Hee Lim** (Ulsan National Institute of Science and Technology, Korea)
Metals and misfolded proteins in Alzheimer's Disease

14:40 **KL 11** **Kevin A. Francesconi** (University of Graz, Austria)
On the biosynthesis of arsenic-containing lipids

15:00 **KL 12** **Toshiyuki Fukada** (Tokushima Bunri University, Japan)
Zinc signaling in physiology and pathogenesis

15:20 **KL 13** **Yangzhong Liu** (University of Science and Technology of China, China)
Proteins in the mechanism of metallodrugs

15:40 **KL 14** **Christian G. Hartinger** (University of Auckland, New Zealand)
Anticancer metallodrug development: Towards intracellular target identification beyond DNA

16:00 **KL 15** **Juan'e Song** (Agilent Technologies)
Introducing Agilent 8800 ICP-MS/MS

16:20 - 16:40 Coffee Break

Scientific Session 4

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Michael J. Maroney, Chunying Chen

16:40 **KL 16** **Jianhua Wang** (Northeastern University, China)
Biomass-metal interactions for selective sample pretreatment

17:00 **KL 17** **Mari Shimura** (National Center for Global Health and Medicine, Japan)
Visualization of intracellular elements by scanning X-ray fluorescence microscopy-application for cell biology and medicine

17:20 **KL 18** **Xiaogai Yang** (Peking University Health Science Center, China)
How innate immune system respond to rare earth phosphates

17:40 **KL 19** **John H. Beattie** (University of Aberdeen, UK)
Zinc nutrition in vascular cell function and health

18:00 **KL 20** **Xiaoda Yang** (Peking University Health Science Center, China)
The mechanisms of pharmacological and toxicological actions of anti-diabetic vanadium compounds

18:20 **KL 21** **Le Yang** (Shimadzu Corporation)
The analytical instruments that applied to the metallomics research from Shimadzu

Thursday, 11th Sept 2015

Scientific Session 5

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Yuliang Zhao, Wolfgang Maret

08:30 **PL 06** **Hongzhe Sun** (The University of Hong Kong, China)
Integrative metallomic approach to identify metalloproteins in microbes

09:00 **KL 22** **Erik H. Larsen** (Technical University of Denmark, Denmark)
Characterization of nanoparticles and metal-protein binding in biological fluids from hip-replacement patients

09:20 **KL 23** **Zijian Guo** (Nanjing University, China)
Cellular sensing and imaging of metals and metallodrugs

09:40 **KL 24** **David P. Giedroc** (Indiana University, USA)
Exploring protein allostery and dynamics in metalloregulatory proteins

10:00 **KL 25** **Zongwan Mao** (Sun Yat-Sen University, China)
Metal-based antitumor agents and biological probes

10:20 - 10:40 Coffee Break

Scientific Session 6

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Hongzhe Sun, Erik H. Larsen

10:40 **PL 07** **Yuliang Zhao** (Chinese Academy of Sciences, China)
Analyses of nanoparticles interactions with biological system *in vitro & in vivo*

11:10 **KL 26** **Wolfgang Maret** (King's College London, UK)
Human pancreas zinc metalloproteomics in cellular time and space

11:30 **KL 27** **Chun Tang** (Chinese Academy of Sciences, China)
Visualizing the quaternary dynamics of Lys63-linked diubiquitin using paramagnetic NMR

11:50 **KL 28** **Yasumitsu Ogra** (Chiba University, Japan)
Identification of a novel selenium metabolite and elucidation of its biological and toxicological roles

12:10 **KL 29** **Jijun Yao** (Perkin Elmer Inc.)
Brief introduction to center for single nanoparticle, single cell, and single molecule monitoring

12:30 - 13:30 Lunch

Shangyuan (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

13:30 - 14:00 Poster Session

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Scientific Session 7

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Naoki Furuta, Wei Hang

14:00 **KL 30** **Norbert Jakubowski** (BAM Federal Institute for Materials Research and Testing, Germany)
Spatial distribution of nanoparticles, proteins and DNA measured simultaneously in single cells by LA-ICP-MS

14:20 **KL 31** **Joanna Szpunar** (Centre National de la Recherche Scientifique, France)
Mass spectrometry and tracking selenium pathways: from drug synthesis to cancer cell metabolism

14:40 **KL 32** **Xueyun Gao** (Chinese Academy of Sciences, China)
Target detection and quantitative count of $\alpha_{IIb}\beta_3$ integrin in single cell by experimental and theoretical studies

15:00 **KL 33** **Steven J. Ray** (Indiana University, USA)
Distance-of-flight mass spectrometry:A new tool for metallomics

15:20 **KL 34** **Bin Hu** (Wuhan University, China)
Chip-based microextraction techniques coupled to ICP-MS for trace metals and their species analysis in cells

15:40 **KL 35** **Gunda Köllensperger** (University of Vienna, Austria)
The assisting role of elemental speciation analysis in metabolomics and proteomics

16:00 **KL 36** **Zhiyong Zhang (**Chinese Academy of Sciences, China)
Interactions between plants and rare earth oxide nanoparticles

16:20 - 16:40 Coffee Break

Scientific Session 8

Ginkgo Hall (The Third Floor, No. 1 Building, Xijiao Hotel)

Chair: Norbert Jakubowski, Joanna Szpunar

16:40 **KL 37** **Takefumi Hirata** (Kyoto University, Japan)
Sample preparation procedure for the high-resolution elemental imaging using the LA-ICP-Mass Spectrometry

17:00 **KL 38** **Wei Hang** (Xiamen University, China)
Probing gas-phase interactions of peptides with “naked” metal ions

17:20 **KL 39** **Naoki Furuta** (Chuo University, Japan)
Difference of Selenium metabolism in mouse after intravenous injection of Se-82 enriched selenite or selenomethionene

17:40 **KL 40** **Hongmei Li** (National Institute of Metrology, China)
Establishment of metrological traceability for protein analysis

18:00 **KL 41** **Tanja Schwerdtle** (University of Potsdam, Germany)
New insights into the toxic modes of action of organic arsenic and mercury species

Saturday, 12th Sept 2015

Scientific Session A1

Jinyuan Hall (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

Chair: Gunda Köllensperger, Xueyun Gao

08:30 **KL 42** **Xiangshi Tan** (Fudan University, China)
Metal specficity of metalloproteins and metalloenzymes

08:50 **OP 01** **Maximilian Bonta** (Vienna University of Technology, Austria)
Expanding the possibilities of elemental analysis: Investigations of biological tissues using Tandem LA/LIBS

09:00 **OP 02** **Florian Brenner** (Vienna University of Technology, Austria)
Distribution of modern anti-cancer drugs in single cells using high resolution ToF-SIMS

09:10 **OP 03** **Teresa Chávez-Capilla** (University of Canberra, Australia)
Partitioning coefficients and diffusion of organic arsenic species

09:20 **OP 04** **David Clases** (University of Münster, Germany)
Speciation analysis of ^{99}Tc in contrast agents by means of HILIC/ICP-MS and HILIC/ESI-HR-MS

09:30 **OP 05** **Barbara Crone** (University of Münster, Germany)
Imaging of cisplatin by LA-ICP-MS in the model organism *Caenorhabditis elegans*

09:40 **OP 06** **Liuxing Feng** (National Institute of Metrology, China)
Determination of transferrin, albumin and electrolytes in human serum CRM by using isotope dilution HPLC/Laser ablation-ICP-MS

09:50 **OP 07** **Lisa Frensemeier** (University of Münster, Germany)
Speciation analysis of arsenic containing drug roxarsone and its electrochemically generated transformation products

10:00 - 10:20 Coffee Break

Scientific Session A2

Jinyuan Hall (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

Chair: Philip Doble, Weiyue Feng

10:20 **OP 08** **Liang Gao** (Chinese Academy of Sciences, China)
The Au clusters induce tumor cell apoptosis via specifically targeting thioredoxin reductase 1 (TrxR1) and suppressing its activity

10:30 **OP 09** **Oliver Hachmöller** (University of Münster, Germany)
Element bioimaging of copper and iron in Wilson's Disease liver samples

10:40 **OP 10** **Man He** (Wuhan University, China)
Gold nanoparticles labeling coupled with ICP-MS for the assay of sialic acid expression on cancer cell surfaces

10:50 **OP 11** **Yide He** (Humboldt-University of Berlin, Germany)
Metal labeling of biopolymers for high precision quantification

11:00 **OP 12** **Yu-Feng Li** (Chinese Academy of Sciences, China)
Metallomics study on mercury selenium interaction in rice

11:10 **OP 13** **Magdalena Matczuk** (Warsaw University of Technology, Poland)
Tumor-targeting metal-based nanomaterials-alterations in human serum examined by CE-ICP-MS

11:20 **OP 14** **Wenjie Mei** (Guangdong Pharmaceutical University, China)
Ruthenium complexes as potential inhibitor against the invasion of tumor cells targeting to the formation of invadopodia

11:30 **OP 15** **Yu-Ki Tanaka** (Kyoto University, Japan)
Evaluation of Ca, Mg and Sr metabolism in rat bone through elemental imaging using LA-ICPMS technique

11:40 **OP 16** **Meng Wang** (Chinese Academy of Sciences, China)
Quantitative analysis of gold nanoparticles in single cells by laser ablation inductively coupled plasma-mass spectrometry

11:50 **OP 17** **Jiating Zhao** (Chinese Academy of Sciences, China)
Identification and quantification of seleno-proteins by 2-DE-SRXRF in selenium-enriched yeasts

12:00 **OP 18** **Zhenli Zhu** (China University of Geosciences, China)
Coupling thin layer chromatography with catalyzed luminol chemiluminescence for the quantification of gold nanoparticles

Scientific Session B1

Huiyuan Hall (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

Chair: David P. Giedroc, Zijian Guo

08:30 **KL 43** **Fudi Wang** (Zhejiang University, China)
Deciphering roles of metals homeostasis on chronic diseases

08:50 **OP 19** **Yuko Yamagata** (Kyoto University, Japan)
Stable isotope signature of Fe for marine creatures

09:00 **OP 20** **Tao Wang** (Sichuan University, China)
Copper uptake by DMT1: A compensatory mechanism for CTR1 deficiency in human umbilical vein endothelial cells

09:10 **OP 21** **Wen Yin** (Sichuan University, China)
The requirement of cytochrome C oxidase for mitochondrial fusion in copper-induced regression of cardiomyocyte hypertrophy

09:20 **OP 22** **Wenjing Zhang** (Sichuan University, China)
The association of depressed angiogenic factors with reduced capillary density in Rhesus monkey model of myocardial ischemic infarction

09:30 **OP 23** **Eva Fischer-Fodor** (Institute of Oncology "Prof.I.Chiricuta" Cluj Napoca, Romania)
The platinum cellular uptake as biomarker for uterine cervix carcinoma therapy

09:40 **OP 24** **Ruiguang Ge** (Sun Yat-sen University, China)
The functions of a His-rich metalloprotein Hpn in *Helicobacter pylori*

09:50 **OP 25** **Hyuck Jin Lee** (Ulsan National Institute of Science and Technology, Korea)
The variation of hydroxyl groups on the flavonoid backbone directs the modulation of Cu (II)–Aβ aggregation pathways

10:00 - 10:20 Coffee Break

Scientific Session B2

Huiyuan Hall (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

Chair: Michael Sperling, Zongwan Mao

10:20 **OP 26** **Antonello Merlino** (University of Naples Federico II, Italy)
Crystallographic studies on the interaction between proteins and platinum-based drugs

10:30 **OP 27** **Iurii A. Orlov** (ITMO University, Russia)
The chelating properties of the N-terminal domain of hCTR1

10:40 **OP 28** **Xinqing Zhao** (Shanghai Jiaotong University, China)
Exploration of zinc-responsive genes and metabolites responsible for stress tolerance of *Saccharomyces cerevisiae* and implication for biofuels prodution

10:50 **OP 29** **Bing Cao** (Peking University Health Science Center, China)
The Accumulation and Metabolism features of Rare Earth Elements La, Ce, Pr, Nd, Gd in Tissues and Organs of SD Rats

11:00 **OP 30** **Yang Ding** (Guangdong Pharmaceutical University, China)
Ruthenium (II) complexes as fluorescence probe in imaging living cell

11:10 **OP 31** **Wei Xia** (Sun Yat-sen University, China)
Metal ion and ligand binding of integrin α5β1

11:20 **OP 32** **Yasumi Anan** (Showa Pharmaceutical University, Japan)
Distribution and metabolism of tellurium in rats after administration of garlic leaves exposed with tellurate

11:30 **OP 33** **Xiubo Du** (Shenzhen University, China)
Potential roles of selenoprotein and Se-containing compounds in the intervention of Alzheimer's Disease

11:40 **OP 34** **Liming Wang** (Chinese Academy of Sciences, China)
Applications of synchrotron radiation techniques in studying cytotoxicity of silver nanoparticles

11:50 **OP 35** **Kangdi Zheng** (Guangdong Pharmaceutical University, China)
Ruthenium (II) complexes as potential apoptosis inducer in chemotherapy

12:00 **OP 36** **Zeng Zeng** (Shanghai Jiaotong University, China)
Hierarchical Fe-ZSM-5 Zeolite-Mediated Non-enzymatic modification of immobilized phytase protein

12:20 - 12:40 Closing Ceremony

Jinyuan Hall (The Second Floor, No. 5 & 6 Building, Xijiao Hotel)

Chair: Zhifang Chai, Xinrong Zhang

12:20 The Poster Awards

12:30 Welcome speech from the host of the 6th International Symposium on Metallomics

12:40 - 14:00 Lunch

Dongyuan (The First Floor, No. 5 & 6 Building, Xijiao Hotel)

14:00 - 19:00 City tour

Poster Presentation

All posters will be shown on 10th Sept - 11th Sept, so presenting authors are kindly asked to mount their poster before the noon of 10th Sept. Every presenting poster author is kindly requested to be at her/his poster at the scheduled time:

13:30 - 14:00, 10th Sept 2015, Ginkgo Hall (No. 1 Building, Xijiao Hotel)
13:30 - 14:00, 11th Sept 2015, Ginkgo Hall (No. 1 Building, Xijiao Hotel)

P 01 **Takuto Abiko, Keito Kobayashi, Takashi Nakazawa, Naoki Furuta*, Takehisa Matsukawa, Yuki Matsumoto-Omori, Atsuko Shinohara**
Effects of selenium deficiency on proteins containing proteins containing essential trace race elements of Mn, Fe, Cu, Zn and Se in brain of mice

P 02 **Maximilian Bonta*, Balazs Hegedus, Andreas Limbeck**
Trace element analysis and quantification in tumor tissues using LA-ICP-MS

P 03 **F. Brenner*, Balázs Hegedűs, Balázs Döme, Thomas Klikovits, Szilvia Török, H. Hutter**
Elemental and molecular imaging of tumour tissues with TOF-SIMS

P 04 **Bing Cao, Qing Xie, Ninghua Huang, Jing Zeng, Yaqiong Liu, Li Oyang, Lailai Yan, Jingyu Wang***
Rapidly verification of common pathogenic bacteria based on five kinds of inorganic metal elements

P 05 **Beibei Chen, Bin Hu*, Man He, Shan Li**
Chip based magnetic solid phase microextraction combined with capillary HPLC-ICP-MS for the absolute quantification analysis of phosphopeptides

P 06 **Xing Wei, Linlin Hu, Ting Yang, Mingli Chen*, Jianhua Wang**
Chromium distribution pattern and conversion in single cells with detection by ICP-MS

P 07 **Muhe Chen, Fangxin Wang, Caiping Tan, Zongwan Mao*, Liangnian Ji**
Phosphorescent cyclometalated Iridium (III) complexes as autophagy regulators and lysosome-targeted anticancer agents

P 08 **David Clases, Marvin Birka, Michael Sperling, Uwe Karst***
Ultra trace analysis of ^{99}Tc by means of isobaric dilution-ICP-MS

P 09 **J. M. Costa-Fernandez, Silvia Diez Fernández, F. Calderón Celis, J. Ruiz Encinar, A. Sanz-Medel**
CapLC-ICP-QQQ for absolute protein quantification and phosphorylation degree determinations

P 10 **Yawei Tong, Yinglan Jin, Dongshen Fan, Weizhong Xiao, Dehua Cui**
High manganese, a risk for Alzheimer's Disease

P 11 **Liwei Cui, Yu-Feng Li*, Jiating Zhao, Yunyun Li, Xiaohan Xu, Yuxi Gao, Bowen Zhang, Yongjie Liu, Bai Li, Zhifang Chai**
Studies on the demethylation of methylmercury by three species of bacteria

P 12 **Jeffrey S. Derrick, Mi Hee Lim***
Rational design of a structural framework with potential use to develop chemical reagents that target and modulate multiple facets of Alzheimer's Disease

P 13 **Liuxing Feng*, Dan Zhang, Jun Wang, Hongmei Li**
Determination of transferrin, albumin and electrolytes in human serum CRM by using isotope dilution HPLC/Laser Ablation-ICP-MS

P 14 **William Maher*, Frank Krikowa, Enzo Lombi, Erica Donner, Simon Foster**
Arsenic in rice: comparison of LC-ICPMS and XANES to identify the chemical form of arsenic in rice

P 15 **Aki Kosugi, Chiaki Nishizawa, Akira Kawabe, Emiko Harada***
Heavy metal accumulation and vegetation ecology in allotetraploid *Arabidopsis kamchatica* subsp. *kawasakiana*

P 16 **Emiko Harada*, Takuma Asayama, Nozomi Shiraki, Shota Inoue, Erina Okuda1, Kazuma Nishida, Kosuke Tsuji, Hiroshi Hasegawa**
Hyperaccumulation and seasonal change of manganese in a submerged plant *egeria densa*

P 17 **Gerrit Hermann, Evelyn Rampler, Michaela Schwaiger, Stephan Hann, Gunda Köellensperger***
High throughput flow injection-ICP-MS a versatile tool in metallomics

P 18 **Seiichiro Himeno*, Misaki Isawa, Satoko Hamao, Hitomi Fujishiro**
Segment-specific transport and toxicity of cadmium in proximal tubule epithelial cells of mice

P 19 **Hao Hu, Guoqiang Lan, Tianfeng Chen***

Combating drug resistance in hepatocellular carcinoma cells through inhibition of ABC family proteins by platinum (ii) complexes

P 20 **Xuefeng Shan, Shuimei Zhang, Zhihui Cai, Chenghui Zhu, Qinjie Ling, Zhi Huang***

Modulation of selenium to cholesterol reverse transportation (CRT) in macrophages: Implications in foam cell formation and atherogenesis

P 21 **Ekaterina Y. Ilyechova*, Aleksandra S. Sukhanova, Nadezhda V. Tsymbalenko, Mikhail M. Shavlovsky, Ludmila V. Puchkova**

Influence of chronic extracellular copper deficiency caused by dietary silver ions on the *ectopic ceruloplasmin*

P 22 **Oleksandra Kuzmich, Michael Linscheid***

Metal labelling of biomolecules

P 23 **Mee-Young Shin, In-Sook Kwun***

Zn regulation in vascular calcification is independent of osteogenic calcification

P 24 **Lanhai Lai, Wenjie Zheng, Tianfeng Chen***

Copper polypyridyl complexes inhibits growth and metastasis of breast cancer cells

P 25 **Bin Li, Marta Garcia-Miralles, Mahmoud Pouladi, Thomas Walczyk***

Development of techniques for near quantitative removal of blood from brain in a mouse model

P 26 **Yi Li, Liangnian Ji, Zongwan Mao***

Phosphorescent bis(n-heterocyclic carbene) Iridium(iii) complexes as mitochondria-targeted theranostic and photodynamic anticancer agents

P 27 **Yunyun Li, Jiating Zhao, Bowen Zhang, Yongjie Liu, Xiaohan Xu, Yu-Feng Li, Bai Li, Yuxi Gao*, Zhifang Chai**

The influence of iron plaque on the absorption, translocation and transformation of mercury in rice (*Oryza sativa* L.) seedlings exposed to different mercury species

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