



Scientific Program of The 14th International Conference on Heteroatom Chemistry (ICHAC-14)

July 14th-19th, 2024 Tianjin, China

Day1: July 15th, 2024 (Monday)				
Main Hall Opening Ceremony and Plenary Lecture / 15th July, Morning				
Time	Speaker	Affiliation	Title	Chair
9:00-9:30	Opening Ceremony			
9:30-10:10	PL1	Guy Bertrand University of California	Coordination Chemistry at Phosphorus (Phosphorus as A Metal-Like)	Qi-Lin Zhou
10:10-10:30	Coffee Break			
10:30-11:10	PL2	Zhaomin Hou RIKEN Center for Sustainable Resource Science	Heteroatom-Assisted Olefin Polymerization by Rare-Earth Catalysts	Matthias Driess
11:10-11:50	PL3	Qi-Lin Zhou Nankai University	Asymmetric Carbene Insertion into N-H Bonds	
11:50	Buffet Lunch (Third Floor Conference Hall 1& Hall 2)			



Hall A (Chairman: Mengchun Ye Secretary: Dongbing Zhao, Jun Deng) / July 15, Afternoon					
Monday, July 15, Afternoon					
Time	Speaker		Affiliation	Title	Chair
14:00-14:30	KL1A	Shigeyoshi Inoue	Technical University of Munich	Silylene-Mediated Bond Activation and Beyond	Zhaomin Hou
14:30-14:50	IL1A	Yi-Feng Wang	University of Science & Technology of China	Boryl Radicals Enabled Selective Activation of Carbon-Heteroatom Bonds	
14:50-15:10	IL2A	Shuhei Kusumoto	The University of Tokyo	Synthesis, Characterization and Trapping of a Cyclic Diborylcarbene, an Electrophilic Carbene	
15:10-15:25	YIL1A	Takuya Kodama	Osaka University	Gallylene and Germylene Bearing a Phenalenyl-Based Bidentate Ligand	
15:25-15:40	YIL2A	Zhongshu Li	Sun Yat-Sen University	Diphosphenes and Diphosphaenones, the Phosphorus Analogues of Alkenes and Enones	
15:40-16:00	Coffee Break				
16:00-16:30	KL2A	Wen-Xiong Zhang	Peking University	Direct Functionalization of White Phosphorus to Organophosphorus	Dongbing Zhao
16:30-16:50	IL3A	Peng Wang	Shanghai Institute of Organic Chemistry, CAS	Chiral Organosilane Chemistry	
16:50-17:10	IL4A	Chuan He	Southern University of Science and Technology	Catalytic Asymmetric Dehydrogenative Coupling toward Si-Stereogenic Silanes	
17:10-17:25	YIL3A	Zhenpin Lu	City University of Hong Kong	Reduction of Li ⁺ within A Borate Anion	
17:25-17:40	YIL4A	Jiliang Zhou	Sichuan University	Antimony Redox Catalysis Through Unique Sb(I)/Sb(III) Cycling	
17:40-17:55	YIL5A	Shaowei Hu	Beijing Normal University	Vanadium-Catalyzed Dinitrogen Reduction to Ammonia	
18:00-20:00	Poster Session				



Hall B (Chairman: Zhong-Ming Sun Secretary: Xuguang Liu, Fei Lin) / July 15, Afternoon					
Time	Speaker		Affiliation	Title	Chair
14:00-14:30	KL1B	Shigehiro Yamaguchi	Nagoya University	Tailored Main-Group-Containing Fluorophores and Beyond	Hui Xu
14:30-14:50	IL1B	Cui-Hua Zhao	Shandong University	The Stimuli-responsive Luminescent Triarylboranes with Tunable Excited-state Dynamics	
14:50-15:05	YIL1B	Akihiro Tsurusaki	Osaka Metropolitan University	Synthesis and Properties of Fused Phosphindolizine Derivatives	
15:05-15:20	YIL2B	Kanglei Liu	Beijing Institute of Technology	Borane-Functionalization of Polyaromatic Hydrocarbons as Organic Sensitizers for Noninvasive Cancer Therapy	
15:20-15:35	YIL3B	Nan Wang	Beijing Institute of Technology	Construct Smart Materials With Boron: From Emitters To Stimuli Responsive Materials	
15:35-16:00	Coffee Break				
16:00-16:30	KL2B	Hui Xu	Heilongjiang University	Luminescent Organophosphine	Shigehiro Yamaguchi
16:30-16:50	IL2B	Qian Miao	The Chinese University of Hong Kong	N-Heteroacene Based Electronic Materials and Molecular Architectures	
16:50-17:10	IL3B	Martin Heeney	Imperial College London, UK	Carborane Containing Conjugated Materials	
17:10-17:25	YIL4B	Yoshihiro Nishimoto	Osaka University	Sequential Transformation of Two C–F bonds in a CF ₂ Unit Mediated by Photocatalyst and Lewis Acid	
17:25-17:40	YIL5B	Xiaodong Yin	Beijing Institute of Technology	Preparation and Property Study of Highly Crystalline Boron-Containing Two-Dimensional Graphdiyne Derivatives	
17:40-17:55	YIL6B	Peng-Fei Cui	Nanjing University of Science and Technology	Supramolecular Chemistry Based on the Carborane Skeleton	
18:00-20:00	Poster Session				



Angewandte Advances Symposium				
Hall C (Chairman: Xin Su Secretary: Junting Chen) / July 15, Afternoon				
Time	Speaker	Affiliation	Title	Chair
14:00-14:05	Opening Session			Yang Gao
14:05-14:35	Feng-Ling Qing	Shanghai Institute of Organic Chemistry, CAS	Efficient and Direct Access to Aryl Trifluoromethyl/Bromo (chloro)difluoromethyl Ethers	
14:35-15:05	Shangfeng Yang	University of Science and Technology of China	Fullerene-Based Optoelectronic Functional Materials	
15:05-15:35	Zhong Lian	Sichuan University	Mechanical-Force-Induced Single Electron Transfer Reactions by Using Piezoelectric Materials as a Redox Catalyst	
15:35-16:00	Coffee Break			
16:00-16:30	Hongli Bao	Fujian Institute of Research on the Structure of Matter (FJIRSM), CAS	Mechanistic Investigation of Copper-Catalyzed Asymmetric Esterification: Revealing A New NLEs Analysis Model	Jing Tang
16:30-17:00	Mario Waser	Johannes Kepler University Linz	Chiral Isochalcogenourea Organocatalysis	
17:00-17:30	Yi Ren	ShanghaiTech University	Design of Phosphorus-Nitrogen Containing Organic Conjugated Molecules	
17:30-17:35	Closing Remarks			
18:00-20:00	Poster Session			



Day2: July 16th, 2024 (Tuesday)

Hall A (Chairman: Meng-Chun Ye Secretary: Dongbing Zhao, Jun Deng) / July 16, Morning

Time	Speaker	Affiliation	Title	Chair
9:00-9:30	KL3A	Liang Deng	Shanghai Institute of Organic Chemistry, CAS	Shigeyoshi Inoue
9:30-9:50	IL5A	Xing-Zhong Shu	Lanzhou University	
9:50-10:10	IL6A	Pengfei Li	Xi'an Jiaotong University	
10:10-10:25	YIL6A	Youngsuk Kim	Pusan National University	
10:25-10:45	Coffee Break			
10:45-11:15	KL4A	Shou-Fei Zhu	Nankai University	Youai Qiu
11:15-11:35	IL7A	Lutz Greb	Universität Heidelberg	
11:35-11:55	IL8A	Xiao Shen	Wuhan University	
11:55-12:10	YIL7A	Jiaxiang Chu	University of Chinese Academy of Sciences	
12:10	Buffet Lunch (Third Floor Conference Hall 1 & Hall 2)			



Hall A (Chairman: Meng-Chun Ye Secretary: Dongbing Zhao, Jun Deng) / July 16, Afternoon					
Tuesday, July 16, Afternoon					
14:00-14:30	KL5A	Xin-Ping Wang	Shanghai Institute of Organic Chemistry, CAS	The Lewis Acid-Induced Single Electron Transfer in Organic Molecules	Martin Oestreich
14:30-14:50	IL9A	Qiuling Song	Fuzhou University	Unusual Metallate Shifts based on Tetracoordinate Boron Species	
14:50-15:10	IL10A	Zhan Lu	Zhejiang University	Asymmetric Iron and Cobalt Catalysis for Hydrofunctionalization	
15:10-15:25	YIL8A	Hairong Lyu	The Chinese University of Hong Kong	A neutral sp^2 - sp^3 diboron reagent and its applications in borylation reactions	
15:25-15:40	YIL9A	Feng-Lian Zhang	University of Science and Technology of China	Boryl Radical-Catalyzed Asymmetric Cycloisomerization Reactions	
15:40-16:00	Coffee Break				
16:00-16:30	KL6A	Simon Aldridge	University of Oxford	Unleashing New Patterns of Chemical Reactivity With Electron Rich Main Group Compounds	Zhenbo Mo
16:30-16:50	IL11A	Qing Ye	Universität Würzburg	Benzoborirene and Its Carborane-based Analogues as Innovative C2B Synthons	
16:50-17:05	YIL10A	Jie Li	Soochow University	Anion-Coordination in Organozinc Reagents: Development and Application	
17:05-17:20	YIL11A	Zhaowen Dong	Sichuan University	Synthesis and Redox Catalysis of Geometrically Constrained Stannylene	
17:20-17:35	YIL12A	Ling Pan	Northeast Normal University	Synthesis of nitrogen-containing compounds from 4- CF_3 - <i>p</i> -quinols	
17:35-17:50	YIL13A	Yuxin Luan	Nankai University	Asymmetric Trifluoromethoxylation Reactions	
18:00-22:00	Banquet (Third Floor Conference Hall 1& Hall2)				



Hall B (Chairman: Zhong-Ming Sun Secretary: Xuguang Liu, Fei Lin) / July 16, Morning

Tuesday, July 16, Morning

Time	Speaker		Affiliation	Title	Chair
9:00-9:30	KL3B	Shih-Yuan Liu	Boston College	Hydrofunctionalizations of 1,3-Enynes Catalyzed By Pd/Senphos/B(C ₆ F ₅) ₃ : Reaction Development and Mechanism Elucidation	Frieder Jaekle
9:30-9:50	IL4B	Hong Zhang	Xiamen University	Planar CCN-, CCCX- (X = N, O, P) and NCCCN-Type Pentadentate Complexes: Synthesis and Reactivities	
9:50-10:10	IL5B	Gang He	Xi'an Jiaotong University	Chalcogenoviologen-Based Photoelectric Functional Colloids and Interface	
10:10-10:25	YIL7B	Lei Ji	Northwestern Polytechnical University	Conjugation Through Carboranes	
10:25-10:45	Coffee Break				
10:45-11:15	KL4B	Frieder Jaekle	Rutgers University Newark	B-N Units as Versatile Motifs in the Design of Polymeric Materials	Shih-Yuan Liu
11:15-11:35	IL6B	Ryo Shintani	Osaka University	Copper-Catalyzed 1,2-anti-Silylfunctionalization of Alkynes	
11:35-11:55	IL7B	Caihong Xu	Institute of Chemistry, CAS	Synthesis and Application of Ceramifiable Silicon-Containing Polymers	
11:55-12:10	YIL8B	Dengtao Yang	Northwestern Polytechnical University	Multi-Boron-Centered Organic Conjugated Systems with Narrow Emissions	
12:10	Buffet Lunch (Third Floor Conference Hall 1 & Hall 2)				



Hall B (Chairman: Zhong-Ming Sun Secretary: Xuguang Liu, Fei Lin) / July 16, Afternoon					
Tuesday, July 16, Afternoon					
14:00-14:30	KL5B	Takuji Hatakeyama	Kyoto University	Recent Advances in Boron-based MR-TADF Materials	Eric Rivard
14:30-14:50	IL9B	Chuangong Dou	Jilin University	Boron-Doped Molecular Carbons	
14:50-15:10	IL9B	Seung Jun Hwang	Pohang University of Science and Technology	Phosphorus-Ligand Redox Cooperative Catalysis	
15:10-15:25	YIL9B	Bin Rao	Xi'an Jiaotong University	The redox behavior of SHI and SLI organic radicals	
15:25-15:40	YIL10B	Bo Peng	Zhejiang Normal University	Aromatic sulfonium/iodonium Claisen-type rearrangement	
15:40-16:00	Coffee Break				
16:00-16:30	KL6B	Eric Rivard	University of Alberta	Frustrated Lewis Pair Chelation and its Link to Materials Synthesis	Xiao-Ye Wang
16:30-16:50	IL10B	Zhenlei Song	Sichuan University	Asymmetric Construction of Stereogenic Silicon	
16:50-17:10	IL11B	Zheng Duan	Zhengzhou University	Access to Low-Coordinate Phosphorus Species Through C-P Bond Cleavage	
17:10-17:25	YIL11B	Manuel Buckel	Julius-Maximilians-Universität Würzburg	Fully Conjugated Tetraboratetrathiaporphyrinoids: Reduction-Induced Aromaticity	
17:25-17:40	YIL12B	Weidi Cao	Sichuan University	Visible Light-Induced Enantioselective Alkylation with Organosilanes as Radical Precursors	
17:40-17:55	YIL13B	Zijie Qiu	The Chinese University of Hong Kong, Shenzhen	Circularly Polarized Luminescence and Through-Space Interaction in a Three-dimensional World	
18:00-22:00	Banquet (Third Floor Conference Hall 1 & Hall 2)				



EOC Symposium					
Hall C (Chairman: Pingping Tang Secretary: Xiao-Chen Wang, Fei Wang) / July 16, Morning					
Time	Speaker		Affiliation	Title	Chair
9:00-9:30	KL1C	Liang Zhao	Tsinghua University	Synthesis and Reactivity of Nitrogen- and Carbon-centered Polynuclear Gold(I) Clusters	Feng-Ling Qing
9:30-9:50	IL1C	Jose Goicoechea	Indiana University	The Cyaphide Ion: A New Building Block for Chemical Synthesis	
9:50-10:10	IL2C	Geng-Wen Tan	SUN YAT-SEN University	The Chemistry of Monosubstituted Heavy Main-Group Compounds	
10:10-10:25	YIL1C	Peng Cui	Anhui Normal University	Syntheses and Reactivity of Heterobimetallic Rare-Earth/Late-Transition Metal Complexes with LM→Ln Dative Bonds	
10:25-10:45	Coffee Break				
10:45-11:05	IL3C	Eunsung Lee	Pohang University of Science and Technology	Stable organic radicals derived from carbenes and their applications	Norihiro Tokitoh
11:05-11:25	IL4C	Congqing Zhu	Nanjing University	Actinide-Metal Bonds Supported by Double-Layer N-P Ligand	
11:25-11:40	YIL2C	Xiuxiu Yang	Nanjing University	Paramagnetic bismuth complexes	
11:40-11:55	YIL3C	Kei Ota	Kindai university	Reaction of arylhalogermynes with NHCs	
12:00	Buffet Lunch (Third Floor Conference Hall 1 & Hall 2)				



EOC Symposium					
Hall C (Chairman: Pingping Tang Secretary: Xiao-Chen Wang, Fei Wang) / July 16, Afternoon					
14:00-14:30	KL2C	Norihiro Tokitoh	Kyoto University	New Progress in the Chemistry of Heavy Aryl Anions	Liang Zhao
14:30-14:50	IL5C	Erli Lu	Newcastle University	Sustainable Organic Synthesis enabled by New Group-1 Metal Chemistry	
14:50-15:10	IL6C	Lingbing Kong	Shandong University	Synthesis and Properties of Iminoborane Derivatives	
15:10-15:30	IL7C	Cheuk-Wai So	Nanyang Technological University	Low-Oxidation-State Boron Complexes for Carbon Dioxide Activation	
15:30-15:45	YIL4C	Hao Wang	Southeast University	Synthesis and Reactivity of Group 13 And 14 Heterocyclic Compounds	
15:45-16:05	Coffee Break				
16:05-16:25	IL8C	Rei Kinjo	Nanyang Technological University	The Chemistry of Cyclic (Alkyl) (Amino) Aluminium (I) Anions	Eunsung Lee
16:25-16:45	IL9C	Liu Leo Liu	Southern University of Science and Technology	Isolable Carbyne Anions and Carbenes with an Inverted Electronic Configuration	
16:45-17:05	IL10C	Tiow-Gan Ong	National Taiwan University	Phosphine-Stabilized Dicarbon and Its Chemistry	
17:05-17:25	IL11C	Zhong-Ming Sun	Nankai University	New Sandwich Compounds with Group 15 Cyclo Rings as Ligands	
17:25-17:40	YIL5C	Bochao Su	Xi'an Jiaotong University	Isolation of Fluorescent 2 π -Aromatic 1,3-Disiladiboretenes	
17:40-17:55	YIL6C	Lipeng Wu	Lanzhou Institute of Chemical Physics, CAS	BH ₃ -Catalyzed Si-B Functional Group Exchange Reaction and Beyond	
18:00-22:00	Banquet (Third Floor Conference Hall 1 & Hall2)				

**Day3: July 17th, 2024 (Wednesday)****Hall A (Chairman: Meng-Chun Ye Secretary: Dongbing Zhao, Jun Deng) / July 17, Morning****Wednesday, July 17, Morning**

Time	Speaker		Affiliation	Title	Chair
9:00-9:30	KL7A	Martin Oestreich	Technische Universität Berlin	The Cation Shuffle	Lutz Greb
9:30-9:50	IL12A	Li-Wen Xu	Hangzhou Normal University	Catalytic Construction of Si-Stereogenic Centers via Si-H/C Functionalization	
9:50-10:05	YIL14A	Wei lu	Sichuan University	Synthesis and Reactivity of a Bisphosphirane-Fused Anthracene for Applications in Small Molecule Activation	
10:05-10:20	YIL15A	De-Wei Gao	ShanghaiTech University	Research on the Asymmetric Synthesis and Catalytic Transformations of Poly(Organoborons)	
10:20-10:40	Coffee Break				
10:40-11:00	IL13A	Zhuangzhi Shi	Nanjing University	P(III)-Directed C–H Activation	Li-Jun Xiao
11:00-11:20	IL14A	Xiao-Chen Wang	Nankai University	Meta-Selective Pyridine Functionalization via Dihydropyridines	
11:20-11:35	YIL16A	Shunxi Dong	Sichuan University	Rare-Earth Organometallic Complex-Mediated Hydrofunctionalization of Alkenes	
11:35-12:50	YIL17A	Chao Liu	Nanjing University	Isotopic Organoboron Chemistry	
12:00	Buffet Lunch (Third Floor Conference Hall 1 & Hall 2)				



Hall B (Chairman: Zhong-Ming Sun Secretary: Xuguang Liu, Fei Lin) / July 17, Morning					
Time	Speaker		Affiliation	Title	Chair
9:00-9:30	KL7B	Derek P. Gates	University of British Columbia	P=C Bonds in Polymer Science and Catalysis	Guo-Xin Jin
9:30-9:50	IL12B	Xiaodong Shi	University of Maryland	Formation of C-Heteroatom Bond via Gold Catalysis	
9:50-10:05	YIL14B	Zhaoyong Lu	Nankai University	Collective Synthesis of Marine Sesquiterpene Quinones/Hydroquinones	
10:05-10:20	YIL15B	Youliang Wang	Xi'an Jiaotong University	Iterative, Controllable, and Programmable Ligation of Four Different Alcohols at One Silicon Center	
10:20-10:40	Coffee Break				
10:40-11:10	KL8B	Guo-Xin Jin	Fudan University	Molecular Macrocycles, Catenanes and Knots	Derek P. Gates
11:10-11:30	IL13B	Shifa Zhu	South China University of Technology	Catalytic Transformation of Acetylene	
11:30-11:45	YIL16B	Jin-Dong Yang	Tsinghua University	P(III)/P(V)=O Redox-Catalyzed Isodesmic Reactions: A New Paradigm for Mild Deoxygenation of Phosphine Oxides	
11:45-12:00	YIL17B	Xiaolei Zhang	Xi'an Jiaotong University	Access to Quasi-[7]Circulenes from [5]Helicenes by Boron Insertion	
12:00	Buffet Lunch (Third Floor Conference Hall 1 & Hall 2)				



EOC Symposium					
Hall C (Chairman: Pingping Tang Secretary: Xiao-Chen Wang, Fei Wang) / July 17, Morning					
Time	Speaker		Affiliation	Title	Chair
9:00-9:30	KL3C	Thomas Müller	Carl von Ossietzky Universität Oldenburg	Silole and Germole Dianions as Precursors for Unusual Main Group Element Compounds	Huadong Wang
9:30-9:50	IL12C	Xin Xu	Soochow University	Synthesis and Reactivity of Zn/Mg-Metal-Bonded Complexes	
9:50-10:05	YIL7C	Lizhao Zhu	Nankai University	Synthesis and Derivatization of Diboratriazoles	
10:05-10:20	YIL8C	Yile Wu	Ningbo University	Lewis Acid-Stabilized Active N-Containing Species	
10:20-10:40	Coffee Break				
10:40-11:00	IL13C	Huadong Wang	Fudan University	Borenum in the Activation of C–H and C–C Bonds	Thomas Müller
11:00-11:20	IL14C	Bing-Tao Guan	Fudan University	New Catalytic Explorations on s-Block Metal Complexes	
11:20-11:35	YIL9C	Jingzhen Du	Zhengzhou University	Actinide-Antimony Metal-Metal Bonding Chemistry	
11:35-11:50	YIL10C	Yuanting Su	Soochow University	An Isolable T-shaped Planar Silyl Anion	
12:00	Buffet Lunch (Third Floor Conference Hall 1 & Hall 2)				



Main Hall Flash Talk / Wednesday, July 17, Afternoon					
Time	Speaker		Affiliation	Title	Chair
14:00-14:05	FT1	Huihui Xu	CNRS	The Synthesis, Isolation and Reactivity of A Three-Coordinate Base-Stabilized Alumylene	Jun Deng
14:05-14:10	FT2	Simone Verena Hirmer	Technical University of Munich	A Series of Zero-Valent Germanium-, Tin-, and Lead-Tetracarbonyliron Complexes	
14:10-14:15	FT3	Niiaz Iagafarov	Gunma University	Janus-Type Tetrapod Silsesquioxanes Transformations: Way to Perspective Applications	
14:15-14:20	FT4	Bing Zhong	Tsinghua University	The Synthesis, Characterizations, and Properties of N-Heterocyclic Phosphorus with a Tethered Boron Center	
14:20-14:25	FT5	Cheng Chen	Nankai University	Synthesis and Luminescent Properties of Boron-Embedded Acenes	
14:25-14:30	FT6	Zhongwei Zhang	Tianjin University	Metallaphotocatalytic Multicomponent Synthesis of Intricately Structured N-Alkyl Anilines	
14:30-14:35	FT7	Guoping Li	Xi'an Jiaotong University	The Structural Developments and Applications of Chalcogenoviologens	
14:35-14:40	FT8	Ji-Kun Li	Nankai University	B, N-Embedded Double Helicenes for Near-Infrared Circularly Polarized Luminescence	
14:40-14:45	FT9	Zhaoxiang Liu	University of British Columbia	Anionic Polymerization of 1-Phosphaisoprene	
14:45-14:50	FT10	Shaozhi Du	Nankai University	Synthesis And Reactivity of N-Heterocyclic Silylene Stablized Disilicon(0) Complexes	
14:50-14:55	FT11	Wei-Xing Chen	Nankai University	New Fe–Fe Bonding in Group 14 Sn/Pb Cages	



Main Hall Plenary Lecture and Closing Ceremony / Wednesday, July 17, Afternoon					
Time	Speaker		Affiliation	Title	Chair
14:55-15:35	PL4	Matthias Driess	Technische Universität Berlin	The Rise of Boron, Silicon and Germanium Analogs of N-Heterocyclic Carbenes in Small Molecule Activation and Catalysis	Chunming Cui
15:35-15:55	Coffee Break				
15:55-16:35	PL5	Cameron Jones	Monash University	Activated Magnesium(I) Compounds: Humble Reagents with Noble Intentions in Small Molecule Activations	Simon Aldridge
16:35-17:15	PL6	Douglas Stephan	University of Toronto	Frustrated Lewis Pairs: Reactivity across the Periodic Table	
17:15-17:35	Closing Ceremony & Awards				