# **Scientific Program**

### Oct. 20<sup>th</sup> Thursday

### DuoGongNeng Hall of Conference Center

Ononing	15:20-15:25	Welcome Address by the President of Beijing University of	
Opening		Chemical and Technology	
Ceremony Chair:	15:25-15:30	Opening Address by the Director of Department of Organic	
5	15.25-15.30	Chemistry of National Science Foundation of China	
Prof. Jun Nie (The Dean of College	45 20 45 25	Opening Address by the Dean of Shenzhen Graduate School of	
,	15:30-15:35	Peking University, Prof. Yundong Wu	
of Science)	15:35-15:40	Opening Address by Prof. Michael B. Hall	

#### **Group Photo**

#### The Gate of Conference Center

### DuoGongNeng Hall of Conference Center

Keynote		Yundong Wu	New Mechanistic Insights on the Selectivity of
Lecture	16:00-16:45	Shenzhen Graduate	Transition-Metal- Catalyzed Organic Reactions: The
Chair:		School of Peking Univ.	Role of Computational Chemistry
Weihai	16.45 17.20	Zhenfeng Xi	Synthesis of Metallaaromatics from Dilithio Reagents
Fang	16:45-17:30	Peking Univ.	and Low-Valent Metal Salts

#### 17:30-19:00 Dinner

#### The 1<sup>st</sup> Floor of GuiZhou Hotel

### DuoGongNeng Hall of Conference Center

Invited Lecture	19:00-19:30	Djamaladdin G. Musaev <i>Emory Univ.</i>	Computational Insights in Complexity of Chemical Catalysis		
Chair: Daniel A. Singleton	19:30-20:00	Decai Fang Beijing Normal Univ.	Pd Catalytic Reaction Mechanism: Directing Groups, Solvent and Oxidation State		
	20:00-20:15 <b>Coffee Break</b>				
Invited Lecture	20:15-20:45	ShiLu Chen Beijing Inst. of Technology	How is Methane Formed and Oxidized Reversibly When Catalyzed by Ni-containing Methyl-Coenzyme M Reductase?		
Chair: Wenhua Sun	20:45-21:15	Wenhong Yang Inst. of Chem., Chinese Academy of Science	Catalytic Activities of Transition Metal Complexes in Ethylene Oligo/Polymerization		

### Oct. 21<sup>st</sup> Friday

## DuoGongNeng Hall of Conference Center

Keynote Lecture	8:30-9:15	Shigeyoshi Sakaki Kyoto Univ.	Crucial Role of Lewis Acid in Enhancing Reactivity of Organometallic Complex		
Chair: Yundong Wu	9:15-10:00	Fahmi Himo Stockholm Univ.	Quantum Chemical Modeling of Mechanisms and Selectivities in Homogeneous Catalysis		
	10:00-10:15 <b>Coffee Break</b>				
Invited	10:15-10:45	Zhi-Xiang Yu Peking Univ.	Mechanism of [5+2+1] Reaction of Ene-Vinylcyclopropanes and Carbon Monoxide		
Lecture Chair:	10:45-11:15	Evert Jan Meijer Univ. of Amsterdam	Modeling Catalytic Reactions in an Aqueous Environment		
Jeremy Harvey;	11:15-11:45	Yu Lan Chongqing Univ.	Mechanistic Study of Organometallic Reactions Based on Density Functional Theory Calculations		
Zhuofeng Ke	11:45-12:15	Agustí Lledós Univ. Autònoma de Barcelona	New Radical Pathways in Organometallic Reactions		

### 12:15-13:30 Lunch

The 1st Floor of GuiZhou Hotel

### DuoGongNeng Hall of Conference Center

		ZhiXiang Wang	Computational Developments of Strategies for H <sub>2</sub>
to de al	13:30-14:00	Univ. of Chinese	Activation and Hydrogenation: The Prediction Power
Invited 		Academy of Sciences	of Computations
Lecture		Jeremy N. Harvey	Computational Modelling of the Kinetics of
Chair:	14:00-14:30	KU Leuven	Homogeneous Catalysis: Progress and Challenges
Feliu		Jing Ma	
Maseras;	14:30-15:00	Nanjing Univ.	Noncovalent Bond-mediated Reactions in Solutions
Shixuan		Rong-Zhen Liao	
Du	15:00-15:30	Huazhong Univ. of	Quantum Chemical Modeling of Water Oxidation
		Science and Tech.	Catalysis
		15:30-15:4	5 Coffee Break
		Paul W. Ayers	
Invited	15:45-16:15	McMaster Univ.	Conceptual Tools for Noninnocent Ligands
Lecture		Ganglong Cui	DFT Studies on Photo-Induced Reactions Mediated by
Chair:	16:15-16:45	Beijing Normal Univ.	Ruthenium- and Iridium-Containing Catalysts
Agustí		Feliu Maseras	
Lledós;	16:45-17:15	The Barcelona Inst. of	How are the electrons transferred in oxidative
		Science and Tech.	coupling?

17:15-18:30 Dinner

The 1<sup>st</sup> Floor of GuiZhou Hotel

DuoGongNeng Hall of Conference Center

Invited	18:30-19:00	Siwei Bi Qufu Normal Univ.	Theoretical Rationalization of Kinetic Experimental Phenomena involved in Gold-Catalyzed Cyclization of 2-Alkynyl-N- Propargylanilines
Lecture Chair: Evert Jan	19:00-19:30	Jiaxi Xu Beijing Univ. of Chem. Tech.	Chemoselectivity in the Copper-Catalyzed Reaction of Diazoacetamide Derivatives
Meijer	19:30-20:00	Xinhao Zhang Shenzhen Graduate School of Peking Univ.	A Combined IM-MS/DFT Study on the Role of N-Protected Amino Acid Ligand in Pd-Catalyzed C-H Activation

20:00-21:30 **Poster Section** 

DuoGongNeng Hall of Conference Center

### Oct. 22<sup>nd</sup> Saturday

### DuoGongNeng Hall of Conference Center

Invited Lecture	8:30-9:00	Jun Li Tsinghua Univ.	Single-Atom Catalysis (SAC): Bridging Heterogeneous and Homogenous Catalysis
	9:00-9:30	Jinlan Wang	Two-Dimensional Materials for Hydrogen Evolution
Chair:		Southeast Univ.	Reaction
Shuhua Li		Shixuan Du	Functionalization of Noble-metal Surfaces for
orraina a	9:30-10:00	Inst. of Phys., Chinese	
		Academy of Science	Hydrogen Dissociation
		10:00-10:1	5 Coffee Break
		Zhenyang Lin	Carbon versus Carbon-Boron Coupling Reactions of
	10:15-10:45	The Hong Kong Univ.	Primary, Secondary and Tertiary Alkyl Bromides
Invited		of Science and Tech.	
Lecture		Raghavan B. Sunoj	Cooperative Asymmetric Dual Catalysis: Mechanism
Chair:	10:45-11:15	Indian Inst. of Tech.	
ZhiXiang		Bombay	and Selectivity
Wang;		Ruiqin Zhang	Carbon and Carbon Nitrida Quantum Data for
Shixuan	11:15-11:45	City University Hong	Carbon and Carbon Nitride Quantum Dots for
Du		Kong	Photoelectrochemical Applications
	11:45-12:15	Xinzheng Yang	Computational Decign of Pace Metal Complexes for
		Inst. of Chem., Chinese	Computational Design of Base Metal Complexes for Catalytic Hydrogenation of Carbon Dioxide
		Academy of Science	

### 12:15-13:30 Lunch

### The 1st Floor of GuiZhou Hotel

### DuoGongNeng Hall of Conference Center

Invited	13:30-14:00	Daniel A. Singleton Texas A&M Univ.	Identification and Control of Dynamic Effects on Selectivity		
Lecture Chair:	14:00-14:30	Cunyuan Zhao Sun Yat-Sen Univ.	Theoretical Study on the Hydrolysis Mechanism of Phosphoesters Catalysed by Metal Complexes		
Zhenyang Lin;	14:30-15:00	Zexing Cao Xiamen Univ.	QM/MM Insight into the Importance of Nonchemical Steps in Enzymatic Catalysis		
Jing Ma	15:00-15:30	Shuhua Li Nanjing Univ.	Homolytic Cleavage of B-B Bond via the Cooperative Catalysis of Two Lewis Bases: Computational Design and Experimental Verification		
	15:30-15:45 <b>Coffee Break</b>				
Keynote Lecture Chair: Jun Li	15:45-16:30	Michael B. Hall Texas A&M Univ.	Intriguing Aspects of Non-innocent Ligands in Transition Metal Complexes		
	16:30-17:15	Weihai Fang Beijing Normal Univ.	Mechanism of the Enantioselective Intramolecular Enone [2+2] Photocycloaddition Reaction Explored by the CASPT2//CASSCF calculation		

18:00-20:30 Banquet

The 2<sup>nd</sup> floor of XianHeng Restaurant

Poster Awards and Conference Closing by Prof. Weihai Fang and Prof. Michael Hall