CONTENTS

Welcome Message

On behalf of the organization community, we would like to extend our warmest welcome to invite all delegates from all over the world to attend the 8th Asian Conference on Coordination Chemistry (ACCC8), which is held on August 7-11, 2022 in National Taiwan University, Taipei, Taiwan, and organized by National Tsing Hua University, National Taiwan University, Chemical Society Located in Taipei, Taiwan Bioinorganic Chemistry Society and co-organized by Academia Sinica.

The Asian Conference on Coordination Chemistry (ACCC) is the largest and most reputable regional conference in Asia focusing on the area of coordination chemistry. The aims of the conference are to provide a forum for coordination chemists from all over the world to gather together and present their most recent research findings and to offer a stimulating atmosphere to discuss and exchange ideas on the most frontier research topics in coordination chemistry. The conference also serves to showcase the fast development of coordination chemistry in Asia.

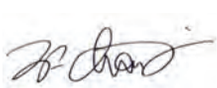
The conference is devoted to the recent advances and new trends in coordination chemistry including electronic structures and bonding of metal complexes, supramolecular chemistry, organometallic chemistry, bioinorganic chemistry, metal catalysis, small molecule activation, functional coordination compounds for materials science, biomedical science and environmental science and energy, as well as other emerging topics in coordination chemistry.

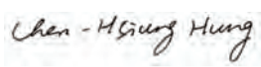
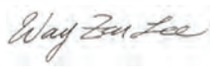
ACCC has long been an important information-sharing platform in the chemistry field. This year, we bring you not only renowned speakers and experts; we also present you with an in-depth and enriched scientific program. We sincerely hope you can join us in learning the latest research and perspectives, share knowledge and actively participate in advancing the field of coordination chemistry in Asia.

Although we have been facing the challenge of the Covid-19 pandemic since 2019, the adversity can bring us together against such difficulties. ACCC8 is held as a hybrid conference, it allows the participants around the world to join the meeting online, thus shortening the distance of communication between all of us.

This symposium consists of plenary lectures, keynote lectures, invited lectures, oral presentations and online poster presentations (including short talk presentations, optional). Moreover, an oral presentation session is planned especially for young researchers (graduate students, postdoctoral researchers, and young researchers from industry) to encourage their activity.

We appreciated your participation. Enjoy ACCC8 in Taipei during August 7-11.
Hope you could find some new perspectives and inspirations on coordination chemistry.



Yi-Chou Tsai	Ching-Wen Chiu	Chen-Hsiung Hung	Way-Zen Lee
Chair, ACCC8	Co-chair, ACCC8	Co-chair, ACCC8	Co-chair, ACCC8
National Tsing Hua University	National Taiwan University	Academia Sinica	National Taiwan Normal University

Organization

Conference Chair	
Yi-Chou Tsai	National Tsing Hua University

Conference Co-chairs	
Ching-Wen Chiu	National Taiwan University
Chen-Hsiung Hung	Academia Sinica
Way-Zen Lee	National Taiwan Normal University

Organizing Committee	
Chun-Hung Kuo	National Yang Ming Chiao Tung University
Lan-Chang Liang	National Sun Yat-sen University
Chia-Her Lin	National Taiwan University
Po-Heng Lin	National Chung Hsing University
Hsueh-Ju Liu	National Yang Ming Chiao Tung University
Shie-Ming Peng	National Taiwan University
Biing-Chiau Tzeng	National Chung Cheng University
Masahiro Yamashita	Tohoku University

Acknowledgements

The Organizing Committee of 8th Asian Conference on Coordination Chemistry (ACCC8 2022) would like to acknowledge and express our sincere gratitude to the following organizations and companies for their great support:

Organizers

National Tsing Hua University	National Taiwan University	Taiwan Bioinorganic Chemistry Society	Chemical Society Located in Taipei

Co-organizer

Institute of Chemistry, Academia Sinica

Government & Academic Organizations

Ministry of Science and Technology	National Tsing Hua University	Department of Information and Tourism, Taipei City Government

Taiwan Bioinorganic Chemistry Society	Ministry of Education	Institute of Chemistry, Academia Sinica	National Taiwan University

Exhibitions & Sponsors

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Nova Materials Co., Ltd.	ZIMMERMAN SCIENTIFIC CO., LTD	ADVANCED EDUCATION TECHNOLOGY CORPORATION
ACS Publications	TechMax Technical Co., Ltd.	Royal Society of Chemistry
Agilent Technologies, Inc.	Chang Chun Petrochemical Co.,Ltd.	

Note: The sponsors and exhibition logos are listed in the amount of the payment.

General Information

Conference

Date: Sunday, August 7 - Thursday, August 11, 2022

Venue: Boya Lecture Building, National Taiwan University

Address: No. 1, Sec. 4, Roosevelt Road, Taipei, 10617 Taiwan R.O.C.

Registration

Date	Operating Hours
Sunday, August 7, 2022	16:00 – 18:00
Monday, August 8, 2022	08:10 – 17:00
Tuesday, August 9, 2022	08:10 – 17:00
Wednesday, August 10, 2022	08:10 – 17:00
Thursday, August 11, 2022	08:10 – 12:00

Venue: Main Entrance, 1F, Boya Lecture Building

Name Badge

All delegates are required to wear their official name badges at all times in the meeting venues.

Individuals will be identified as follows:

Yellow badge	Chair / Co-chair / Organizing Committee
Red badge	Speaker / Session Chair
Blue badge	Delegate
Green badge	Exhibitor
Grey badge	Staff

Official Language

The official language of ACCC8 2022 is English

Lunch

Lunch boxes will be provided by showing the badge.

Date	Time
Monday, August 8, 2022	12:30 – 14:00
Tuesday, August 9, 2022	12:30 – 14:00
Wednesday, August 10, 2022	12:30 – 14:00

Venue: Hallway, 1F, Boya Lecture Building

Refreshments

Date	Time
Monday, August 8, 2022	10:40 – 11:00
	15:30 – 15:50
Tuesday, August 9, 2022	10:40 – 11:00
	15:30 – 15:50
Wednesday, August 10, 2022	10:40 – 11:00
	15:30 – 15:50
Thursday, August 11, 2022	10:00 – 10:30

Venue: Hallway, 1F, Boya Lecture Building

Secretariat Office & Speaker's Ready Room

Date	Operating Hours
Sunday, August 7, 2022	16:00 – 18:00
Monday, August 8, 2022	08:10 – 17:00
Tuesday, August 9, 2022	08:10 – 17:00
Wednesday, August 10, 2022	08:10 – 17:00
Thursday, August 11, 2022	08:10 – 12:00

Venue: 2F, Room 203&204, Boya Lecture Building

Social Programs

Event	Date	Time	Venue
Opening Ceremony	Sunday, August 7, 2022	17:00-17:15	Room 101, Boya Lecture Building
Welcome Reception	Sunday, August 7, 2022	18:00-20:00	Hallway, 1F, Boya Lecture Building
Conference Banquet	Wednesday, August 10, 2022	18:30-20:30	Ballroom 1, 3F, Caesar Metro Taipei
Closing Ceremony	Thursday, August 11, 2022	12:00-12:15	Room 101, Boya Lecture Building
Excursion	Thursday, August 11, 2022	12:15-14:00	DalongDong Baoan Temple, Taipei Confucius Temple

Welcome Reception

Date: Sunday, August 7, 2022

Time: 18:00-20:00

Venue: Hallway, 1F, Boya Lecture Building

Dress Code: Smart casual

※ All attendees who registered for the ACCC8 2022 are cordially invited to the Welcome Reception.

Conference Banquet

Date: Wednesday, August 10, 2022

Time: 18:30-20:30

Venue: Ballroom 1, 3F, Caesar Metro Taipei

Dress Code: Smart casual

Transportation: Shuttle bus service is provided as follows:

Time	From ▸	▸ To
18:00	National Taiwan University	Caesar Metro Taipei
20:30	Caesar Metro Taipei	National Taiwan University

※ Departure: Meet up in front of the entrance of New Moon Pavilion, National Taiwan University.

Excursion

Date: Thursday, August 11, 2022

Time: 12:15-14:00

Destination: DalongDong Baoan Temple & Taipei Confucius Temple

Lunch: Lunch boxes will be provided on the bus.

Reservation Only: Admission is only for those who confirmed with the Secretariat before the Conference.

Transportation: Shuttle bus service is provided as follows:

Time	From ▸	▸ To
12:20	National Taiwan University	DalongDong Baoan Temple
13:40	Taipei Confucius Temple	National Taiwan University

※ Departure: Meet up in front of the entrance of New Moon Pavilion, National Taiwan University at 12:20.

DalongDong Baoan Temple & Taipei Confucius Temple

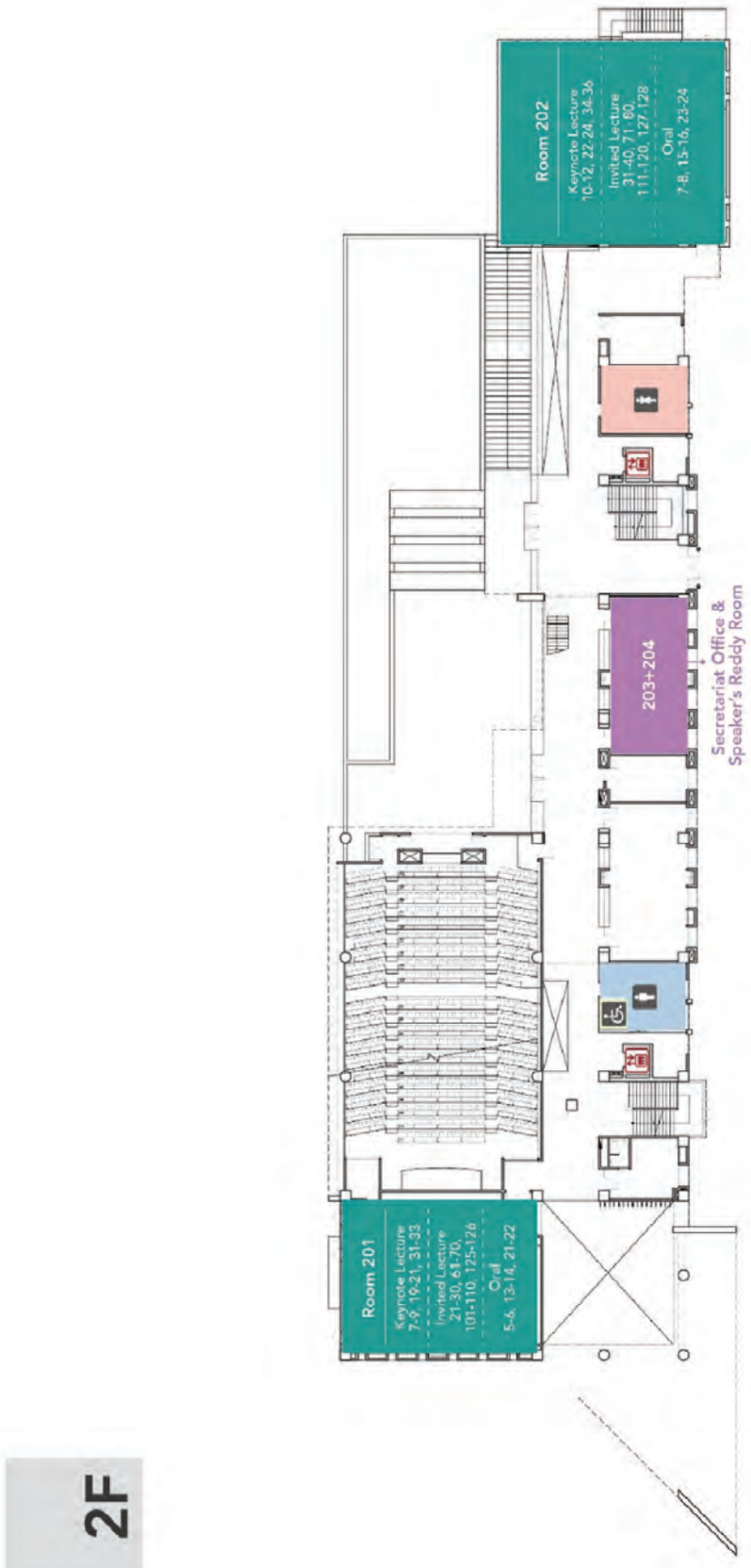
Taipei Confucius Temple was built in the early 1880s, damaged several decades later, and reconstructed in 1925 by the crème de la crème of carpenters from Quanzhou, China. The absence of words in the temple venerates the Confucian disdain of pompous drivel. This class-2 national historic site reflects a rare level of artistic achievement. The two-month Baosheng Cultural Festival (April-May) held here features an array of traditional art performances. Baoan Temple is a UNESCO Asia-Pacific Heritage Award recipient.

DalongDong Baoan Temple

Taipei Confucius Temple

Floor Plan


Registration Desk
Exhibition Area
Exit Only
Room 103
Keynote Lecture
4-6, 15-18, 28-30
Invited Lecture
11-20, 51-60, 91-100
123-124
Oral
3-4, 11-12, 19-20
Room 102
Keynote Lecture
1-3, 13-15, 25-27
Invited Lecture
1-10, 41-50, 81-90
121-122
Oral
1-2, 9-10, 17-18
Welcome Reception / Coffee Break
Networking Area
Room 101
Opening Ceremony
Plenary Session
1,2,3,4,5,6,7,8,9
Closing Ceremony
Poster Session
Registration Desk
Main Entrance
1F

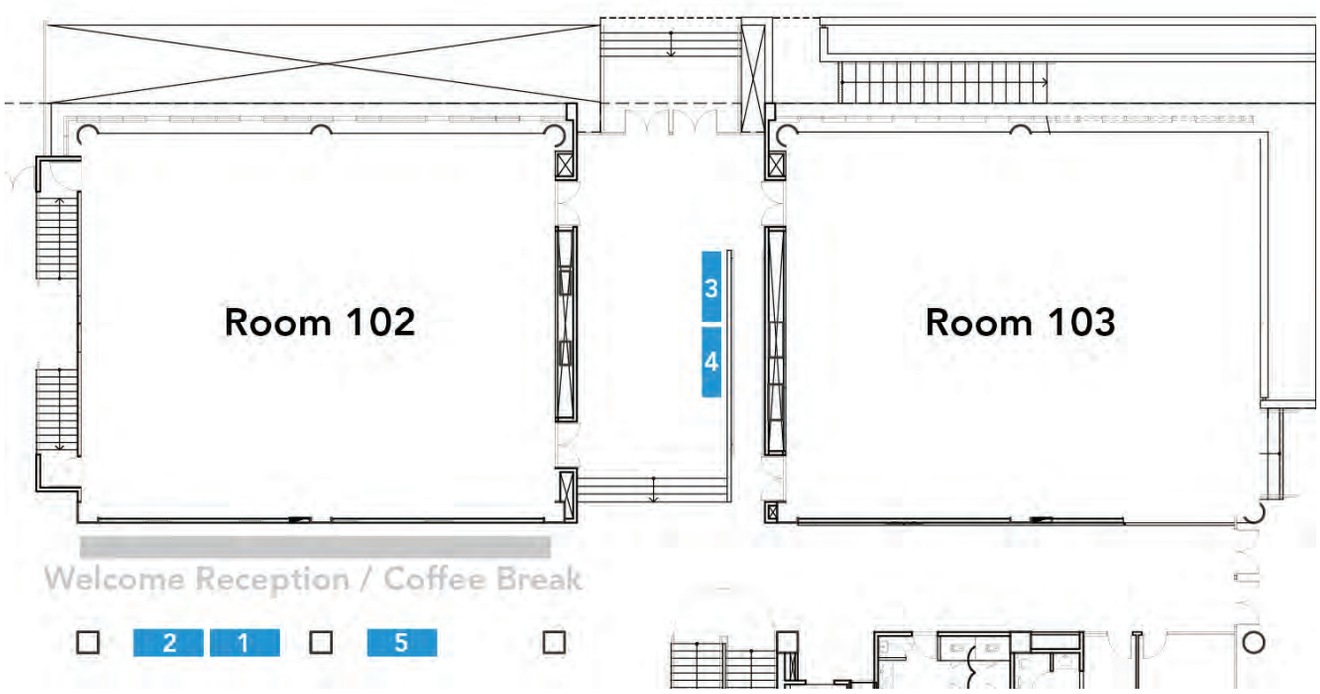

Room 202
Keynote Lecture
10-12, 22-24, 34-36
Invited Lecture
31-40, 71-80,
111-120, 127-128
Oral
7-8, 15-16, 23-24
203+204
Secretariat Office &
Speaker's Ready Room
Room 201
Keynote Lecture
7-9, 19-21, 31-33
Invited Lecture
21-30, 61-70,
101-110, 125-126
Oral
5-6, 13-14, 21-22
2F

Floor Plan of Exhibition Area

Venue: Hallway, 1F, Boya Lecture Building

Date	Operating Hours
Monday, August 8, 2022	10:40 – 17:00
Tuesday, August 9, 2022	08:40 – 17:00
Wednesday, August 10, 2022	08:40 – 17:00
Thursday, August 11, 2022	08:40 – 11:30

Layout of Exhibition Area



Exhibitors List

Booth No.	Exhibitor
1	**Nova Materials Co., Ltd.**
2	**MICROTRAC BEL Corp. / DKSH TAIWAN Ltd.**
3	**ZIMMERMAN SCIENTIFIC CO., LTD**
4	**ACS Publications**
5	**ADVANCED EDUCATION TECHNOLOGY CORPORATION**

Memo

Program at a Glance

8th Asian Conference on Coordination Chemistry
August 8-11, 2022

August 7 SUN

Time	Room 101
16:10 | 16:30	Registration
17:00-17:15	Opening Ceremony
17:15 | 18:00	**Plenary Session 1 & ACCC Award 1** Vivian Wing-Wah Yam
18:00 | 20:00	**Welcome Reception**

August 8 MON

Time	Room 101	Room 102	Room 103	Room 201	Room 202
08:10-08:40	Registration				
08:40 | 09:25	**Plenary Session 2** (Room 101) Colette Boskovic				
09:25-09:30	Moving				
09:30 | 10:00		Keynote Lecture 1 Daniel J. Mindiola	Keynote Lecture 4 Partha Sarathi Mukherjee	Keynote Lecture 7 Chia-Wen (Kevin) Wu	Keynote Lecture 10 Michael Huang
10:00 | 10:20		Invited Lecture 1 Congping Zhu	Invited Lecture 11 Dongshan Lee	Invited Lecture 21 Shuhei Furukawa	Invited Lecture 31 Youngmin You
10:20 | 10:40		Invited Lecture 2 Yumiko Nakajima	Invited Lecture 12 Takahiro Nakama	Invited Lecture 22 Sujit Kumar Ghosh	Invited Lecture 32 Masashi Okubo
10:40-11:00	Coffee Break				
11:00 | 11:20		Invited Lecture 3 Arnab Dutta	Invited Lecture 13 John Yip	Invited Lecture 23 Chia-Her Lin	Invited Lecture 33 Ayumi Ishii
11:20 | 11:40		Invited Lecture 4 Gavin Chit Tsui	Invited Lecture 14 Shigehisa Akine	Invited Lecture 24 Ryotaro Matsuda	Invited Lecture 34 Jing-Lin Zuo
11:40 | 12:00		Invited Lecture 5 Hong Geun Lee	Invited Lecture 15 Wei Lu	Invited Lecture 25 Jaursup Boonmak	Invited Lecture 35 Sayaka Uchida
12:00 | 12:30		Keynote Lecture 2 Liang Deng	Keynote Lecture 5 Takumi Konno	Keynote Lecture 8 Hai-Long Jiang	Keynote Lecture 11 Ru-Shi Liu
12:30-14:00	Lunch	13:30-15:00 **International Committee Meeting of ACCC** (Room 203)			
14:00 | 14:30		Keynote Lecture 3 Yaofeng Chen	Keynote Lecture 6 Andy Hor	Keynote Lecture 9 Myoung Soo Lah	Keynote Lecture 12 Shinobu Itoh
14:30 | 14:50		Invited Lecture 6 Tatsuhiko Yoshino	Invited Lecture 16 Sanjit Konar	Invited Lecture 26 Chang Seop Hong	Invited Lecture 36 Rui Cao
14:50 | 15:10		Invited Lecture 7 Chuan He	Invited Lecture 17 Abhishek Dey	Invited Lecture 27 Rie Makiura	Invited Lecture 37 Yasuyuki Yamada
15:10 | 15:30		Invited Lecture 8 Yu-Heng Wang	Invited Lecture 18 Hsien-Hsin Chou	Invited Lecture 28 Nobuhiko Hosono	Invited Lecture 38 Miho Yamauchi
15:30-15:50	Coffee Break				
15:50 | 16:10		Invited Lecture 9 Ching Tat To	Invited Lecture 19 Ho Yu Au-Yeung	Invited Lecture 29 Chih-Min Wang	Invited Lecture 39 Shih-Ching Chuang
16:10 | 16:30		Invited Lecture 10 Chun-Yu Lin	Invited Lecture 20 Chen-Yu Yeh	Invited Lecture 30 Hiroshi Sato	Invited Lecture 40 Ken Sakai
16:30-16:35	Moving				
16:35 | 17:05	**Rising Star Award** (Room 101) Shang-Da Jiang				
17:05 | 17:50	**Plenary Session 3** (Room 101) Goutam Kumar Lahiri				
18:00 | 20:00	**Poster Session 1**				

August 9 TUE

Time	Room 101	Room 102	Room 103	Room 201	Room 202
08:10-08:40	Registration				
08:40 | 09:25	**Plenary Session 4** (Room 101) François Gabbaï				
09:25-09:30	Moving				
09:30 | 10:00		Keynote Lecture 13 Hisako Hashimoto	Keynote Lecture 16 Mizuki Tada	Keynote Lecture 19 Shik-Ming Peng	Keynote Lecture 22 Nobuhiro Yanai
10:00 | 10:20		Invited Lecture 41 Chi-How Peng	Invited Lecture 51 Han Sen Soo	Invited Lecture 61 Tomoaki Tanase	Invited Lecture 71 Guorn Zhoj
10:20 | 10:40		Invited Lecture 42 Chien-Tien Chen	Invited Lecture 52 Manzhou Zhu	Invited Lecture 62 Zhong-Ning Chen	Invited Lecture 72 Kenneth Kam-Wing Lo
10:40-11:00	Coffee Break				
11:00 | 11:20		Invited Lecture 43 Hajime Ito	Invited Lecture 53 Shigeyuki Masaoka	Invited Lecture 63 I-Jui Hsu	Invited Lecture 73 Hiroshi Fujii
11:20 | 11:40		Invited Lecture 44 Lan-Chang Liang	Invited Lecture 54 Wei Shi	Invited Lecture 64 Lili Zhao	Invited Lecture 74 Jun-Long Zhang
11:40 | 12:00		Invited Lecture 45 Cheuk-Wai So	Invited Lecture 55 Atsushi Kobayashi	Invited Lecture 65 Makoto Yamashita	Invited Lecture 75 Takashi Hayashi
12:00 | 12:30		Keynote Lecture 14 Munetaka Akita	Keynote Lecture 17 Chi-Ming Che	Keynote Lecture 20 Chen-Wei Liu	Keynote Lecture 23 Wei-Yan Ang
12:30-14:00	Lunch				
14:00 | 14:30		Keynote Lecture 15 Hoi Ri Moon	Keynote Lecture 18 Yi-Tsu Chan	Keynote Lecture 21 Masahiro Yamashita	Keynote Lecture 24 Shengda Ye
14:30 | 14:50		Invited Lecture 46 Tong-Hao Chen	Invited Lecture 56 Yi-Chieh Yin	Invited Lecture 66 Chen-I Yang	Invited Lecture 76 Woon Ju Song
14:50 | 15:10		Invited Lecture 47 Nak Cheon Jeong	Invited Lecture 57 Mingliang Shieh	Invited Lecture 67 Yoshihiro Sekine	Invited Lecture 77 Shin Aoki
15:10 | 15:30		Invited Lecture 48 Shinpei Kusaka	Invited Lecture 58 Hiroaki Iguchi	Invited Lecture 68 Wataru Kosaka	Invited Lecture 78 Tapan K. Paine
15:30-15:50	Coffee Break				
15:50 | 16:10		Invited Lecture 49 Hirofumi Yoshikawa	Invited Lecture 59 Kentaro Tanaka	Invited Lecture 69 Takefumi Yoshida	Invited Lecture 79 Yasuhiro Ohki
16:10 | 16:30		Invited Lecture 50 Jing-Yun Wu	Invited Lecture 60 Chunying Duan	Invited Lecture 70 Kiyonori Takahashi	Invited Lecture 80 Parak Nath Yadav
16:35 | 17:05		Oral 1 Takashi Kitao	Oral 3 David Turner	Oral 5 Tetsu Sato	Oral 7 Yusuke Takezawa
		Oral 2 Chuan-Sheng Huang	Oral 4 Shun Ohta	Oral 6 Atsuko Masuya-Suzuki	Oral 8 Chien-Wei Chiang
17:00-17:05	Moving				
17:05 | 17:50	**Plenary Session 5** (Room 101) Xiao-Ming Chen				
18:00 | 20:00	**Poster Session 2**				

August 10 WED

Time	Room 101	Room 102	Room 103	Room 201	Room 202
08:10-08:40	Registration				
08:40 | 09:25	**Plenary Session 6** (Room 101) Hiroshi Kitagawa				
09:25-09:30	Moving				
09:30 | 10:00		Keynote Lecture 25 Sally Brooker	Keynote Lecture 28 Takahiko Kojima	Keynote Lecture 31 Kazushi Mashima	Keynote Lecture 34 Sundargopal Ghosh
10:00 | 10:20		Invited Lecture 81 Phimphaka Harding	Invited Lecture 91 Kuo-Wei Huang	Invited Lecture 101 Po-Heng Lin	Invited Lecture 111 Eunsung Lee
10:20 | 10:40		Invited Lecture 82 Hitoshi Miyasaka	Invited Lecture 92 Min Kondo	Invited Lecture 102 Wen-Xiong Zhang	Invited Lecture 112 Takeaki Iwamoto
10:40-11:00	Coffee Break				
11:00 | 11:20		Invited Lecture 83 Masayuki Nihei	Invited Lecture 93 Quan-Ming Wang	Invited Lecture 103 Miki Hasegawa	Invited Lecture 113 Sakya Singha Sen
11:20 | 11:40		Invited Lecture 84 Shinya Hayami	Invited Lecture 94 Hao-Ming Chen	Invited Lecture 104 Jinkui Tang	Invited Lecture 114 Masaichi Saito
11:40 | 12:00		Invited Lecture 85 Shen Zhou	Invited Lecture 95 Ming-Tian Zhang	Invited Lecture 105 Peng Cui	Invited Lecture 115 Zhifang Li
12:00 | 12:30		Keynote Lecture 26 David Harding	Keynote Lecture 27 Yunho Lee	Keynote Lecture 32 Chunming Cui	Keynote Lecture 35 Zuowei Xie
12:30-14:00	Lunch				
14:00 | 14:30		Keynote Lecture 27 Phan Van Hoa	Keynote Lecture 30 Takashi Uemura	Keynote Lecture 33 Song Gao	Keynote Lecture 36 Manfred Scheer
14:30 | 14:50		Invited Lecture 86 Jarrod Aldrich-Wright	Invited Lecture 96 Weisheng Liu	Invited Lecture 106 Tetsuro Kusamoto	Invited Lecture 116 Xinping Wang
14:50 | 15:10		Invited Lecture 87 Hiroshi Nakajima	Invited Lecture 97 Daisuke Tanaka	Invited Lecture 107 Shinya Takaishi	Invited Lecture 117 Rong Shang
15:10 | 15:30		Invited Lecture 88 Jaeheung Cho	Invited Lecture 98 Fa-Kuen Shieh	Invited Lecture 108 Kosuke Suzuki	Invited Lecture 118 Huadong Wang
15:30-15:50	Coffee Break				
15:50 | 16:10		Invited Lecture 89 Yoshitsugu Shiro	Invited Lecture 99 Minyoung Yoon	Invited Lecture 109 Wei-Xiong Zhang	Invited Lecture 119 Moumita Majumdar
16:10 | 16:30		Invited Lecture 90 Tsai-Te Lu	Invited Lecture 100 Satoshi Horike	Invited Lecture 110 Masaki Yoshida	Invited Lecture 120 Yoshinori Yamanoi
16:35 | 17:05		Oral 9 Khulan Byambasuren	Oral 11 Yeshayahu Ben-Efraiyhu Israel	Oral 13 Masanori Wakizaka	Oral 15 Nicolas Juan Leest
		Oral 10 Marilena Ferbinteanu	Oral 12 Kosei Yamauchi	Oral 14 Afaf Oulmidi	Oral 16 Matthew Robb
17:00-17:05	Moving				
17:05 | 17:50	**Plenary Session 7** (Room 101) Mi Hee Lim				
18:30 | 20:30	**Conference Banquet** (Caesar Metro Taipei)				

August 11 THU

Time	Room 101	Room 102	Room 103	Room 201	Room 202
08:10-08:30	Registration				
08:30 | 09:15	**Plenary Session 8** (Room 101) Xiaogang Liu				
09:15-09:20	Moving				
09:20 | 09:40		Invited Lecture 121 Hsuan-Ying Chen	Invited Lecture 123 Tien-Lin Wu	Invited Lecture 125 Chun-Hong Kuo	Invited Lecture 127 Ryo Ohtani
09:40 | 10:00		Invited Lecture 122 Zhenke Mo	Invited Lecture 124 Tomoyuki Mochida	Invited Lecture 126 Dongmei Cui	Invited Lecture 128 Chung-Wei Kung
10:00 | 10:15		Oral 17 Yoji Horii	Oral 19 Yuya Tanaka	Oral 21 Edmund Tse	Oral 23 Pamela Berlyn So
10:15 | 10:30		Oral 18 Sanchaita Dey	Oral 20 Sokichiro Kawamorita	Oral 22 Augia Atqa	Oral 24 Chen-Yen Tsai
10:30 | 11:15	**ACCC Award 2** (Room 101) Wonwoo Nam				
11:15 | 12:00	**Plenary Session 9** (Room 101) Tiow-Gan Ong				
12:00 | 12:15	**Closing Ceremony** (Room 101)				
12:15-14:00	Excursion and Free Discussion				

- Electronic Structures and Bonding of Metal Complexes
- Organometallic Chemistry
- Bioinorganic Chemistry and Biomedical Diagnostics
- Transition Metal
- Lanthanides and Actinides
- Main Group Element Chemistry
- Catalysis, Energy and Small Molecule Activation
- Supramolecular Chemistry
- Magnetic Materials
- Metal Organic Frameworks
- Functional Materials
- Other Topics in Coordination Chemistry
- ACCC Award & Rising Star Award
- Oral

Organizers: National Tsing Hua University; National Taiwan University; Chemical Society Located in Taipei; Taiwan Bioinorganic Chemistry Society

Co-organizer: Institute of Chemistry, Academia Sinica

Sponsor: Department of Information and Tourism, Taipei City Government

Detailed Program

Sunday, August 7, 2022

17:00-17:15	**Opening Ceremony (1F, Room 101)**		

Plenary Session 1 & ACCC Award 1 (Functional Materials)			
17:15-18:00			1F, Room 101
Chair	Shie-Ming Peng		
17:15-18:00	PL-01	From simple discrete metal-ligand motifs to supramolecular assembly, nanostructures and functions	**Vivian Wing-Wah Yam**

18:00-20:00	**Welcome Reception (Hallway, 1F)**		

Monday, August 8, 2022

Plenary Session 2 (Magnetic Materials)			
08:40-09:25			1F, Room 101
Chair	Masahiro Yamashita		
08:40-09:25	PL-02	Switchable molecular materials based on valence tautomerism and spin crossover	**Colette Boskovic**

Organometallic Chemistry			
09:30-12:30			1F, Room 102
Chair	Ching-Wen Chiu		
09:30-10:00	KL-01	A Tetrahedral and High-Spin Ti^{II} Ion	**Daniel J. Mindiola**
10:00-10:20	IL-01	Heterometallic Clusters with U-M Bonds Supported by Double-Layer N-P Ligands	**Congqing Zhu**
10:20-10:40	IL-02	Si–Cl Bond Cleavage Induced by an Iron Complex Bearing a Phenanthroline-Based PNNP Ligand	**Yumiko Nakajima**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-11:20	IL-03	Reversible CO_2 /CO conversion by a homogeneous copper-based molecular catalyst	**Arnab Dutta**
11:20-11:40	IL-04	Highly Stereoselective Palladium-Catalyzed C-F Bond Functionalization of gem-Difluoroalkenes	**Gavin Chit Tsui**
11:40-12:00	IL-05	Pd-Catalyzed Stereospecific Cross Coupling of Organoboron Compounds to Access Chiral α-Aryl Carbonyl Compounds	**Hong Geun Lee**
12:00-12:30	KL-02	Recent Advance in the Chemistry of Low-Coordinate Low-Valent Transition-Metal Complexes	**Liang Deng**

Supramolecular Chemistry

09:30-10:40			1F, Room 103
Chair	Norman Lu		
09:30-10:00	KL-04	Water-Soluble Molecular Architectures	**Partha Sarathi Mukherjee**
10:00-10:20	IL-11	Managing inequality: helical fluxionality of metallohelicate	**Dongwhan Lee**
10:20-10:40	IL-12	Confinement of unfolding and refolding proteins in an M12L24 coordination cage	**Takahiro Nakama**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-12:30			1F, Room 103
Chair	Shih-Sheng Sun		
11:00-11:20	IL-13	Dynamics of Gold Rings and Boxes	**John Yip**
11:20-11:40	IL-14	Metallo-molecular containers with open/close functions based on [Co^{III}(saloph)] scaffolds	**Shigehisa Akine**
11:40-12:00	IL-15	Highly phosphorescent Pd(II) complexes with metal-metal-to-ligand charge-transfer excited states in fluid solutions	**Wei Lu**
12:00-12:30	KL-05	Non-coulombic ionic crystals created via metalloligand approach	**Takumi Konno**

Metal Organic Frameworks

09:30-12:30			2F, Room 201
Chair	Biing-Chiau Tzeng		
09:30-10:00	KL-07	Metal-Organic Frameworks (MOFs)-Driven Carbon Neutral Society: Heterogeneous Catalysis, Membrane Separation, and Power Generation	**Chia-Wen (Kevin) Wu**
10:00-10:20	IL-21	Metal-organic cage assemblies for gel engineering	**Shuhei Furukawa**
10:20-10:40	IL-22	Ionic Metal–Organic Frameworks (iMOFs) Based Sequestration of Environmental Pollutants for Water Remediation	**Sujit Kumar Ghosh**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-11:20	IL-23	Rapid Structural Transformation and Functional Application of Defect Al-MOFs	**Chia-Her Lin**
11:20-11:40	IL-24	Stimuli-responsive Metal-organic Frameworks Showing Unique Molecular Adsorption and Conversion	**Ryotaro Matsuda**
11:40-12:00	IL-25	Coordination Polymers for Naked-Eye Multi-responsive Chromism and Luminescent Applications	**Jaursup Boonmak**
12:00-12:30	KL-08	Microenvironment Modulation in Metal-Organic Framework-Based Catalysis	**Hai-Long Jiang**

Functional Materials

09:30-12:30			2F, Room 202
Chair	Jiann-Tsuen Lin		
09:30-10:00	KL-10	Molecular functionalization as a powerful approach to Cu_2O photocatalytic activity enhancement	**Michael Huang**
10:00-10:20	IL-31	Helical Metal-Metal Interactions Boost Circularly Polarized Luminescence	**Youngmin You**
10:20-10:40	IL-32	Development of coordination compounds for electrochemical energy-storage devices	**Masashi Okubo**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-11:20	IL-33	Lanthanide-Sensitized Optoelectronic Functions of Lead Halide Perovskites	**Ayumi Ishii**
11:20-11:40	IL-34	Functional Coordination Polymers Based on Redox-Active Tetrathiafulvalene and its Derivatives	**Jing-Lin Zuo**
11:40-12:00	IL-35	Porous Ionic Crystals Based On Polyoxometalates As A Tunable Platform For Functional Materials	**Sayaka Uchida**
12:00-12:30	KL-11	Progress in Phosphor Materials and Future Perspectives	**Ru-Shi Liu**

Organometallic Chemistry

14:00-16:30			1F, Room 102
Chair	Lan-Chang Liang		
14:00-14:30	KL-03	Rare-earth metal phosphinidene complexes: from dinuclear ones to mononuclear and terminal ones	**Yaofeng Chen**
14:30-14:50	IL-06	Cp*Rh(III)/chiral Lewis base hybrid catalysis for enantioselective C–H functionalization	**Tatsuhiko Yoshino**
14:50-15:10	IL-07	Catalytic enantioselective construction of Si-stereogenic silanes	**Chuan He**
15:10-15:30	IL-08	Dinuclear Cobalt Complexes for Electrochemical Water Oxidation: Tuning Rate and Overpotential Through the Redox Non-Innocent Ligand	**Yu-Heng Wang**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:10	IL-09	Base-Promoted Perfluoroalkylation of Rhodium Porphyrin Complexes with Perfluoroalkyl Iodides	**Ching Tat To**
16:10-16:30	IL-10	Radical delocalization enables the stabilization of a high-spin threecoordinate Fe(III) imidyl complex	**Chun-Yi Lin**

Other Topics in Coordination Chemistry			
14:00-15:30			1F, Room 103
Chair	Minghuey Shieh		
14:00-14:30	KL-06	Coordination Chemistry at the Crossroads	**Andy Hor**
14:30-14:50	IL-16	Spin State Switching in Dynamic Molecular Materials	**Sanjit Konar**
14:50-15:10	IL-17	Rational Design of Electrocatalyst for CO2 Reduction	**Abhishek Dey**
15:10-15:30	IL-18	Zinc-Salophen Complexes as New Building Blocks for Photovoltaic Applications	**Hsien-Hsin Chou**
15:30-15:50	Coffee Break, 1F Hallway		

Supramolecular Chemistry			
15:50-16:30			1F, Room 103
Chair	Yi-Tsu Chan		
15:50-16:10	IL-19	Kinetic Effects of Catenane Ligands in Transition Metal Catalysis	**Ho Yu Au-Yeung**
16:10-16:30	IL-20	Application of porphyrins in new generation solar cells	**Chen-Yu Yeh**

Metal Organic Frameworks			
14:00-16:30			2F, Room 201
Chair	Jing-Yun Wu		
14:00-14:30	KL-09	Postsynthetic modifications of metal–organic frameworks and their applications	**Myoung Soo Lah**
14:30-14:50	IL-26	Metal-organic frameworks incorporating high-density acidic sites for effective ammonia capture	**Chang Seop Hong**
14:50-15:10	IL-27	Electrically Conductive Metal-Organic Framework Nanosheets Created at Air/Liquid Interfaces	**Rie Makiura**
15:10-15:30	IL-28	Metal–Organic Frameworks for Polymer Adsorption and Separation	**Nobuhiko Hosono**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:10	IL-29	New organic-inorganic hybrid metal phosphates for food safety and environmental applications	**Chih-Min Wang**
16:10-16:30	IL-30	Stimuli-responsive porous metal–organic crystals	**Hiroshi Sato**

Catalysis, Energy and Small Molecule Activation			
14:00-15:30			2F, Room 202
Chair	Mizuki Tada		
14:00-14:30	KL-12	Alkane hydroxylation catalyzed by late transition-metal complexes	**Shinobu Itoh**
14:30-14:50	IL-36	Water Oxidation with Metal Porphyrins	**Rui Cao**
14:50-15:10	IL-37	Potent Methane Oxidation Catalyst Achieved by Close Stacking of Double-Decker-Type Iron Phthalocyanine Complex on Graphite Surface	**Yasuyuki Yamada**
15:10-15:30	IL-38	Inorganic Nanocatalysts to Enhance Hydrogenation Reactions toward Sustainable Materials Transformations	**Miho Yamauchi**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:30			2F, Room 202
Chair	Yu-Heng Wang		
15:50-16:10	IL-39	Orange-red fluorescent polycyclic cinnolino[2,3-*f*] phenanthridin-9- ium salts by palladium(II)-catalyzed C—H bond activation	**Shih-Ching Chuang**
16:10-16:30	IL-40	Photocatalytic Water Splitting and CO_2 Reduction	**Ken Sakai**

Rising Star Award (Magnetic Materials)		
16:35-17:05		1F, Room 101
Chair	Masahiro Yamashita	
16:35-17:05	Spin Manipulation in Magnetic Molecules	**Shang-Da Jiang**

Plenary Session 3 (Electronic Structures and Bonding of Metal Complexes)			
17:05-17:50			1F, Room 101
Chair	Andy Hor		
17:05-17:50	PL-03	Non-innocence of coordinated ligands. Electronic structure and Reactivity	**Goutam Kumar Lahiri**

Poster Session 1 (online)	
18:00-20:00	online

Tuesday, August 9, 2022

Plenary Session 4 (Bioinorganic Chemistry and Biomedical Diagnostics)			
08:40-09:25			1F, Room 101
Chair	Ching-Wen Chiu		
08:40-09:25	PL-04	Carbenium Ions as Z-type Ligands	**François Gabbaï**

Organometallic Chemistry			
09:30-10:40			1F, Room 102
Chair	Munetaka Akita		
09:30-10:00	KL-13	Group 6 metal complexes featuring metal–germanium triple bonds: synthesis, reactivity, and catalysis	**Hisako Hashimoto**
10:00-10:20	IL-41	Linear correlation between the equilibrium constant and half-wave potential of cobalt complexes in cobalt-mediated radical polymerization	**Chi-How Peng**
10:20-10:40	IL-42	Vanadyl Complex-mediated Self-assembly and Radical Type Cross Coupling Reactions	**Chien-Tien Chen**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-12:30			1F, Room 102
Chair	Hsueh-Ju Liu		
11:00-11:20	IL-43	Luminescent gold complexes that change structure upon mechanical stimulation	**Hajime Ito**
11:20-11:40	IL-44	Mismatched donor-acceptor pairs: serendipitous structural and reaction chemistry	**Lan-Chang Liang**
11:40-12:00	IL-45	Competence of Diborene Compounds in Small Molecules Activation and Catalytic Hydroboration	**Cheuk-Wai So**
12:00-12:30	KL-14	Organometallic molecular switch driven by redox stimuli	**Munetaka Akita**

Catalysis, Energy and Small Molecule Activation			
09:30-10:40			1F, Room 103
Chair	Takahiko Kojima		
09:30-10:00	KL-16	Synthesis and Operando Characterization of Pt-Bimetallic Oxygen Reduction Catalysts for Polymer Electrolyte Fuel Cell	**Mizuki Tada**
10:00-10:20	IL-51	Development of metal halide perovskites and vanadium complexes for artificial photosynthesis and plastics upcycling	**Han Sen Soo**
10:20-10:40	IL-52	Tailoring the Photoluminescence of Atomically Precise Ligand Protected Metal Nanoclusters	**Manzhou Zhu**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-12:30			1F, Room 103
Chair	Yunho Lee		
11:00-11:20	IL-53	Molecular catalysts for photochemical and electrochemical conversions of ubiquitous small molecules	**Shigeyuki Masaoka**
11:20-11:40	IL-54	Uncoordinated Groups as Functional Units of Metal-Organic Frameworks	**Wei Shi**
11:40-12:00	IL-55	Molecular assembly at photocatalyst-mediator interface toward Z-scheme water splitting reaction	**Atsushi Kobayashi**
Functional Materials			
12:00-12:30	KL-17	Photo-catalysis with Earth Abundant Metal Complexes. Excited State Dynamics and Application Studies	**Chi-Ming Che**

Electronic Structures and Bonding of Metal Complexes			
09:30-10:40			2F, Room 201
Chair	Yi-Chou Tsai		
09:30-10:00	KL-19	From Metal-Metal Multiple Bonds to Helical Metal Strings	**Shie-Ming Peng**
Other Topics in Coordination Chemistry			
10:00-10:20	IL-61	Dynamically Functional Palladium Chains Supported by Linear Tetraphosphines	**Tomoaki Tanase**
Transition Metal			
10:20-10:40	IL-62	T-type photochromism through generating copper(I) metallacyclopentadiene biradical	**Zhong-Ning Chen (canceled)**
10:40-11:00	Coffee Break, 1F Hallway		

Other Topic in Coordination Chemistry			
11:00-12:30			2F, Room 201
Chair	Yi-Chou Tsai		
11:00-11:20	IL-63	Geometric and electronic structures characterization on Fe(II) complexes with the tridentate pyridine-tetrazolate ligand	**I-Jui Hsu**
11:20-11:40	IL-64	Bond analysis in "novel molecules" and their applications in chemistry	**Lili Zhao**
11:40-12:00	IL-65	Characteristic Features of Transition Metal Complexes Having Lewis Acidic Group 13 Element Ligand	**Makoto Yamashita**
12:00-12:30	KL-20	Hydride-Containing Copper- And Silver-Rich Nanoclusters	**Chen-Wei Liu**

Functional Materials			
09:30-10:00			2F, Room 202
Chair	Ming-Hsi Chiang		
09:30-10:00	KL-22	Exploring quantum functions using triplets in MOFs	**Nobuhiro Yanai**

Bioinorganic Chemistry and Biomedical Diagnostics			
10:00-10:40			2F, Room 202
Chair	Ming-Hsi Chiang		
10:00-10:20	IL-71	Using Decoy Molecules to Manipulate P450BM3 Biotransformations	**Osami Shoji**
10:20-10:40	IL-72	Exploitation of Photofunctional Transition Metal Complexes in Bioorthogonal Labeling, Cellular Imaging, and Photocytotoxic Applications	**Kenneth Kam-Wing Lo**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-12:30			2F, Room 202
Chair	Hua-Fen Hsu		
11:00-11:20	IL-73	Molecular Mechanisms Controlling Formation and Reactivity of Oxoiron(IV) Porphyrin π-Cation Radical Complex	**Hiroshi Fujii**
11:20-11:40	IL-74	Lanthanide Porphyrin Phototheranostics	**Jun-Long Zhang**
11:40-12:00	IL-75	Conversion of Myoglobin into Artificial Metalloenzymes	**Takashi Hayashi**
12:00-12:30	KL-23	New Insights into the Platinum(IV) Prodrug Activation	**Wee Han Ang**

Metal Organic Frameworks			
14:00-15:30			1F, Room 102
Chair	Fa-Kuen Shieh		
14:00-14:30	KL-15	MOF@MOF Architectures: Synthesis, Characterization & Application	**Hoi Ri Moon**
14:30-14:50	IL-46	3D mixed-valence metal–organic frameworks and their structure-performance relationships for high-power electrochemical energy storage	**Teng-Hao Chen**
14:50-15:10	IL-47	Open Coordination Chemistry in a Paddlewheel Metal-Organic Framework	**Nak Cheon Jeong**
15:10-15:30	IL-48	Metal-organic framework nanospace as platform for selective photochemical reactions	**Shinpei Kusaka**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-17:00			1F, Room 102
Chair	Teng-Hao Chen		
15:50-16:10	IL-49	Application of Porous Coordination Polymer Containing Aromatic Azo Linkers as Cathode Active Materials in Sodium-Ion Batteries	**Hirofumi Yoshikawa**
16:10-16:30	IL-50	Influence of Framework Metal Ion of Analogous Coordination Polymers on the Adsorptive Removal and Photocatalytic Oxidative Degradation of Dyes	**Jing-Yun Wu**
Oral Presentation (Metal Organic Frameworks and Organometallic Chemistry)			
16:30-16:45	Oral-01	Precise Synthesis of Graphene Nanoribbons in Metal–Organic Frameworks	**Takashi Kitao**
16:45-17:00	Oral-02	Reactions of NO and β-Diketiminate Ligands Supported Ru(I) Complexes	**Chuan-Sheng Huang**

Supramolecular Chemistry			
14:00-15:30			1F, Room 103
Chair	Chen-Wei Liu		
14:00-14:30	KL-18	2D Metallo-Supramolecular Arrays Assembled from Giant Cages	**Yi-Tsu Chan**
14:30-14:50	IL-56	Fabrication of tunable hydrogel networks through metal-ligand coordination crosslinking	**Yi-Cheun Yeh**
14:50-15:10	IL-57	Structure-property correlations of semiconducting Te/$SeFe_3(CO)_9$–dipyridyl Cu polymers	**Minghuey Shieh**
15:10-15:30	IL-58	Electrically conductive metallocycle: densely packed molecular hexagons assembled by π-radicals	**Hiroaki Iguchi**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-17:00			1F, Room 103
Chair	Yi-Tsu Chan		
15:50-16:10	IL-59	Capturing of fullerene with macrocyclic metal complexes	**Kentaro Tanaka**
16:10-16:30	IL-60	Confined Electron Transfer within Metal-Organic Supramolecular Architectures for Sustainable Photocatalysis	**Chunying Duan**
Oral Presentation (Supramolecular Chemistry)			
16:30-16:45	Oral-03	Following and Controlling the Assembly of Paddlewheel-Based Cages	**David Turner**
16:45-17:00	Oral-04	Structures and functions of hydrogen-bonded organic frameworks based on metal chlorido complexes bearing a bis(benzimidzol-2-yl)methane	**Shun Ohta**

Magnetic Materials			
14:00-15:30			2F, Room 201
Chair	Hui-Lien-Tsai		
14:00-14:30	KL-21	Molecular Spin Qubits for Quantum Computer and Highly Density Memory Devices Based on Molecular Magnets	**Masahiro Yamashita**
14:30-14:50	IL-66	Rigid Pyrimidyl Ligands to Construct of Low-Dimensional Magnetic Coordination Polymers	**Chen-I Yang**
14:50-15:10	IL-67	Development of stimuli-responsive metal complex	**Yoshihiro Sekine**
15:10-15:30	IL-68	Control of the Long-Range Magnetic Ordering via Gas Adsorption in a π-stacked Pillared Layer Framework	**Wataru Kosaka**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-17:00			2F, Room 201
Chair	Chen-I Yang		
15:50-16:10	IL-69	Heterometallic interaction emerges from resonant inelastic X-ray scattering in magnetic Gd−Pt molecules	**Takefumi Yoshida**
16:10-16:30	IL-70	Peculiar Magnetic Response and Negative Thermal Expansion of a Nickel Dithiolate Crystal	**Kiyonori Takahashi**
Oral Presentation (Magnetic Materials and Lanthanides and Actinides)			
16:30-16:45	Oral-05	TBC	**Tetsu Sato**
16:45-17:00	Oral-06	Selective Crystallization of Dy^{3+} Complex from Nd^{3+}/Dy^{3+} Mixture Enabled by Cooperation of Coordination and Crystallization	**Atsuko Masuya-Suzuki**

Bioinorganic Chemistry and Biomedical Diagnostics			
14:00-16:30			2F, Room 202
Chair	Way-Zen Lee		
14:00-14:30	KL-24	Electronic Structures and Reactivity of Iron(V)- Nitrido and -Oxo Complexes	**Shengfa Ye**
14:30-14:50	IL-76	Design and Directed Evolution of Noncanonical β-Stereoselective Metalloglycosidases	**Woon Ju Song**
14:50-15:10	IL-77	Design, synthesis, and biological evaluation of cyclometalated iridium(III) complex-peptide hybrids that induce paraptotic programmed cell death in cancer cells	**Shin Aoki**
15:10-15:30	IL-78	Bioinspired Approaches to Selective Catalytic Oxidations by Nonheme Iron Complexes	**Tapan K. Paine**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:10	IL-79	Nitrogen Activation and Conversion by the Fe Sites of Biomimetic Mo-Fe-S Cubes	**Yasuhiro Ohki**
16:10-16:30	IL-80	Anticancer screening of N(3) ring substituted 3-acetylcoumarin thiosemicarbazones and their copper(II) complexes	**Paras Nath Yadav**
Oral Presentation (Bioinorganic Chemistry and Biomedical Diagnostics)			
16:30-16:45	Oral-07	Metal-Mediated Stabilization and Structure Induction of DNA Three-Way Junction Motifs Modified with Bpy and Phen Ligands	**Yusuke Takezawa**
16:45-17:00	Oral-08	Bioinspired $Co(NO)_x$ Complexes: Correlating Structure and NO-Transfer Reactivity towards Cysteine	**Chien-Wei Chiang**

Plenary Session 5 (Metal Organic Frameworks)			
17:05-17:50			1F, Room 101
Chair	Yi-Tsu Chan		
17:05-17:50	PL-05	Metal-Organic Frameworks for Photo-/Electro-Catalytic CO_2 Reduction	**Xiao-Ming Chen**

Poster Session 2 (online)	
18:00-20:00	online

Wednesday, August 10, 2022

Plenary Session 6 (Electronic Structures and Bonding of Metal Complexes)			
08:40-09:25			1F, Room 101
Chair	David Harding		
08:40-09:25	PL-06	Low-dimensional electrons system in coordination networks	**Hiroshi Kitagawa**

Magnetic Materials			
09:30-10:40			1F, Room 102
Chair	Phan Van Hoa		
09:30-10:00	KL-25	Tuneable ligand field leads to correlations with spin crossover $T_{1/2}$ and redox potential E_{pa} in Fe(II) helicates	**Sally Brooker**
10:00-10:20	IL-81	Solvent and periphery ligand effects on structural and magnetic properties of Fe(III) spin crossover complexes	**Phimphaka Harding**
10:20-10:40	IL-82	Phase Switchable Porous Magnets	**Hitoshi Miyasaka**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-12:30			1F, Room 102
Chair	Po-Heng Lin		
11:00-11:20	IL-83	Ultrasmall Nano Particle Encapsulated within an Organic Cage	**Masayuki Nihei**
11:20-11:40	IL-84	Ferroelectricity in spin crossover compounds	**Shinya Hayami**
11:40-12:00	IL-85	Quantum Information Processing with the Zero-Field Splitting Effects in High-spin Centers	**Shen Zhou**
12:00-12:30	KL-26	Bidirectional photoswitching and solvent effects in iron(III) spin crossover complexes	**David Harding**

Catalysis, Energy and Small Molecule Activation

09:30-12:30			1F, Room 103
Chair	Michael Huang		
09:30-10:00	KL-28	Ruthenium-Oxygen Species in Oxidation Reactions: Characteristics and Mechanistic Insights	**Takahiko Kojima**
10:00-10:20	IL-91	Fueling the Future	**Kuo-Wei Huang**
10:20-10:40	IL-92	Electrochemical Polymerization Provides Function-Integrated Systems for Water Oxidation	**Mio Kondo**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-11:20	IL-93	Ligand engineering toward the structural and functional control of metal nanoclusters	**Quan-Ming Wang**
11:20-11:40	IL-94	Potential-driven dynamic structures of electrocatalysts	**Hao Ming Chen**
11:40-12:00	IL-95	Bioinspired Molecular Water Oxidation Catalysts	**Ming-Tian Zhang**
12:00-12:30	KL-29	Bioinspired Small Molecule Conversion Catalysis Mediated by 1st-row Transition Metals	**Yunho Lee**

Lanthanides and Actinides

09:30-12:30			2F, Room 201
Chair	Chun-Yi Lin		
09:30-10:00	KL-31	Cerium Carboxylate Clusters: Synthesis and Photocatalysis	**Kazushi Mashima**
10:00-10:20	IL-101	Fine-tuned core structures of lanthanide complexes by applying nitrophenolate-type ligands	**Po-Heng Lin**
10:20-10:40	IL-102	Rare-earth Metallacyclic Chemistry	**Wen-Xiong Zhang**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-11:20	IL-103	Lanthanide ELEMENTS: a Helicate structure for the luminescence	**Miki Hasegawa**
11:20-11:40	IL-104	Lanthanide macrocycles: Magnetism and beyond	**Jinkui Tang**
11:40-12:00	IL-105	Syntheses and reactivity of heterobimetallic rare-earth/latetransition metal complexes with LM→Ln dative bonds	**Peng Cui**
12:00-12:30	KL-32	Rare-earth-catalyzed hydrosilylation	**Chunming Cui**

Main Group Element Chemistry

09:30-10:40			2F, Room 202
Chair	Tiow-Gan Ong		
09:30-10:00	KL-34	Small molecules activation by N,S-chelated metal complexes	**Sundargopal Ghosh**
10:00-10:20	IL-111	Stable Organic Radicals (feat. N-Heterocyclic Carbenes)	**Eunsung Lee**
10:20-10:40	IL-112	Reactivity of a Cyclic (Alkyl)(amino)silylene and Its Derivatives	**Takeaki Iwamoto**
10:40-11:00	Coffee Break, 1F Hallway		
11:00-12:30			2F, Room 202
Chair	Hsueh-Ju Liu		
11:00-11:20	IL-113	Tridentate Nacnac: Pendant Picolyl Powers Peculiar Chemistry	**Sakya Singha Sen**
11:20-11:40	IL-114	Coordination chemistry staring from dilithiostannoles and -plumboles	**Masaichi Saito**
11:40-12:00	IL-115	The Low-Valent Gold Complexes Coordinated by Dialkyltetrylene	**Zhifang Li**
12:00-12:30	KL-35	Controlled Functionalization of Carboranes via Transition Metal- Catalyzed B-H Activation	**Zuowei Xie**

Magnetic Materials

14:00-14:30			1F, Room 102
Chair	Yun-Ming Wang		
14:00-14:30	KL-27	Multifunctional spin-crossover materials and organic radicals magnetism	**Phan Van Hoa**

Bioinorganic Chemistry and Biomedical Diagnostics

14:30-17:00			1F, Room 102
Chair	Yun-Ming Wang		
14:30-14:50	IL-86	Multi-action Platinum Anticancer Compounds	**Janice Aldrich-Wright**
14:50-15:10	IL-87	Iron(III)-based CORM with dynamic variation in responsive wavelengths depending on H^+	**Hiroshi Nakajima**
15:10-15:30	IL-88	Peroxy Intermediates in Aldehyde Deformylation and Nitrile Activation	**Jaeheung Cho**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:10	IL-89	Molecular mechanism of NO reduction catalyzed by Fe-containing nitric oxide reductases	**Yoshitsugu Shiro**
16:10-16:30	IL-90	Metal-Ligand Cooperation in Dinuclear Dinitrosyl Iron Complexes for Small Molecule Activation	**Tsai-Te Lu**

Oral Presentation (Electronic Structures and Bonding of Metal Complexes)			
16:30-16:45	Oral-09	Structure of the Copper (II)-Cefotaxime Complex	**Khulan Byambasuren**
16:45-17:00	Oral-10	Synthesis, properties and structural analysis of a new series of oligonuclear copper (II) complexes with pyrazolato-bridges	**Marilena Ferbinteanu**

Metal Organic Frameworks			
14:00-17:00			1F, Room 103
Chair	Chia-Her Lin		
14:00-14:30	KL-30	MOFs to Create Advanced Polymers	**Takashi Uemura**
14:30-14:50	IL-96	Rare Earth Functional Complexes	**Weisheng Liu**
14:50-15:10	IL-97	Machine-Learning-Assisted Synthesis of Semiconductive Coordination Polymers	**Daisuke Tanaka**
15:10-15:30	IL-98	Insights into MOF Chemical Biology	**Fa-Kuen Shieh**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:10	IL-99	Dynamic Structural Transformation of Metal-Organic Framework	**Minyoung Yoon**
16:10-16:30	IL-100	Metal-organic network-forming glasses for energy applications	**Satoshi Horike**

Oral Presentation (Catalysis, Energy and Small Molecule Activation)			
16:30-16:45	Oral-11	Electrochemical conversion of methane to useful oxygenates using an oxygen transfer cascade provided by a bi-layer coating electrode	**Yeshayahu Ben-Eliyahu**
16:45-17:00	Oral-12	Electrochemical and photochemical hydrogen evolution from water catalyzed by first row transition metal complexes	**Kosei Yamauchi**

Functional Materials			
14:00-15:30			2F, Room 201
Chair	Chen-Yu Yeh		
14:00-14:30	KL-33	Molecular spin state manipulation and spin chemistry	**Song Gao**
14:30-14:50	IL-106	An open-shell, magnetoluminescent, two-dimensional coordination polymer with a triangular organic radical ligand	**Tetsuro Kusamoto**
14:50-15:10	IL-107	Chromatographic separation of hydrogen isotopes at ambient temperature using dihydrogen complexes	**Shinya Takaishi**
15:10-15:30	IL-108	Synthesis and properties of atomically precise silver nanoclusters with polyoxometalates	**Kosuke Suzuki**
15:30-15:50	Coffee Break, 1F Hallway		

Functional Materials			
15:50-17:00			2F, Room 201
Chair	Tien-Lin Wu		
15:50-16:10	IL-109	Phase transitions in multi-component dense crystals	**Wei-Xiong Zhang**
16:10-16:30	IL-110	Thermo- and mechano-triggered luminescence ON/OFF switching by supercooled liquid/crystal transition of Pt(II) complex thin films	**Masaki Yoshida**
Oral Presentation (Functional Materials)			
16:30-16:45	Oral-13	Macro- and atomic-scale observations of a one-dimensional heterojunction in a nickel and palladium nanowire complex	**Masanori Wakizaka**
16:45-17:00	Oral-14	Bis-pyrazole-bis-acetate based coordination complexes as building blocks for the design of hybrid materials	**Afaf Oulmidi**

Main Group Element Chemistry			
14:00-17:00			2F, Room 202
Chair	Kuo-Wei Huang		
14:00-14:30	KL-36	Five-fold Symmetric Complexes for Spherical Supramolecular Aggregations	**Manfred Scheer**
14:30-14:50	IL-116	Formation of stable intra- and inter-molecular radical ion pairs by Lewis acid coordination	**Xinping Wang**
14:50-15:10	IL-117	Synthesis Towards Chiral π-Conjugated Iridium Metallacycles	**Rong Shang**
15:10-15:30	IL-118	From methane functionalization to polystyrene hydrogenolysis: borenium in C-H and C-C bond activations	**Huadong Wang**
15:30-15:50	Coffee Break, 1F Hallway		
15:50-16:10	IL-119	Coordination Chemistry of the Cationic Donor Ligands	**Moumita Majumdar**
16:10-16:30	IL-120	Synthesis of Disilane-Bridged Aromatic Compounds for the Luminescent Materials	**Yoshinori Yamanoi**
Oral Presentation (Electronic Structures and Bonding of Metal Complexes)			
16:30-16:45	Oral-15	A radical approach to novel reactivity	**Nicolaas P.van Leest**
16:45-17:00	Oral-16	Electronic tuning of Fe^{II} and Ru^{II} complexes through choice of coordinated azine	**Matthew Robb**

Plenary Session 7 (Bioinorganic Chemistry and Biomedical Diagnostics)			
17:05-17:50			1F, Room 101
Chair	Chen-Hsiung Hung		
17:05-17:50	PL-07	Bioinorganic Strategies to Study Multiple Facets in Alzheimer's Disease	**Mi Hee Lim**

Thursday, August 11, 2022

Plenary Session 8 (Functional Materials)			
08:40-09:25			1F, Room 101
Chair	Ru-Shi Liu		
08:30-09:15	PL-08	Luminescence Materials: A Wonderful Toolbox for Applied Imaging and Assistive Technologies	**Xiaogang Liu**

Main Group Element Chemistry			
09:20-10:30			1F, Room 102
Chair	Ching-Wen Chiu		
09:20-09:40	IL-121	Synthesis of Novel Aluminum Catalysts for Ring-Opening Polymerization of ε-Caprolactone and Their Polymerization Mechanism Study	**Hsuan-Ying Chen**
09:40-10:00	IL-122	N-Heterocyclic Silylene Stabilized Disilicon(0) Complexes	**Zhenbo Mo**
Oral Presentation (Supramolecular Chemistry and Electronic Structures and Bonding of Metal Complexes)			
10:00-10:15	Oral-17	Tow-dimensional MOFs Composed of Single-Molecule Magnets	**Yoji Horii**
10:15-10:30	Oral-18	Multimetallic Set up of 2,1,3-Benzothiadiazole: Revelation of Electronic Structure and Application Potential	**Sanchaita Dey**

Functional Materials			
09:20-10:30			1F, Room 103
Chair	Jeffrey M. Farrell		
09:20-09:40	IL-123	Substituent Engineering of Organoboron Compounds for Ultrathin and Nondoped OLEDs	**Tien-Lin Wu**
09:40-10:00	IL-124	Construction of Amorphous Coordination Polymers From Liquid Metal Complexes	**Tomoyuki Mochida**

Oral Presentation (Functional Materials and Transition Metal)			
10:00-10:15	Oral-19	Unusual Substituent effects of Paddle-Wheel Organometallic Molecular Wires on Single-Molecule Conductance	**Yuya Tanaka**
10:15-10:30	Oral-20	Circularly polarized luminescence of (O^N^C^C)-cyclometalated carbene platinum(II) complexes having distorted structure	**Soichiro Kawamorita**

Catalysis, Energy and Small Molecule Activation			
09:20-10:30			2F, Room 201
Chair	Hao Ming Chen		
09:20-09:40	IL-125	Nanoarchitectonic Engineering for Small Molecule Conversion	**Chun-Hung Kuo**
09:40-10:00	IL-126	Preparation of New Polymers via Coordination Polymerization using Rare-earth Metal Catalysts	**Dongmei Cui**
Oral Presentation (Catalysis, Energy and Small Molecule Activation)			
10:00-10:15	Oral-21	Steering Redox Pathways via Hybrid Bilayer Membranes	**Edmund Tse**
10:15-10:30	Oral-22	Precise synthesis and catalytic evaluation of Mo-based subnanoclusters on low-temperature CO_2 hydrogenation	**Augie Atqa**

Metal Organic Frameworks			
09:20-10:30			2F, Room 202
Chair	Chia-Her Lin		
09:20-09:40	IL-127	Distorted coordination geometries of metal nodes for structural properties of coordination polymers	**Ryo Ohtani**
09:40-10:00	IL-128	Iridium-functionalized stable metal–organic framework-based materials for electrocatalysis	**Chung-Wei Kung**
Oral Presentation (Metal Organic Frameworks)			
10:00-10:15	Oral-23	MOF@PVA beads for VOC capture	**Pamela Berilyn So**
10:15-10:30	Oral-24	Core-Shell Microspheres of SiO2@MOF for Cycloaddition of CO2 with Epoxides	**Chen-Yen Tsai**

ACCC Award 2 (Bioinorganic Chemistry and Biomedical Diagnostics)		
10:30-11:15		1F, Room 101
Chair	Masahiro Yamashita	
10:30-11:15	Biomimetic Metal-Oxygen Intermediates in Dioxygen Activation and Formation Chemistry	**Wonwoo Nam**

Plenary Session 9 (Organometallic Chemistry)			
11:15-12:00			1F, Room 101
Chair	Deng Liang		
11:15-12:00	PL-09	Domesticating the Reactivity of Non-Octet Carbon toward Plethora of Chemistry	**Tiow-Gan Ong**

12:00-12:15	**Closing Ceremony (1F, Room 101)**

Abstracts

Sunday, August 7 **Time: 17:15-18:00**

Plenary Session 1 & ACCC Award 1

Vivian Wing-Wah Yam

Professor
Institute of Molecular Functional Materials and
Department of Chemistry
The University of Hong Kong
Hong Kong

1. Curriculum Vitae:

Professor Vivian W.-W. Yam is the Chair Professor of Chemistry and Philip Wong Wilson Wong Professor in Chemistry and Energy at The University of Hong Kong. She received both her BSc(Hons) and PhD from The University of Hong Kong. She was elected to Member of Chinese Academy of Sciences, International Member (Foreign Associate) of US National Academy of Sciences, Foreign Member of Academia Europaea, Fellow of TWAS and Founding Member of Hong Kong Academy of Sciences. She was Laureate of 2011 L'Oréal-UNESCO For Women in Science Award. Her research interests include inorganic/organometallic chemistry, supramolecular chemistry, photophysics and photochemistry, and metal-based molecular functional materials for sensing, organic optoelectronics and energy research.

Also see: https://chemistry.hku.hk/wwyam

2. Abstract:

Speech Topic: From simple discrete metal-ligand motifs to supramolecular assembly, nanostructures and functions

Various strategies for the design and synthesis of new classes of chromophoric and luminescent metal complexes will be described. These simple discrete metal complexes can undergo supramolecular assembly to give a variety of nanostructures and morphologies with different colors and emission properties. Explorations into the underlying factors that govern their structures, properties and morphologies and their assembly mechanisms have provided new insights into the interplay of the various intermolecular forces for the directed assembly of metal-containing soft materials and hybrids. Manipulation of the electronic effects, molecular conformation, orientation and assembly has led to the control of the excited states in novel molecular materials and supramolecular assemblies. The exploration into the potential applications and functions of these luminescent discrete metal complexes, supramolecular assemblies and polymers will also be described.

Monday, August 8 **Time: 08:40-09:25**

Plenary Session 2

Colette Boskovic

Professor
School of Chemistry
The University of Melbourne
Australia

1. Curriculum Vitae:

Boskovic graduated from the University of Melbourne with a PhD in 1998. After postdoctoral stints at Indiana University, USA, and the University of Berne, Switzerland, she returned to the University of Melbourne in 2004 as a Lecturer and was promoted to full Professor in 2022.

Colette was awarded the 2004 Selby Research Award from the University of Melbourne, the 2013 Alan Sargeson Lectureship from the Royal Australian Chemical Institute (RACI) Inorganic Chemistry Division and the 2014 Dean's Award for Excellence in Research (Teaching and Research) from the Faculty of Science, University of Melbourne. She received an Australian Research Council Future Fellowship in 2019. Colette was elected a Fellow of the RACI in 2020. She is presently the Chair-Elect of the RACI Inorganic Chemistry Division Committee. She is a member of the International Advisory Boards for the *International Conference on Molecule-based Magnets (ICMM), Asian Conference on Molecular Magnetism* (ACMM) and *Asian Conference on Coordination Chemistry* (ACCC).

Colette leads the *Inorganic Molecular Materials* research group in the School of Chemistry at the University of Melbourne. Her research interests focus on the chemistry of paramagnetic transition and rare earth metals, including valence tautomeric and spin crossover molecular switches, redox-active ligands and single-molecule magnets.

2. Abstract:

Speech Topic: Switchable molecular materials based on valence tautomerism and spin crossover

Molecules that can be reversibly switched between distinguishable forms are of interest for a range of future applications, including in sensors, data storage and molecular spintronics. Transition metal complexes are ideal switchable molecules because facile modulation of their electronic structure affords readily detectable changes in electronic properties, including colour and magnetic moment. Spin crossover involves stimulated interconversion between different spin states and is a well-known mechanism for switchability in metal complexes. Valence tautomerism is another possibility, where intramolecular electron transfer between a metal and a redox-active ligand can be induced, allowing switching between species with different charge distributions. In some cases, a spin transition accompanies electron transfer. Our work with switchable metal complexes has focused mainly on valence tautomerism, but also spin crossover. Our recent efforts with computational collaborators have explored the use of density functional theory to predict both the likelihood of an interconversion for metal complexes, as well as the switching characteristics, including transition temperature. [1,2] We have also focused on understanding the origin of stepwise interconversions in dinuclear metal complexes. [3] Our aim is to be able to use density functional theory to design new metal complexes with properties suitable for applications prior to synthesis and experimental validation.

References

[1] Janetzki, J. T.; Zahir, F. Z. M.; Gable, R. W.; Phonsri, W.; Murray, K. S.; Goerigk, L.; Boskovic, C. A Convenient DFT-Based Strategy for Predicting Transition Temperatures of Valence Tautomeric Molecular Switches. Inorg. Chem. 2021, 60, 14475.

[2] Gransbury, G. K.; Boulon, M. E.; Petrie, S.; Gable, R. W.; Mulder, R. J.; Sorace, L.; Stranger, R.; Boskovic, C. DFT Prediction and Experimental Investigation of Valence Tautomerism in Cobalt-Dioxolene Complexes. Inorg. Chem. 2019, 58, 4230.

[3] Gransbury, G. K.; Livesay, B. N.; Janetzki, J. T.; Hay, M. A.; Gable, R. W.; Shores, M. P.; Starikova, A.; Boskovic, C. Understanding the Origin of One- or Two-Step Valence Tautomeric Transitions in Bis(Dioxolene)-Bridged Dinuclear Cobalt Complexes. J. Am. Chem. Soc. 2020, 142, 10692.

Monday, August 8 **Time: 16:35-17:05**

Rising Star Award

Shang-Da Jiang

Professor
Spin-X Insitute
South China University of Technology
China

1. Curriculum Vitae:

Prof. Shang-Da Jiang works in the field of molecular magnetism and obtained the Ph. D degree at Peking University, China (2011). His Ph. D thesis was awarded National Excellent Doctorial Dissertation of China. He has been a Humboldtian in the University of Stuttgart (2001-2014) and a postdoctor in Laboratoire National des Champs Magnétiques Intenses in France (2015). He worked in the Peking University as a research scientist (2015-2020), and presently is a full professor of chemistry in Spin-X Institute at South China University of Technology. His research interests are the quantum coherence manipulation of magnetic molecules by microwave, electric field and laser stimulations. Prof. Jiang has published more than 60 publications with over 5000 citations. He has obtained the National Science Fund of China for Excellent Young Scholars in 2018.

2. Abstract:

Speech Topic: Spin Manipulation in Magnetic Molecules

Quantum information technology can realize a new information processing based on quantum mechanics principles. Magnetic molecules can be applied as the quantum information processing units due to their tunable quantum coherence properties and larger Hilbert space. This talk will firstly introduce the research ideas of the "Magnetic Molecular Coherence Manipulation", and the "cage protection" proposal to enhance the magnetic molecular coherence. The talk will also introduce our experiments on coherent manipulation of magnetic molecules by transient electric fields and lasers. The quantum phase interference phenomenon of multi-level molecules of fullerene molecules shows that magnetic molecules could be more interesting compared with traditional quantum systems.

[1] **Jiang, S.-D.*** *et al.*, Endohedral Metallofullerene as Molecular High Spin Qubit: Diverse Rabi Cycles in $Gd_2@C_{79}N$. ***J. Am. Chem. Soc.*** **2018**, 140, 1123-1130.

[2] **Jiang, S.-D.*** *et al.*, Electric field manipulation enhanced by strong spin-orbit coupling: promoting rare-earth ions as qubits. ***Natl. Sci. Rev.*** **2020**, 7, 1557-1563.

[3] **Jiang, S.-D.*** *et al.*, Coherent manipulation and quantum phase interference in a fullerene-based electron triplet molecular qutrit. ***npj Quan. Infor.*** **2021**, 7, 32.

[4] **Jiang, S.-D.*** *et al.*, Implementation of Quantum Level Addressability and Geometric Phase Manipulation in Aligned Endohedral Fullerene Qudits. ***Angew. Chem. Int. Ed.*** **2022**, DOI: 10.1002/anie.202115263

[5] **Jiang, S.-D.*** *et al.*, Spin-Electric Coupling with Anisotropy-Induced Vanishment and Enhancement in Molecular Ferroelectrics. ***J. Am. Chem. Soc.*** **2022**, DOI: 10.1021/jacs.2c00484

Monday, August 8 **Time: 17:05-17:50**

Plenary Session 3

Goutam Kumar Lahiri

Professor
School of Chemistry
Indian Institute of Technology Bombay
India
Email: lahiri@chem.iitb.ac.in

1. Curriculum Vitae:

Educational Qualification:

Ph.D: Jadavpur University, India

Postdoctoral Fellow: West Virginia University, USA

Professional Career:

Professor: I.I.T.-Bombay

Research Interest

Manifestations of electronic structural aspects of metal complexes involving redox active ligands including molecular functionalization and catalysis

Publications: ~300 (*h*-index: 51)**; Ph.D students Supervised:**36

Awards and Recognitions

Associate Editor: Indian J. Chem.-New Delhi and J.Chem.Sci.-Bangalore

J C Bose Fellowship

CRSI Silver Medal

B. M. Birla awards in chemistry

Fellow, Indian National Science Academy, The National Academy of Sciences, India, Indian Academy of Sciences, Maharashtra Academy of Sciences

Institute (IIT Bombay) Chair Professor

Ramanna Fellowship (DST, New Delhi)

Excellence in Teaching (IIT Bombay)

Mercator Chair Professorship (DFG-Germany)

Royal Society Award for International Authors

2. Abstract:

Speech Topic: Non-innocence of coordinated ligands. Electronic structure and Reactivity

Metal complexes of redox non-innocent (RNI) ligands, capable of participating in multi-electron transfer processes due to closeness in energy of their frontier orbitals have considered to be important from the broader perspectives of fundamental electron transfer aspects,[1] as well as their application potency in small-molecule activation,[2] catalysis,[3] bio-mimicking[4] and designing molecular electronic devices.[5] The present deliberation would primarily be centered on addressing (i) inner sphere electron transfer at the metal-ligand interface (MnL p Mn+1L p–1) of such redox-active molecular frameworks including dynamic resonating[6] or valence tautomeric[7] issue and (ii) assessing redox mediated chemical non-innocence of the coordinated ligand moiety.

References

[1] (a) Kaim, W.; Lahiri, G. K. Angew. Chem., Int. Ed., 2007, 46, 1778-1796. (b) Kumari, M.; Bera, S. K.; Blickle, S.; Kaim, W.; Lahiri, G. K. Chem. Eur. J. 2021, 27, 5461-5469.
[2] (a) Lyaskovskyy, V.; de Bruin, B. ACS Catal., 2012, 2, 270-279. (b) Panda, S.; Bera, S. K.; Goel, P.; Dutta, A. K.; Lahiri, G. K. Inorg. Chem., 2019, 58, 11458- 11469.
[3] (a) Kundu, S.; Stieber, S. C. E.; Ferrier, M. G.; Kozimor, S. A.; Bertke, J. A.; Warren, T. H. Angew. Chem., Int. Ed., 2016, 55, 10321-10325. (b) Ray, R.; Chandra, S.; Yadav, V.; Mondal, P.; Maiti, D.; Lahiri, G. K. Chem. Commun. 2017, 53, 4006- 4009.
[4] Dhara, S.; Panda, S.; Lahiri, G. K. Dalton Trans., 2021, 50, 12408-12412.
[5] Goswami, S.; Matula, A. J.; Rath, S. P.; Hedström, S.; Saha, S.; Annamalai, M.; Sengupta, D.; Patra, A.; Ghosh, S.; Jani, H.; Sarkar, S.; Motapothula, M. R.; Nijhuis, C. A.; Martin, J.; Goswami, S.; Batista, V. S.; Venkatesan, T. Nat. Mater., 2017, 16, 1216-1224.
[6] Singh, A.; Dey, S.; Panda, S.; Lahiri, G. K. Inorg. Chem., 2021, 60, 18260-18269. [7] Singh, A.; Panda, S.; Dey, S.; Lahiri, G. K. Angew. Chem., Int. Ed., 2021, 60, 11206-11210.

Tuesday, August 9 **Time: 08:40-09:25**

Plenary Session 4

François Gabbaï

Professor
Department of Chemistry
Texas A&M University
USA

1. Curriculum Vitae:

François Gabbaï was born in Montpellier (France) in the late 60's. Upon completion of his undergraduate studies at the University of Bordeaux in 1990, he joined the graduate program at the University of Texas at Austin to work with Alan Cowley. After obtaining his Ph.D. in 1994, he was awarded an Alexander von Humboldt Fellowship and subsequently a Marie Curie Fellowship which allowed him to work with Hubert Schmidbaur at the Technical University of Munich first as a postdoctoral fellow and later as an "Habilitand". In 1998, he joined Texas A&M University where he now holds the Arthur E. Martell Chair of Chemistry. François, who is a member of the advisory board of several international journals, has served as an associate editor for *Organometallics* between 2011 and 2019, and for *Chemical Science* since April 2019. He is a Fellow of the American Chemical Society (ACS), a Fellow of the Royal Society of Chemistry, and the recipient of several awards including the 2009 North American Dalton Lectureship and the 2016 F. Albert Cotton Award in Synthetic Inorganic Chemistry from the ACS. His most recent recognitions include a 2019 Distinguished Achievement Research Award from the Texas A&M Association of Former Students and his promotion to the title of Distinguished Professor. His research interests revolve around the chemistry of p-block elements and late transition metals with applications in the domain of molecular recognition, anion transport, and catalysis.

2. Abstract:

Speech Topic: Carbenium Ions as Z-type Ligands

As part of our contribution to the chemistry of ambiphilic ligands, we have started to systematically develop examples of such ligands in which the Lewis acidic functionality is a carbenium ion. In this presentation, we will describe the synthesis of phosphine-carbenium[1,2] and carbene-carbenium ligands and show that these new systems can be readily coordinated to electron-rich group 10 and 11 metals (M), leading to a family of complexes featuring weak Au···$C_{carbenium}$[1] or genuine Ni/Pd/Pt→$C_{carbenium}$ dative interactions. In addition to describing the atypical bonding situations that arise in the chemistry of these complexes,[3,4] we will also show that the electron deficiency of the carbenium unit can be used to adjust the catalytic reactivity of gold(I) centers in reactions that necessitate the carbophilic activation of unsaturated hydrocarbons.[1,5]

Finally, we will show that even in the absence of an Au→$C_{carbenium}$ dative bond, the electron-accepting properties of the carbenium ion provides access to low energy excited states, the formation of which can be exploited to induce the clean and highly efficient photoreduction of gold(III) centers.

References

[1] Wilkins, L. C.; Kim, Y.; Litle, E. D.; Gabbaï, F. P., Stabilized Carbenium Ions as Latent, Z-type Ligands. Angew. Chem. Int. Ed. **2019**, 58, 18266-18270.

[2] Zhou, J.; Litle, E. D.; Gabbaï, F. P., Isolation and reactivity of a gold(I) hydroxytrifluoroborate complex stabilized by anion-π^+ interactions. Chem. Commun. **2021**, 57, 10154-10157.

[3] Park, G.; Gabbaï, F. P., The Elusive Au(I)···H–O Hydrogen Bond: Experimental Verification. J. Am. Chem. Soc. **2021**, 143, 12494-12498.

[5] Liu, W.-C.; Kim, Y.; Gabbaï, F. P., Conformational Switching through the OneElectron Reduction of an Acridinium-based, γ-Cationic Phosphine Gold Complex. Chem. Eur. J. **2021**, 27, 6701-6705.

[5] Litle, E. D.; Wilkins, L. C.; Gabbaï, F. P., Ligand-enforced intimacy between a gold cation and a carbenium ion: Impact on stability and reactivity. Chem. Sci. **2021**, 12, 3929-3936.

Tuesday, August 9 **Time: 17:05-17:50**

Plenary Session 5

Xiao-Ming Chen

Professor
School of Chemistry
Sun Yat-Sen University
China

1. Curriculum Vitae:

Xiao-Ming Chen obtained his BSc (1983) and MSc (1986) degrees from Sun Yat-Sen University (SYSU), Guangzhou, China, and PhD degree (1992) from The Chinese University of Hong Kong. He joined chemistry faculty at SYSU since 1992, and became a professor since 1995. He is Member of Chinese Academy of Sciences (since 2009), Fellow of The World Academy of Sciences for Advancement of Science in Developing Countries (TWAS, since 2013). His research interests include synthesis, structures and properties of functional coordination polymers (including MOFs) and metal complexes. He has published 510 papers in academic journals including Science, JACS, Angew. Chem., Adv. Mater., and Chem. Rev. etc. He has currently more than 45,000 citations (H-index >115) in Web of Science. He won several science awards, such as China National Natural Science Prize, TWAS Prize in Chemistry, Khwarizmi International Award, International Award of Japan Society of Coordination Chemistry, as well as Highly Cited Researcher in Chemistry (2014-2021).

2. Abstract:

Speech Topic: Metal-Organic Frameworks for Photo-/Electro-Catalytic CO_2 Reduction

In recent years, catalytic CO_2 reduction reaction (CO_2RR) driven by solar or renewable energy has attracted extensive attention due to its potential role in mitigating green-house effect and energy crisis. However, due to the extremely stable chemical bond in CO_2, the competing hydrogen evolution reaction in the presence of water, as well as the reduction of CO_2 involving a multi-electron stepwise process with several intermediates generated from different chemisorbed species, the design of highly efficient and selective catalysts for CO_2RR, especially to produce hydrocarbons, is challenging.

With many useful characteristics, such as well-defined structures, high porosity, structural diversity, designable and modifiable frameworks/pore surface, metalorganic frameworks (MOFs) can serve as a platform to provide precise structureproperty relationship, and regulate the catalytic sites and chemical micro-environment for better performance.

In this talk, our investigations on the design and modification of MOFs for photoand electro-catalytic CO_2RR to give products of CO,[1] CH_4,[2] and C_{2+} hydrocarbons[3] will be presented, focusing on the importance of the active site binding ability and supramolecular interaction with CO_2 and the specific intermediate species, rational integration of photosensitizers with CO_2 reduction centers for the catalytic activities and selectivities, as well as rational integration of dual metal active sites for the production of ethylene and other high value-added C_{2+} compounds.

References

[1] Wang, Y.; Huang, N.-Y.; Shen, J.-Q.; Liao, P.-Q.; Chen, X.-M.; Zhang, J.-P.; *J. Am. Chem. Soc.* 2018, *140*, 38.
[2] Zhu, H.-L.; Huang, J.-R.; Zhang, X.-W.; Wang, C.; Huang, N.-Y.; Liao, P.-Q.; X.-M. Chen, *ACS Catal*. 2021, *11*, 11786.
[3] Qiu, X.-F.; Zhu, H.-L.; Huang, J.-R.; Liao, P.-Q.; Chen, X.-M., *J. Am. Chem*. Soc. 2021, *143*, 7242.

Wednesday, August 10 **Time: 08:40-09:25**

Plenary Session 6

Hiroshi Kitagawa

Professor
Department of Chemistry
Kyoto University
Japan

1. Curriculum Vitae:

Hiroshi Kitagawa was born at Osaka in 1961 and finished his PhD at Kyoto University in 1991 and, after working as Assistant Professor at the Institute for Molecular Science (IMS) and Japan Advanced Institute of Science and Technology (JAIST), he was appointed as an Associate Professor at the Department of Chemistry, University of Tsukuba in 2000. He became a Professor at the Department of Chemistry, Faculty of Science at Kyushu University in 2003 and moved to Kyoto University as a Professor in 2009. He was engaged at Japan Science and Technology Agency (JST) as Director of the network-type research institution “Science and Creation of Innovative Catalysts”, PRESTO, and is also engaged at JST as Director of the network-type research institution “Exploring Innovative Materials in Unknown Search Space”, CREST, and as Program Officer, Materials Science Panel, Fusion Oriented Research for Disruptive Science and Technology (FOREST). He is also Chief Program Officer, Chemistry Group, Research Center for Science Systems, Japan Society for the Promotion of Science (JSPS). He has been President, Japan Society of Coordination Chemistry from 2020. He has published more than 470 original research papers dealing with solid-state chemistry, coordination chemistry, nanoscience, low-dimensional electron systems, and molecule-based conductors.

2. Abstract:

Speech Topic: Low-dimensional electrons system in coordination networks

More than 35 years, we have investigated MX or MMX chains system as a model of pure 1-D electron system, because this system has wide variety of possible electronic phases[1-2]. The MMX chain is composed of M-M dimer and bridging iodine. In this system, there are four dominant interactions, transfer integral t, on-site Coulombic repulsion U, nearest neighbor Coulombic repulsion V, and electron-lattice interaction S, those are competing to each other in energy. The charge-ordering states with lattice distortions of a halogen-bridged binuclear-metal mixed-valence complex (MMX chain), $Pt_2(L)_4I$ (L = $CH_3CS_2^-$ and $C_2H_5CS_2^-$), have been investigated by transport, magnetic, and optical measurements. This complexes are binuclear unit-assembled conductor containing metal–metal bonds. It exhibits metallic conduction, representing the first example of a metallic halogenbridged one-dimensional transition-metal complex. Conductive MOF nanotube and other electrically conductive MOFs are also presented[3-6].

References
[1] H. Kitagawa, et al., J. Am. Chem. Soc., 121, 10068 (1999), J. Am. Chem. Soc., 121, 2321 (1999), Coord. Chem. Rev.,190, 1169 (1999), J. Am. Chem. Soc., 123, 11179 (2001), Angew. Chem. Int. Ed., 41, 2767, (2002), J. Am. Chem. Soc., 126, 1614 (2004), J. Am. Chem. Soc., 128, 6676 (2006), J. Am. Chem. Soc., 128, 8140 (2006), J. Am. Chem. Soc., 128, 12066 (2006), Chem. Asian J., 4, 1673 (2009), CrystEngComm, 16 6277-6286 (2014), Inorg. Chem., 53, 1229 (2014), Eur. J. Inorg. Chem., 4402-4407 (2016), Inorg. Chem., 55, 2620 (2016), Nature Commun., 7, 11950 (2016), Angew. Chem. Int. Ed., 56, 3838 (2017), Nature Commun. 11, 843 (2020), K. Otake, H. Kitagawa, Small, 17, 2006189 (2021), K. Otake, K. Otsubo, H. Kitagawa, Journal of Physics: Condensed Matter, 33, 034002 (2021).
[2] T. Yamada, K. Otsubo, R. Makiura, H. Kitagawa, Chem. Soc. Rev., 42, 6655 (2017).
[3] K. Otsubo, Y. Wakabayashi, J. Ohara, S. Yamamoto, H. Matsuzaki, H. Okamoto, K. Nitta, T.Uruga, H. Kitagawa, Nature Materials, 10, 291 (2011).
[4] S. Sakaida, K. Otsubo, O. Sakata, C. Song, A. Fujiwara, M. Takata, H. Kitagawa, Nature Chemistry, 8, 377 (2016).
[5] K. Otake, K. Otsubo, K. Sugimoto, H. Kitagawa, Angew. Chem. Int. Ed., 55, 6448 (2016).
[6] D. Lim, M. Sadakiyo, H. Kitagawa, Chemical Science, 10, 16-33 (2019), Y. Yoshida, K. Fujie, D. Lim, R. Ikeda, H. Kitagawa, Angew. Chem. Int. Ed., 58, 10909-10913 (2019), K. Otsubo, S. Nagayama, S. Kawaguchi, K. Sugimoto,H. Kitagawa, JACS Au, 2, 109-115 (2022). D. Lim, H. Kitagawa, Chem. Soc. Rev., 50, 6349-6368 (2021).

Wednesday, August 10 **Time: 17:05-17:50**

Plenary Session 7

Mi Hee Lim

KAIST Endowed Chair Professor
Department of Chemistry
Korea Advanced Institute of Science and Technology
(KAIST)
Republic of Korea

1. Curriculum Vitae:

Education

1995 – 1999 B.S. Ewha Womans University
1999 – 2001 M.S. Ewha Womans University
2002 – 2006 Ph.D. Massachusetts Institute of Technology

Professional Career

2006. 10. – 2008. 06. Postdoctoral Scholar, California Institute of Technology
2008. 08. – 2013. 08. Assistant Professor, Univ. of Michigan, Ann Arbor, USA
2013. 09. – 2018. 01. Associate Professor, Ulsan National Institute of Science and Technology (UNIST)
2018. 02. – present Associate Professor, Professor, and KAIST Endowed Chair Professor, Korea Advanced Institute of Science and Technology (KAIST)

Selected Awards and Honors

2021 The Year Award for Women in Science and Technology (The Ministry of Science and ICT & WISET)
2020 S-Oil Next-Generation Scientist Award (S-Oil Science Prodigy & Culture Foundation & the Korean Academy of Science and Technology)
2020 Asian Biological Inorganic Chemistry (AsBIC) James Hoeschele Award
2019 Member of the Young Korean Academy of Science and Technology
2018 Society of Bioinorganic Chemistry (SBIC) Early Career Award
2016 Award for “30 Young Scientists of Korea” to Lead Basic Science Research for the Next 30 Years (POSTECH & Dong-A Ilbo)
2015 KCS-Wiley Young Chemist Award, Korea
2012 Alfred P. Sloan Research Fellow, USA

3. Abstract:

Speech Topic: Bioinorganic Strategies to Study Multiple Facets in Alzheimer's Disease

Alzheimer's disease (AD), associated with degeneration of neurons and synapses in the brain, leads to motor impairment and eventual fatality. Neurodegeneration could be related to various interconnected features, including (i) plaque formation from amyloid-*β* (A*β*) peptide fragments, (ii) metal ion dyshomeostasis and miscompartmentalization, as well as (iii) inflammation and increased oxidative stress due to overproduction of reactive oxygen species (ROS). The inter-relations between some of these pathological factors have been investigated. Metals are found entangled in the A*β* plaque and likely contribute to A*β* neurotoxicity and oxidative stress. ROS have been shown to increase the rate of A*β* plaque formation. Our understanding of the correlation between these elements and AD neuropathogenesis has been very limited, however. There is currently no cure for AD; therapies are focused on symptomatic relief targeting the decrease in the levels of acetylcholine, only one of the multiple factors causing the disease.[1-3] To find a cure for AD, we require a better understanding of the relationship between the various causative factors of this devastating disease. Towards this goal, we need suitable chemical tools capable of targeting and regulating its multiple underlying factors simultaneously.[2,3] Herein, our rational design and preparation of our chemical tools will be discussed with our investigations of their interactions and reactivities with targets in *vitro* as well as their efficacy in vivo. [4-11]

References
[1] Chem. Soc. Rev. 2017, 46, 310.
[2] Chem. Rev. 2019, 119, 1221.
[3] Acc. Chem. Res. 2021, 54, 3930.
[4] Proc. Natl. Acad. Sci. USA 2010, 107, 21990.
[5] Chem. Sci. 2015, 6, 1879.
[6] J. Am. Chem. Soc. 2014, 136, 299.
[7] J. Am. Chem. Soc. 2015, 137, 14785.
[8] Nat. Commun. 2016, 7, 13115.
[9] J. Am. Chem. Soc. 2017, 139, 2234.
[10] Proc. Natl. Acad. Sci. USA 2020, 117, 5160.
[11] J. Am. Chem. Soc. 2020, 142, 8183.

Thursday, August 11 **Time: 08:30-09:15**

Plenary Session 8

Xiaogang Liu

Professor
Department of Chemistry
National University of Singapore
Singapore

Employment History

2004-2006 Postdoctoral Fellow, Department of Materials Science and Engineering, Massachusetts Institute of Technology, USA
2006-2011 Assistant Professor, Department of Chemistry, National University of Singapore, Singapore
2011-2016 Associate Professor, Department of Chemistry, National University of Singapore, Singapore
2017-present Professor, Department of Chemistry, National University of Singapore, Singapore

Academic qualifications

1996 B.S., Beijing Technology and Business University, Beijing, China
1999 M.S., East Carolina University, Greenville, North Carolina, USA
2004 Ph.D., Northwestern University, Evanston, Illinois, USA

Scientific awards

Outstanding Research Award (NUS 2017)
President's Science Award (Singapore 2016)

Recent Publications

1) "Rare-Earth Doping in Nanostructured Inorganic Materials", **Chemical Reviews** 2022, 122, 5519-5603.
2) "Organic phosphors with bright triplet excitons for efficient X-ray-excited luminescence", **Nature Photonics** 2021, 15, 187-192.
3) "Mapping Drug-Induced Neuropathy through In-Situ Motor Protein Tracking and Machine Learning," **Journal of the American Chemical Society** 2021, 143, 14907–14915
4) "Continuous-wave Near-IR STED Microscopy using Downshifting Lanthanide Nanoparticles", **Nature Nanotechnology** 2021, 16, 975-980.
5) "Anomalous upconversion amplification induced by surface reconstruction in lanthanide sublattices", **Nature Photonics** 2021, 15, 732-737.
6) "High-resolution X-ray luminescence extension imaging", **Nature** 2021, 590, 410–415.
7) "Lanthanide-doped inorganic nanoparticles turn molecular triplet excitons bright," **Nature** 2020, 587, 594.

Abstract:

Speech Topic: Luminescence Materials: A Wonderful Toolbox for Applied Imaging and Assistive Technologies

Lanthanide-doped nanoparticles exhibit unique luminescence properties, including massive Stokes shift, sharp emission bandwidth, high resistance to optical blinking, and photobleaching. They are also unique in converting long-wavelength stimulation into short-wavelength emission. These attributes offer the possibility of developing alternative luminescent labels for organic fluorophores and quantum dots. In recent years, researchers have demonstrated spectral-conversion nanocrystals for many biological applications, such as highly sensitive molecular detection and autofluorescence-free cell imaging. With significant progress over the past decade, we can now design and fabricate nanoparticles that display tailorable optical properties. In particular, by controlling different combinations of dopants and dopant concentrations, we can generate a plethora of colors under excitation with a single wavelength. By incorporating a set of lanthanide ions in defined concentrations into different layers of a core-shell structure, we have expanded the emission spectra of the particles to cover almost the entire visible region, which is not possible with conventional bulk phosphors. In this talk, I will highlight recent advances in the broad utility of lanthanide-based nanocrystals for multimodal imaging, bio-detection, therapy, X-ray scintillation, and assistive technology.

Thursday, August 11 **Time: 10:30-11:15**

ACCC Award 2

Wonwoo Nam

Professor
Department of Chemistry and Nano Science
Ewha Womans University
Korea

1. Curriculum Vitae:

Wonwoo Nam was born in Seoul, Korea. He received his B.S. (Honors) degree in Chemistry from California State University, Los Angeles and his Ph.D. degree in Inorganic Chemistry from UCLA under the direction of Professor Joan S. Valentine in 1990. After one year postdoctoral experience at UCLA, he became an Assistant Professor at Hong Ik University in 1991. He moved to Ewha Womans University in 1994, where he is presently a Distinguished Professor of Ewha Womans University. His current research focuses on the mechanistic studies of dioxygen activation and formation by biomimetic models of heme and nonheme iron monooxygenases.

Awards & Honors

- The 4th Young Scientist Award (Award given by the President of Korea), 2000
- Korean Chemical Society Award, 2006
- The 5th DuPont Science and Technology Award, 2006
- The 3rd Kyeong-Am Academic Award, 2007
- Korea Science Award (Award given by the President of Korea), 2015
- Korea Toray Science and Technology Prize, 2020

Activities as Editor or Editorial Board Member

- Editor-in-Chief; Bulletin of the Korean Chemical Society (KCS), 2020 – Present
- Associate Editor; Chemical Science (RSC), 2011 – 2019
- Editorial Advisory Board; Chemical Science (RSC), 2019 – Present
- Editorial Advisory Board; Chem Catalysis (Cell), 2021 – Present
- Editorial Advisory Board; Accounts of Chemical Research (ACS), 2006 – 2015
- Editorial Advisory Board; Chemical Communications (RSC), 2012 – Present

2. Abstract:

Speech Topic: Biomimetic Metal-Oxygen Intermediates in Dioxygen Activation and Formation Chemistry

Dioxygen is essential in life processes, and enzymes activate dioxygen to carry out a variety of biological reactions. One primary goal in biomimetic research is to elucidate structures of reactive intermediates and mechanistic details of dioxygen activation and oxygenation reactions occurring at the active sites of enzymes, by utilizing synthetic metal-oxygen complexes. A growing class of metal-oxygen complexes, such as metal– superoxo, –peroxo, –hydroperoxo, and –oxo species, have been isolated, characterized spectroscopically, and investigated in various oxygenation reactions. During the past decade, we have been studying the chemical and physical properties of various reactive intermediates in oxygenation reactions, such as high-valent iron(IV)- and manganes(V)-oxo complexes of heme and non-heme ligands in oxotransfer and C-H activation reactions, non-heme metal-peroxo complexes in nucleophilic reactions, and non-heme metal-superoxo complexes in electrophilic reactions. The effects of supporting and axial ligands on structural and spectroscopic properties and reactivities of metal-oxygen adducts have been extensively investigated as well. In this presentation, I will present our recent results on the synthesis and structural and spectroscopic characterization of mononuclear nonheme metaldioxygen intermediates as well as their reactivities in electrophilic and nucleophilic oxidation reactions.

References

1. “Iron and Manganese Oxo Complexes, Oxo Wall and Beyond” Nature Reviews Chemistry **2020**, 4, 404–419.
2. “Hydrogen Atom Transfer Reactions by Metal-Oxygen Intermediates” Acc. Chem. Res. **2018**, 51, 2014–2022.
3. “Synthetic Mononuclear Nonheme Iron-Oxygen Intermediates” Acc. Chem. Res. **2015**, 48, 2415–2423.
4. “Tuning Reactivity and Mechanism in Oxidation Reactions by Mononuclear Nonheme Iron(IV)-Oxo Complexes” Acc. Chem. Res. **2014**, 47, 1146–1154.
5. Jaeheung Cho, Ritimukta Sarangi, and Wonwoo Nam* “Mononuclear Metal-O2 Complexes Bearing Macrocyclic TMC Ligands Acc. Chem. Res. **2012**, 45, 1321– 1330.
6. “High-Valent Iron(IV)-Oxo Complexes of Heme and Nonheme Ligands in Oxygenation Reactions” Acc. Chem. Res. **2007**, 40, 522–531.
7. “Guest Editorial: Dioxygen Activation by Metalloenzymes and Models” Acc. Chem. Res. **2007**, 40, 465.

Thursday, August 11 **Time: 11:15-12:00**

Plenary Session 9

Tiow-Gan Ong

Professor
Institute of Chemistry
Academia Sinica
Taiwan

2. Curriculum Vitae:

Dr. Tiow-Gan Ong has distinguished himself as an organometallic chemist exploring non-octet chemical bonding using "ligand-design strategy." Presently, Dr. Ong is the Research Fellow at Institute of Chemistry at Academia Sinica, acting as Academic Deputy Director. He is also the Professor at National Taiwan University and Koashiung Medical University. Dr. Ong has obtained his Ph.D in 2000 at University of Kentucky under the supervison of Professor Robert Toreki. Subsequently, he did his postdoctoral training at UC Santa Barbara (Professor Guillermo Bazan) and then Univeristy of Ottawa (Professor Darrin Richeson) before beginning his independent career as the Asssitant Research Fellow at Academia Sinica, Taiwan in 2006.

Ong group have consistently contributed his work in Organometallic and Catalysis that leads to several key breakthroughs;

- C–H/C-O bond activation in selective manner relied on synergistic interaction between Nickel-Lewis Acid medaited catalysis.
- Curiosity-driven science on new class of C^0 science so called Carbone and Carbodicarbene, leading to new paradigm in FLP, metal-free catalysis, tandem 1 & 2 electron reaction and radical-orientated reaction.
- Epitome of these basic studying on C^0 class also leads to isolation of unstable Dicarbon (C_2), which has been published recently in Nature Chemistry.

His scientific contributions with impacts on broad field of chemistry have been well recognized in national and international level with recent representative awards; University of Ottawa Visiting Research Award (2020), Outstanding Research Award from Taiwan Ministry of Science and Technology (2019) and the Academia Sinica Presidential Scholar Program Award (2021).

3. Abstract:

Speech Topic: Domesticating the Reactivity of Non-Octet Carbon toward Plethora of Chemistry

Tiow-Gan Ong[a,b*]

[a]*Institute of Chemistry, Academia Sinica, Taipei, Taiwan*
[b]*Department of Chemistry, National Taiwan University, Taipei, Taiwan*
tgong@gate.sinica.edu.tw

ABSTRACT

Carbodicarbenes (CDCs) are carbones (CL_2) repertoire that feature a dicoordinated central carbon (0) atom bearing two lone pairs of electrons, with N-heterocyclic carbenes (NHCs) as ligands (L). Because of the two lone pairs on the central carbon atom, CDCs have been regarded as strong σ-donating surrogates complementary to the well-established NHCs. This presentation will describe the synthetic preparation[1] and chemical properties of the CDC[2] as well as its application toward supporting metallic complexes for catalysis in tandem photoredox,[3] cross-coupling reaction via tandem C-H and C-O bond activation[4] and a new spin in diversifying FLP reactivity with co-modulator benzyl alcohol. Finally, we also described phosphine-stabilized dicarbon as effective ligand for metal complexes and catalysis.[5] Dicarbon is a reactive carbon allotrope that naturally exists only in the high temperature medium of stellar space.

REFERENCES

[1] W.-C. Chen, J.-S. Shen, T. Jurca, C.-J. Peng, Y.-H. Lin, Y.-P. Wang, W.-C. Shih, G. P. A. Yap, T.-G. Ong, *Angew. Chem. Int. Ed.* **2015**, *54*, 15422–15427.

[2] W.-C. Chen, W.-C. Shih, T. Jurca, L. Zhao, D. M. Andrada, C.-J. Peng, C.-C. Chang, S.-K. Liu, Y.-P. Wang, Y.-S. Wen, et al., *J. Am. Chem. Soc.* **2017**, *139*, 12830–12836.

[3] Y.-C. Hsu, V. C. C. Wang, K.-C. Au-Yeung, C.-Y. Tsai, C.-C. Chang, B.-C. Lin, Y.-T. Chan, C.-P. Hsu, G. P. A. Yap, T. Jurca, et al., *Angew. Chem. Int. Ed.* **2018,** *57,* 4622–4626.

[4] T.-H. Wang, R. Ambre, Q. Wang, W.-C. Lee, P.-C. Wang, Y. Liu, L. Zhao, T.-G. Ong, *ACS Catal.* **2018**, *8*, 11368–11376.

[5] Leung, T.-F.; Jiang, D.; Wu, M.-C.; Xiao, D.; Ching, W.-M.; Yap, G. P. A.; Yang, T.; Zhao, L.; Ong, T.-G.; Frenking, G. *Nat. Chem.* **2021**, *13*, 89-93.

Poster Session

Monday, August 8, 2022

Poster Session 1		
18:00-20:00		online
P01-01	Some New Evaluations for a Cyanide Ag-Cu Complex and Laccase	**Takashiro Akitsu**
P01-02	Ordered self-assembly of lanthanide complexes	**Lijuan Liang**
P01-03	Synthesis and characterization of naphthalenediimide based semiconductive coordination polymers with potassium centers	**Tappei Tanabe**
P01-04	Reactivity of a tetrahedral Cu^{I}_{4} cluster covered by S-donating octahedral metalloligands	**Nobuto Yoshinari**
P01-05	Cation-ordered pentavalent fullerides	**Keisuke Matsui**
P01-06	Characterization of Two-electron Oxidized Cu^{II}-salen Complexes with Para-methoxy and methylthio Groups; Geometric Structure, Magnetic Property, and Benzyl Alcohol Oxidation Mechanisms	**Tomoyuki Takeyama**
P01-07	Syntheses and magnetic properties of di-nuclear cobalt complexes containing asymmetry tetraoxalene ligand	**Naohiro Takahashi**
P01-08	Electrical conduction of quasi-one dimensional halogen-bridged metal complex heterojunction	**Keisuke Ishiguro**
P02-01	Design, Synthesis and Photophysical Properites of Optically Pure Triscyclometalated Iridium(III) Complexes Synthesized via Diastereomeric Intermediates	**Azusa Kanbe**
P02-02	Organorhodates and -iridates—structure and reactivity—	**Takanori Iwasaki**
P02-03	Cyclotrimerization of benzonitriles by the catalytic systems composed of titanium chlorido complexes and magnesium	**Keiichiro Saitoh**
P02-04	A Bis-(carbone) Pincer Ligand and its Coordinative Behavior Toward Multi-Metallic Configurations	**Bamlaku Semagne Aweke**
P02-05	Base-Promoted Perfluoroalkylation of Rhodium Porphyrin Complexes with Perfluoroalkyl Iodides	**Li-Jie Fu**
P02-06	Synthesis and properties of a neutral chromium complex with a Cr≡Si triple bond	**Masahiro Matsuoka**
P02-07	Crystal structure and molecular recognition of dinuclear and 2D sheet-like Zn(II) complexes using fluorinated carboxylic acid	**Tomoki Jitsukata**
P02-08	Cyclotrimerization of alkynes catalyzed by a bis(indolyl)-coordinated titanium diamido complex	**Yuki Kawahara**
P02-09	Synthesis and structure of an isolable hydroalumylene complex of tungsten	**Keita Sato**

P02-10	Cyclic (Alkenyl)(amino)carbene as a Strong π-Accepting Carbene: Synthesis and Coordination Chemistry	**Shota Kamiyama**
P02-11	$Ag_{13}H_8$ Silver Hydride Core in Tetrahedral Cage Formed by Four Triangular $[CuAg_3(CCAr)_3(PPh_3)_3]^+$ Panels	**Tsutomu Mizuta**
P02-12	Discovery and Mechanistic Analysis of Zn^{2+}- Promoted Decomposition Reactions of Cyclometalated Iridium(III) Complexes	**Surajit Haldar**
P02-13	Crystal structures and reversible vapor adsorption of aromatic derivatives using nickel(II) complexes with perfluorinated ligand	**Hirotomo Usui**
P02-14	Heterometallic d^8 -d^{10} Coupling of Rh(I) and M(0) (M = Pd, Pt) in a Sandwich Framework of pπ-Conjugated Ligands	**Iori Inoue**
P02-15	Theoretical Mechanistic Study of 1,10-Phenanthroline Palladium Catalyzed Chain-Walking Processes	**Kazuma Muto**
P02-16	Characterization of a Ti(IV)-Schiff-base-benzyl Complex Reaction with a Hydroxyketone Using ELF Topological Characterization	**Bernard G. Ramos**
P03-01	Theoretical study of effect on ionization potential by hydrogen bonds around [4Fe-4S] active site in HiPIP	**Taigo Kamimura**
P03-02	Platinum(IV)-Chlorambucil Complexes: A New Series Of Multifunctional Prodrugs	**Angelico Aputen**
P03-03	Cyclooxygenase Inhibiting Platinum(IV) Prodrugs with Potent Anticancer Activity	**Aleen Khoury**
P03-04	Platinum(II) Cyclometallated Cytotoxic Complexes with G- Quadraplex Stabilization and Luminescent Properties	**Brondwyn S. McGhie**
P03-05	X-ray Structure and Electrophilic Reactivity of Nonporphyrinic Terminal Manganese(IV)–Hydroxide Complexes	**Younwoo Park (canceled)**
P03-06	Spectroscopic Characterization of a Peroxyhemiacetal-Like Intermediate in Aldehyde Deformylation	**Yeongjin Son (canceled)**
P03-07	Synthesis of π-Expanded Vitamin B_{12} and Application to the Photocatalytic Reaction	**Keita Shichijo**
P03-08	Synthesis and Characterization of Roussin's Red Esters with Derivatives of Pyrenyl Group for the Detection of ROS	**Show-Jen Chiou**
P03-09	Modeling Heme Peroxidase: Heme Saddling Facilitates Reactions with Hyperperoxides to Form High-Valent Fe(IV)–Oxo Species	**Chang-Quan Wu**
P04-01	Solvent-induced polarity switching of molecular crystals constructed by asymmetric five-coordinate complexes	**Junichi Yanagisawa**
P04-02	Heterometallation of silver(I) sulfide nanoclusters protected by thiolato iridium(III) octahedra	**Zi Lang Goo**
P04-03	Evidence for Stereoselective Substitution of Pyridine Derivatives (PY) in mer-$\{Ru^{III}(PY)_3\}^{3+}$ Units	**Chihiro Iwasaki**

P04-04	Structures and Applications of Paddlewheel-Type Dirhodium Complexes with *N,N'*-Donating Ligands	**Natsumi Yano**
P04-05	Syntheses and crystal structures of tri- and octa-nuclear silver(I) clusters having ethynide and diamine ligands	**Daiki Hashimoto**
P04-06	Optical resolution of a tetrahedral chiral-at-nickel(II) complex with only achiral ligands	**Yuanfei Liu**
P04-07	The characteristic of phosphorescence for a ruthenium-terpyridine chromophore complex: DFT modeling postulated low-energy triplet excited state and spin orbit coupling perturbation	**Chi Wei Yin**
P05-01	Highly disordering nanoporous frameworks of lanthanide- dicarboxylates for catalysis of CO_2 cycloaddition with epoxides	**Supaphorn Thammakan**
P06-01	Photochromic Dithienylethene-Containing Four-Coordinate Boron(III) Compounds with Spirocyclic Scaffold	**Tony Ho-Ching Fung**
P06-02	Coordination and Hydroboration of Ru(II)-Borate Complexes: Dihydridoborate vs. Bis(dihydridoborate)	**Sourav Gayen**
P06-03	Coordination Behavior of Iminophosphonamido Silylene toward Group 10 Transition Metals	**Norio Nakata**
P09-01	Synthesis and Allosteric Molecular Recognition of Cavitand-based Hemicarcerand	**Kentaro Harada**
P09-02	Self-assembly of platinum(Ⅱ) complexes possessing chiral triethylene glycol chains	**Masaya Yoshida**
P09-03	Hexapap: A Uniquely-Shaped Macrocycle Possessing Inwardly Assembled Metal Coordination Sites	**Takashi Nakamura**
P09-04	Isocyanide-Templated Assembly of Pillar[5]arene-based Pseudorotaxanes	**Korawit Khamphaijun**
P09-05	Stimuli-responsive and structure-adaptive three-dimensional gold(I) cluster cages constructed via “de-aurophilic” interaction strategy	**Liang-Liang Yan**
P09-06	Catalytic Hydrolysis of Phosphate Monoester by Supramolecular Phosphatases Functionalized with Lewis Acidic Moieties	**Hirokazu Okamoto**
P09-07	Heterometallic coordination compounds with thiolate amino acid as water splitting electrocatalysts	**Naoto Kuwamura**
P09-08	Selective Construction of Metallonanobelts by Template-Directed Self-Assembly Using Various Kinds of Molecules with Oligoether Chains	**Ryosuke Nakamura**
P09-09	Color changes of a bis(benzimidazole)-coordinated nickel dichlorido complex induced by the vapor of methanol or pyridine	**Tatsunari Murakami**
P09-10	Size-selective Guest Recognition and the Open/Close Control of Macrocyclic Cobalt(III) Dinuclear Metallohosts Having Aromatic Bridging Ligands	**Ryo Sudo**
P09-11	Cooperative motion of supramolecular cation composed of branched-chain alkylammonium and dibenzo[18]crown-6 in $[Ni(dmit)_2]$ salts	**Kazuya Kanamaru**

P09-12	Solvent-Mediated Photo-Reactivity of Diolefins in One-Dimensional Metal-Organic Frameworks	**Dong Hee Lee**
P09-13	Regioselective Syntheses of Calix[6]-crown-6 Isomers and Their Heavy Alkali Metal Complexes	**In-Hyeok Park**
P09-14	Crystal Structure and Thermal Expansion of a Monovalent $[Ni(dmit)_2]$ Salt with Supramolecular Cation Composed of 2,2'- oxybis(ethylaminium$^+$) and [18]crown-6	**Masato Haneda**
P09-15	Direct X-ray Observation of Stepwise Metal Exchange Reaction from Cd^{II} to Co^{II} in a 116-Nuclear Cage-of-Cage Complex	**Benny Wahyudianto**
P09-16	Regioselective Photoreaction of Supramolecular Isomers Triggered by Guest Exchange	**Jihye Oh**
P10-01	Theoretical Study on Electronic States and Magnetic Anisotropy of Dysprosium Complexes by Using Density Functional Theory	**Keigo Cho**
P10-02	Redox-Active Bridged Dinuclear Fe(III) Complexes to Target Multi-Step Spin Crossover	**Jett T. Janetzki**
P10-03	Modulation of Magnetic Properties in Organic–Inorganic Perovskite–Type Materials with Ferroelasticity by Metal Substitution	**Naoto Tsuchiya**
P10-04	Theoretical Study on Electronic Structure and Magnetic Anisotropy of Bathocuproine Cobalt(II) Complexes	**Masahiro Tsuda**
P10-05	Crystal structures and magnetic properties of two cyano-bridged Ni-W bimetal assembles	**Shintaro Akagi**
P10-06	Observation of the phonon-frequency shifts at magnetic phase transition on a MnW octacyanide molecule-based magnet	**Shuntaro NAGASHIMA**
P10-07	Syntheses, Crystal Structures, and Properties of Paramagnetic Multinuclear Assembles with Trans Pt–M–Pt Trinuclear Complexes	**Atsushi Takamori**
P10-08	Identifying Valence Tautomeric Cobalt-Dioxolene Complexes: A DFT Benchmark	**F. Zahra M. Zahir**
P10-09	Guest-Induced Multistep-to-One-Step Reversible Spin Transition with Enhanced Hysteresis in a 2D Hofmann Framework	**Dibya Jyoti Mondal**
P10-10	Structural control of Prussian blue analogues by alkali metal substitution	**Marina NISHIURA**
P10-11	Structures and magnetic properties of trinuclear cobalt complexes	**Ryuya Tokunaga**
P10-12	Fabrication of novel cyanide-bridged CoFe dinuclear complex	**Riku Fukushima**
P10-13	Synthesis and physical property of Cyano-bridged $[Co_2Fe_4]$ complexes	**Yutaka Hirai**
P10-14	Electronic pyroelectricity in valence tautomeric complexes	**Shu-Qi Wu**

P10-15	Construction of chiral spin crossover complexes by design of counter anion	**Ayumu Suzuhigashi**
P10-16	Observation of slow magnetic relaxation in π-radicals isolated in crystal structures by chemical modification	**Shohei Koyama**
P10-17	Structural and Statistical Investigation of Salen-type 3d-4f Single Molecule Magnets	**Yuji Takiguchi**
P10-18	Realizing Bifunctional Fluorescence Valence Tautomerism in a Series of Mononuclear Cobalt Compounds	**Yuqin Li**
P10-19	Multi-step spin-crossover in polymorphic Fe(III) compounds	**Yingying Wu**
P10-20	Crystal structures and magnetic properties of octacyano-bridged Cu-W bimetal assembles	**Masashi Okawa**
P10-21	Photochromic dithienylethenes for the construction of photoswitchable quantum nanomagnets	**Katarzyna Rogacz**
P10-22	Spin-lattice relaxations of a S=1/2 copper(II) ion incorporated into Keggin-type silicotungstate	**Toshiharu Ishizaki**
P10-23	Cation shrinking effect for a charge transfer in an iron mixed-valence complex with dithiooxalato bridging ligand	**Ryosuke Taniai**
P10-24	Significant Control on Quantum Tunneling of Magnetization (QTM) in Dysprosium(III) Single-Molecule Magnet via Symmetry Approach	**Pradip Kumar Sahu**
P13-01	Synthesis and Oxidation Catalysis of Difluoride-Containing Polyoxovanadates	**Yuji Kikukawa**
P13-02	Interaction of a Hydrophobic Cation and a Bowl-type Dodecavanadate Complexes	**Hiroya Iwai**
P13-03	Hydride-containing eight-electron superatoms determined by neutron diffraction	**Tzu-Hao Chiu**
P13-04	Paper No. Unsymmetric multidentate azine-based ligands coordinating to a nickel(II) ion	**Kennedy Mawunya Hayibor**
P13-05	*Ab initio* structural investigation of C_{60}/PAH co-adducts – new structures from powder diffraction data	**Akane Matsumoto**
P13-06	Luminescence switch based on the chemically induced reversibility of covalent bonds in Tb(III) complexes: An acid/base-driven system	**Chihiro Kachi-Terajima**
P13-07	Fabrication and phase-transition of WO3 thin films via molecular precursor method involving the tungsten complex of citric acid	**Taichi Murayama**
P13-08	Palladium is Alloyed with Hydride-Encapsulated Silver-Rich Nanoclusters Stabilized by Dithiolates	**Yu-Rong Ni**

Tuesday, August 9, 2022

Poster Session 2		
18:00-20:00		online
P07-01	Highly Active Constrained Aluminum Catalysts for the Synthesis of Cyclic Carbonates from Epoxide/CO_2 Coupling Reactions	**Nattiya Laiwattanapaisarn**
P07-02	Indium Chloride Complexes Supported by Constrained Schiff-Base Ligands for Cyclic Carbonate Synthesis	**Thitirat Piyawongsiri**
P07-03	Theoretical Study on Effect of Dispersion Correction in Interaction between p-Styrenesulfonate and 3,5-Bis(2-pyridyl)pyrazole-Bridged Binuclear Iridium-Copper Complex	**Yuta Hayashi**
P07-04	Ru(III)-Ru(IV) complexes with the doubly oxido-bridged core	**Tomoyo Misawa-Suzuki**
P07-05	Photocatalytic CO_2 Reduction Using Heteroleptic Cu(I) bipyridine Complexes as a Photosensitizer	**Hiroyuki Takeda**
P07-06	Catalytic Water Oxidation by a Doubly N-Confused Hexaphyrin Dinuclear Cobalt Complex	**Takashi Nakazono**
P07-07	Photocatalytic CO_2 Reduction on Rhenium Complexes Connected to a Zinc Porphyrin: Significant Effect of the Connected Positions	**Yuto Suzuki**
P07-08	Chromatography separation of hydrogen isotopes at ambient temperature using dihydrogen complexes	**Tamon Yamauchi**
P07-09	Photoelectrochemical water oxidation by TiO_2 photoanode modified with molecular ruthenium photosensitizer and catalyst	**Xin Yan**
P07-10	Electrochemical Hydrogen Evolution from Water Catalyzed by a Co-NHC Complex	**Masanori Kan**
P07-11	Comparing the water oxidation characteristics of cobalt polymolybdates and Ru-bda catalysts	**Natsuki Taira**
P07-12	Photocatalysis of CO_2 reduction by diazapyridinophane complexes of Fe, Co, and Ni	**Yuto Sakaguchi**
P07-13	Photocatalytic water oxidation by carbon nitride modified with Rubda-type water oxidation catalyst	**Yuki Tomita**
P07-14	Light-Induced Electron Transfer/Phase Migration of a Redox Mediator for the Photocatalytic C–C Coupling in a Biphasic Solution	**Ren Itagaki**
P07-15	Controlling the photofunctionality of polyanionic heteroleptic copper(I) photosensitizer using the ionic interactions with polycationic alkylammonium ions in aqueous media	**Fumika Sueyoshi**
P07-16	Acceptorless Dehydrogenation by the Combinational Use of Semiconductor Photocatalyst and Metal Complex	**Kana Aitsuki**

P07-17	Syntheses and Structures of Vanadium Dinitrogen Complexes Supported with Triamidoamine Ligands with a Series of Sterically Hindered Substituents	**Yoshiaki Kokubo**
P07-18	Cu modified TiO_2 catalyst for electrochemical reduction of carbon dioxide to methane	**Akihiko Anzai**
P07-19	Observation of N_2 and H_2 adsorbed on Ru catalysts by in-situ modulation excitation infrared spectroscopy	**Tomohiro Noguchi**
P07-20	Hydrogen peroxide production over Zr-based metal-organic framework photocatalyst with missing-linker defects	**Yoshifumi Kondo**
P07-21	Reactions of an anionic diniobium complex bearing a bridging dinitrogen ligand in a side–on end–on fashion	**Naofumi Suzuki**
P08-01	Removal of toxic metals from polymetallic concentrate and sulfation roasting	**Narangarav Tumun-Ulzii**
P11-01	A Tip-to-Middle Anisotropic MOF-on-MOF Growth with a Structural Adjustment	**Gihyun Lee**
P11-02	Synthesis of Aromatic Ladder Polymer Utilizing Coordination Nanospaces	**Takumi Miura**
P11-03	Structural Characterization and Water Adsorption of Two Cu(II) Supramolecular Isomers Constructed by 4,4'-dipyridyl disulfide (dpds) and 4,5-dihydroxycyclopent-4-ene-1,2,3-trione (Na2C5O5) Ligands	**Chih-Chieh Wang**
P11-04	Structural Characterization of A Series of Cd(II) Coordination Polymers Constructed by tpsmb and Multi-carboxylated Ligands	**Hsaio-Hsun Wang**
P11-05	Synthesis and Structural Characterization of A Series of Coordination Polymers Constructed by 1,2,4,5-tetrakis(4-pyridylsulfanylmethylbenzene) (TET) and Anionic Ligands	**Tzu-Ao Wang**
P11-06	Synthesis, Structural Characterization and Properties of Co(II) Coordination Polymers with 1,3,5-tris(4-pyridylsulfanylmethyl)2,4,6-trimethyl-Benzene (tpsmb) and Oxygen-based Ligands	**Han-Fei Lin**
P11-07	Ferric metal-organic framework as a nanoreactor for synergistic ferroptosis, starvation, and drug anticancer therapy	**Ping-Hsuan Wu**
P11-08	Quinone-based metal–organic framework for CO_2 capture	**Yao-Ting Wang**
P11-09	Hydroxy- and fluorine-functionalized metal–organic frameworks for gas separations	**Kuan Hao-Ping**
P11-10	Copper-doped ZIF-8: Antioxidant nanozyme with coordination sites similar to the active site of Cu,Zn-SOD	**Hiroki Nakahara**
P11-11	Electrode Performances of Metal-Organic Frameworks with Azo Containing Ligands	**Ryo Matushima**
P11-12	A Thiadiazole-Functionalized Zn(II)-Based Luminescent Coordination Polymer with Seven-Fold Interweaved Herringbone Nets Showing Solvent-Responsive Fluorescence Properties and Discriminative Detection of Ethylenediamine	**Po-Min Chuang**

P11-13	Reversible Ion-Exchange Ability of a Novel MOF Consisting of Zirconium Mellitate toward Selective Ammonium Recovery	**Genki Hatakeyama**
P11-14	Synthesis, Structure, and Proton Conductivity of Isostructural Oxalate-bridged Coordination Polymers for Fuel Cells	**Marlon T. Conato**
P11-15	Coexistence between negative thermal expansion and spin-crossover from new 2-D Hofmann like coordination polymer $Fe(L)_2[M(CN)_4]$	**Ryota KOSUGE**
P11-16	Synthesis, crystal structure, and photochromic behavior of a Cu(II) coordination polymer with diindolylmethane derivative	**Chaowat Kaenpracha**
P11-17	Bromine Vapor Induced Continuous p- to n-Type Conversion of Semiconductive Metal-Organic Framework $Cu[Cu(pdt)_2]$	**Shraddha Gupta**
P11-18	Hydrogen Isotope Separation in Hofmann-type Metal-Organic Frameworks with High-Density Open Metal Sites	**Junsu Ha**
P11-19	Diamine-Appended MOF-Based Adsorbents with Long-Term Stability under Humid Conditions	**Jong Hyeak Choe**
P11-20	Understanding the structural transformation of 2-dimensional Cu(II)- to Cu(I)-based metal-organic framework	**Jonghoon Park**
P11-21	Synthesis of a Porous Coordination Polymer with Dithiocarbamate Derivative as a Ligand, and Application to a Lithium ion Secondary Battery	**Tomoki Nishiyama**
P11-22	Fabrication of 3D Hofmann-type thin film by casting method	**Qiyuan Zhang**
P11-23	Sequential Perturbation for Systematic Tuning of Metal–Organic Framework Supercooled Liquid and Glasses	**Ming-Hua Zeng**
P11-24	Single-Molecule Diode-Typed Metal-Organic Framework for Confined Photocatalysis and Electrocatalysis with Added Value	**Tiexin Zhang**
P12-01	Crystal Lattice Design of H_2O-Tolerant n-type Semiconducting Anionic Naphthalenediimide Salts	**Tomoyuki Akutagawa**
P12-02	Response Of Complex Dielectric Constant On Linkage Isomerization Of Co(III) Nitrite Complex	**Shinkiro Chinen**
P12-03	Preparation and Structure of Halide Solid Solution of Hexamethylenetetramine-based Metal-free Perovskite	**Hiroki Honda**
P12-04	Theoretical Study of Substituent Effect on Frontier Orbital Energies of Tris(2,2'-bipyridine) Ruthenium(II) Complex Using Multivariate Analysis	**Kazuaki Tokuyama**
P12-05	Controlled construction of multinuclear copper cores within ring-shaped polyoxometalate by ligand-protecting strategy	**Yoshihiro Koizumi**
P12-06	Introduction of Materials Informatics Technique to In Silico Design of Functional Molecular Materials: Case Study in Frontier Energies of $[Ru(bpy)_3]^{2+}$	**Yasutaka Kitagawa**
P12-07	Theoretical Study on Electron Conductivity of Paddle-Wheel Type Binuclear Complexes for Design Guideline of Single-Molecule Transistors	**Naoka Amamizu**

P12-08	Theoretical Study on Frontier Orbitals of Paddle-Wheel Type Dinuclear Ruthenium(II,II) Complexes Bearing Polycyclic Aromatic Hydrocarbons in Bridging Ligands	**Keisuke Sasaki**
P12-09	Mixed Matrix Membranes based on SBS Triblock Copolymer with Ni-MOF-74 Filler for a Highly Selective H_2/CH_4 and CO_2/CH_4 Separation	**Jeesica Hermayanti Pratama**
P12-10	Molecular design of efficient yellow- to red-emissive alkynylgold(III) complexes for the realization of thermally activated delayed fluorescence (TADF) and their applications in solution-processed organic light-emitting devices	**Cathay Chai Au-Yeung**
P12-11	Aggregation induced emission enhancement on a specific surface of trans-bis(iminomethylpyrrolato)platinum(II) complex bearing vaulted structure	**Shufang Huang**
P12-12	Comparison of the thermal behaviour of salen type complexes with one or two substituent(s) at the ethylene diamine moiety	**Kazuo Miyamura**
P12-13	Tailoring CeO_2-based heterostructure through pyrolysis coordination-tunable bimetallic NiCe-MOF toward enhancing oxygen evolution reaction	**Haiyan An**
P12-14	Electron Storage Performances of Hybrid Materials Consisting of Polyoxometalates and Carbon Nanohorns	**Katsuhiro Wakamatsu**
P12-15	Synthesis of amino-functionalized mesoporous SBA-15 nanoparticles with excellent adsorption performance	**Tzong-Horng Liou**
P12-16	Solvent Vapor-Induced Reversible Polarity Switching	**Fumiya Kobayashi**
P12-17	Charge storage of redox-active self-assembled monolayers toward organic transistor applications	**Keishiro Tahara**
P12-18	Mixed valency in $(Sm_1\text{-}xCa_x)_{2.75}C_{60}$	**Naoya Yoshikane**
P12-19	Development of Poly(2,2'-bipyridyl) Ligands for Cancer Therapy Whose Anti-cancer Activity is Controlled by Complexation with Metal Cations.	**Tomohiro Tanaka**
P12-20	Vapoluminescence of platinum complexes with bis- triethylsilylethynyl-phenanthroline and several arylethynyl ligands	**Michito Shiotsuka**
P12-21	Synthesis and luminescence properties of silver(I) halogenido coordination polymers bridged by pyrazine-related ligands	**Kiyoshi Tsuge**
P12-22	Photo-Controlled Gelation of Ionic Liquids Using Gelator-Coordinated Ruthenium Complexes	**Ryo Sumitani**
P12-23	Switching of the Emitting States of Pt(II) Complexes by Time- resolved EPR and Optical Spectroscopy	**Motoko S. Asano**
P12-24	Porous Organic Polymer-based Composites for Photocatalytic Sulfur Mustard Simulant Degradation under Ambient Conditions	**Hyojin Kim**
P12-25	Synthesis of Aluminosilicate from a Single-Source Spiro-7 type Molecular Precursor	**Akira Imaizumi**

P12-26	Structure and phase transition behavior of solid solutions composed of metal-free perovskite-type compounds	**Jumpei Moriguchi**
P12-27	One-dimensional Coordination Polymer with Supramolecular Interactions as Cathode Material for High Performance Sodium-Ion Batteries	**Yi-An Lo**
P12-28	Terahertz Wave Absorption Material Showing Charge-Transfer Phase Transition	**Yuuki Mineo**
P12-29	Bistability at room temperature in Cyanido-bridged Co-W assembly	**Kazuki Nakamura**
P12-30	Kinematic Study of Molecular Motions in Crystal; Force Conversion from Thermal Linear Expansion of Metal Ions to Circular Rotation of Ligands	**Ryo Tsunashima (canceled)**
P12-31	Ambient-temperature formation of antiviral Cu films on a glass plate by reduction of Cu(II) complex in aqueous solution	**Hsiang-Jung Wu**
P12-32	Antibacterial Cu_2O thin films of transparent and well-adhered on a polycarbonate plate; formation by UV-irradiation onto Cu(II) complex film	**Kyoko Kumagai**
P12-33	Electrical and Magnetic Properties of Paramagnetic TTF-metal complexes	**Daiki Tauchi**
P12-34	Synthesis of gallium/platinum alloy sub-nanoparticles using dendrimers	**Mariko Uchiyama**
P12-35	*N*-Heterocyclic Carbene Metal Complexes for Designing Molecular Rotation in Crystals with Photofunctions	**Mingoo Jin**
P12-36	Functional molecule-based materials consisting of cyanido-bridged metal complexes	**Shin-ichi Ohkoshi**
P12-37	Tuning of the Magnetoresistance Effect by Modulating the Spin State of Axially Ligated Manganese Phthalocyanine Complex	**Kosuke Mine**

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