



# The 1<sup>st</sup> Symposium of Metal-Carbene Consortium

T6, Meng Wah Complex  
P1, CYM Chemistry Building

1 December, 2016  
2 December, 2016



Organized by

State Key Laboratory of Synthetic Chemistry, Department of Chemistry, The University of Hong Kong

# The 1<sup>st</sup> Symposium of Metal-Carbene Consortium

1–2 December, 2016

## Scientific Program

### Thursday, 1 December 2016

Venue: Lecture theater T6, Meng Wah Complex

10:45 – 11:00 Opening Remarks: Prof. Chi-Ming Che (HKU)

**Session 1 (11:00 – 12:30)** Chair: Prof. Chi-Ming Che (HKU)

11:00 – 11:30 Prof. Michael P. Doyle (UTSA)  
*Asymmetric Cycloaddition Reactions with Metal Carbenes*

11:30 – 12:00 Prof. Jianbo Wang (PKU)  
*Transition Metal Catalyzed Cross-Couplings with Carbene Precursors*

12:00 – 12:30 Prof. Pauline Chiu (HKU)  
*Synthetic Studies towards Welwistatin Based on a Rhodium Carbene Rearrangement Reaction*

12:30 – 14:00 Lunch Break

**Session 2 (14:00 – 15:00)** Chair: Dr. Man-Kin Wong (PolyU)

14:00 – 14:30 Prof. Xiaoming Feng (Sichuan U)  
*Asymmetric X-H Bonds Insertion with  $\alpha$ -Diazoesters*

14:30 – 15:00 Prof. Michael Fuk-Yee Kwong (PolyU)  
*Palladium-Catalyzed Three-Component Synthesis of Phenanthrene Derivatives: A Combination of C-H bond Activation, Decarboxylation and retro-Diels-Alder Strategy*

15:00 – 15:30 Coffee Break

**Session 3 (15:30 – 17:00)** Chair: Prof. Pauline Chiu (HKU)

15:30 – 16:00 Prof. Guy Bertrand (UCSD)  
*Coordination Chemistry and Catalysis with Novel Types of Carbenes*

16:00 – 16:30 Dr. Cong-Ying Zhou (HKU)  
*Transition Metal Porphyrin Catalyzed Alkylcarbene Transfer Reactions*

16:30 – 17:00 Prof. Vivian Wing-Wah Yam (HKU)  
*Versatile Chromophores and Excited States - From Fundamentals to Supramolecular Assembly and Photofunctions*

Close of the First Day

# The 1<sup>st</sup> Symposium of Metal-Carbene Consortium

1–2 December, 2016

## Friday, 2 December 2016

**Venue: Lecture theatre P1, CYM Chemistry Building**

**Session 4 (10:30 – 12:00)** Chair: Prof. Michael Fuk-Yee Kwong (PolyU)

10:30 – 11:00 Prof. Huw M. L. Davies (Emory)

*Catalyst-Controlled Selective Functionalization of Unactivated C-H Bonds*

11:00 – 11:30 Prof. Zuowei Xie (CUHK)

*Stabilization of Reactive Boron Compounds by Carbenes: Synthesis, Structure and Reactivity*

11:30 – 12:00 Prof. Chi-Ming Che (HKU)

*Anti-Cancer Metal-NHC Complexes*

12:00 – 14:00 Lunch Break

**Session 5 (14:00 – 15:40)** Chair: Dr. Cong-Ying Zhou (HKU)

14:00 – 14:30 Dr. Michael Wing-Yiu Yu (PolyU)

*Cascade Functionalization on Carbenoid Carbon. Catalytic Cross Coupling via Carbene Migratory Insertion*

14:30 – 15:00 Dr. Sharon Lai-Fung Chan (PolyU)

*Synthesis and Application of Ruthenium Complexes supported by Fischer-type Carbene Chromophore*

15:00 – 15:20 Mr. Haixu Wang (HKU)

*Cobalt Porphyrin-Catalyzed Intramolecular Buchner Reaction/Arene Cyclopropanation of Alkylcarbene*

15:20 – 15:40 Mr. Jieren Deng (PolyU)

*Combining Gold, Silver and Visible Light Mediated Catalysis for Bioconjugation and Molecular Imaging*

15:40 – 16:10 Coffee Break

**Session 6 (16:10 – 17:10)** Chair: Dr. Sharon Lai-Fung Chan (PolyU)

16:10 – 16:30 Ms. Hairong Lyu (CUHK)

*Transition Metal Catalyzed Regioselective B-H Activation and Functionalization of o-Carboranes*

16:30 – 16:50 Mr. Chun-Kit Li (PolyU)

*Catalytic C-H Bond Functionalization for C-C and C-N Bond Formation. A Expedient Approach for Anthranilic Acids Synthesis*

16:50 – 17:10 Dr. Taotao Zou (HKU)

*Gold(III), Gold(I) and Platinum(II) Containing N-Heterocyclic Carbene Ligands: Anti-Cancer Agents and Luminescent Diagnostic Agents*

17:10 – 17:20 Closing Remarks: Prof. Michael Fuk-Yee Kwong (PolyU)

Close of the Symposium