



*The Chinese University of Hong Kong*  
*Department of Chemistry*  
*Research Seminar Series*

**Speaker:** Prof. Xumu Zhang  
College of Chemistry, Wuhan University  
Department of Chemistry &  
Department of Pharmaceutical Chemistry  
Rutgers, the State University of New Jersey

**Title:** Recent advances in selective hydrogenation  
and hydroformylation

**Date:** May 21, 2014 (Wednesday)

**Time:** 2:30 p.m.

**Venue:** L3  
Science Centre





*The Chinese University of Hong Kong*  
*Department of Chemistry*  
*Research Seminar Series*

**Speaker:** (1) Prof. Ying-Hong Lu  
(2) Prof. Min Zhou

Department of Chemistry  
College of Chemical Engineering  
Nanjing University of Science and Technology

**Title:** (1) Synthetic biology in the Plastid  
(2) Mass Spectrometry of Membrane Complexes  
– Effects of Lipids and Nucleotide Bindings

**Date:** May 22, 2014 (Thursday)

**Time:** 2:30 p.m.

**Venue:** L3  
Science Centre





*The Chinese University of Hong Kong*  
*Department of Chemistry*  
*Research Seminar Series*

**Speaker:** Prof. Yoshito Tobe  
Department of Materials Engineering Science  
Osaka University

**Title:** Dehydro[12]annulene-Based Building Blocks in Two-Dimensional Self-Assembly on Surfaces via van der Waals Interactions

<< Abstract >>

*On-surface self-assembly of organic molecules has attracted a great deal of interest in view of potential applications in electronics and catalysis. Through intensive STM observations, we revealed that porous networks were formed by self-assembly of alkoxy-substituted dehydro[12]annulenes (DBAs) at the liquid/solid interface. DBAs turned out to exhibit high level of adaptability not only for (i) modification of the pore size, (ii) pore functionalization for selective binding of guest molecules, and (iii) installation of reaction sites for covalent bonds between themselves leading to 2D polymers and with the substrate such as graphene, but also for (iv) generation of chirality on surfaces at single molecular as well as supramolecular levels and (v) formation of superlattice structures on surfaces.*

**Date:** May 23, 2014 (Friday)

**Time:** 2:30 p.m.

**Venue:** L3, Science Centre



ALL ARE WELCOME

Contact Person:  
Prof. H.F. Chow



*The Chinese University of Hong Kong*  
*Department of Chemistry*  
*Research Seminar Series*

- Speaker:** Prof. Yeung Ying Yeung  
Department of Chemistry  
National University of Singapore
- Title:** Recent Advances in Bromination Reactions
- Date:** May 26, 2014 (Monday)
- Time:** 9:30 a.m.
- Venue:** L2, Science Centre

< Abstract >

Halogenation is an important class of organic transformation. Over the past decades, reactions including cohalogenation, haloetherification, halolactonization and polyene cyclization are well documented. These reactions have been applied in many natural products and drug molecules synthesis. One of the research focuses in our research group is on the development of novel bromination reactions using N-bromosuccinimide (NBS), an easy handle and inexpensive halogen source. In this lecture, our recent progress in the development of asymmetric and highly diastereoselective bromination reactions will be presented.

Reference:

(a) Zhou, L.; Tan, C. K.; Jiang, X.; Chen, F.; Yeung, Y.-Y. *J. Am. Chem. Soc.* 2010, 132, 15474. (b) Zhou, L.; Tan, C. K.; Zhou, J.; Yeung, Y.-Y. *J. Am. Chem. Soc.* 2010, 132, 10245. (c) Zhou, L.; Chen, J.; Tan, C. K.; Yeung, Y.-Y. *J. Am. Chem. Soc.* 2011, 133, 9164. (d) Jiang, X.; Tan, C. K.; Zhou, L.; Yeung, Y.-Y. *Angew. Chem. Int. Ed.* 2012, 51, 7771. (e) Cheng, Y. A.; Chen, T.; Tan, C. K.; Heng, J. J.; Yeung, Y.-Y. *J. Am. Chem. Soc.* 2012, 134, 16492. (f) Chen, F.; Tan, C. K.; Yeung, Y.-Y. *J. Am. Chem. Soc.* 2013, 135, 1232. (g) Zhao, Y.; Jiang, X.; Yeung, Y.-Y. *Angew. Chem. Int. Ed.* 2013, 52, 8597. (h) Tay, D. W.; Leung, G. Y. C.; Yeung, Y.-Y. *Angew. Chem. Int. Ed.* 2014, 53, 5161. (i) Ke Z., Tan C. K., Chen F., Yeung, Y.-Y. *J. Am. Chem. Soc.*, 2014, 136, 5627.

Biography:

Dr. Ying-Yeung YEUNG received his B.Sc. (2001) at The Chinese University of Hong Kong. He continued his graduate research in the same university under the supervision of Prof. Tony K. M. Shing. After four years research dedicated on natural product synthesis, Dr. Yeung moved to USA to conduct postdoctoral research with Prof. E. J. Corey at Harvard University (2005-2008). In 2008, he joined National University of Singapore, Department of Chemistry as Assistant Professor (2008-2013) and Associate Professor (2014-now). He is also the Assistant Head in the department since 2014. His research interests include asymmetric catalysis and methodology development.



*The Chinese University of Hong Kong*  
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*Research Seminar Series*

- Speaker:** Prof. Yeung Ying Yeung  
Department of Chemistry  
National University of Singapore
- Title:** Nucleophilic Substitution at Carbonyls
- Date:** May 27, 2014 (Tuesday)
- Time:** 9:30 a.m.
- Venue:** L2, Science Centre

< Abstract >

In this lecture, nucleophilic substitution of carbonyl compounds, a fundamental organic transformation, will be discussed. The discussion will cover the general aspects, carbonyl compounds' reactivity, and reaction mechanism of the substitution under basic conditions. A brief description on the reactions under acidic conditions will also be presented.

Reference:

Organic Chemistry, Eds: Clayden, Greeves, Warren and Wothers, Oxford University Press, 2001.

Biography:

Dr. Ying-Yeung YEUNG received his B.Sc. (2001) at The Chinese University of Hong Kong. He continued his graduate research in the same university under the supervision of Prof. Tony K. M. Shing. After four years research dedicated on natural product synthesis, Dr. Yeung moved to USA to conduct postdoctoral research with Prof. E. J. Corey at Harvard University (2005-2008). In 2008, he joined National University of Singapore, Department of Chemistry as Assistant Professor (2008-2013) and Associate Professor (2014-now). He is also the Assistant Head in the department since 2014. His research interests include asymmetric catalysis and methodology development.



