

重庆大学药学院

学术报告第一百二十七讲

报告题目：聚酮天然产物合成的策略和方法

报告人：洪然 研究员（中国科学院上海有机化学研究所）

时 间：2018年4月26日（周四）15:00

地 点：重庆大学药学院学术报告厅

报告人简介：

洪然 博士，中国科学院上海有机化学研究所，研究员



教育和工作经历：

四川大学（本科，物理化学，1992–1996）

中科院上海有机所（理学博士，1996–2001，导师：林国强 研究员）

博士后 (University of Houston, 2001–2002, Prof. Jay K. Kochi)

博士后 (Brandeis University, 2002–2007, Prof. Li Deng)

研究员，课题组长（中科院上海有机所, 2007–至今）

研究领域：天然产物仿生合成、酶催化和不对称合成方法。致力于将生物合成的策略应用于反应方法学的发展和具有重要生理活性的复杂天然产物全合成研究。

获得荣誉：中国科学院“百人计划”(2008), 上海市青年科技启明星 (2008), 多次获得 ACP Lectureship Award (2015-台湾, 2016-日本, 2016-马来西亚, 2017-新加坡), 中国化学会“维善天然产物合成化学奖”(2017年) 和 Thieme Chemistry Journal Award (2018)。

代表性学术论文：

1. Changmin Xie, Jisheng Luo, Yuping Zhang, Sha-Hua Huang, Lili Zhu, Ran Hong*, "Catalytic Aza-Wacker Annulation: Tuning Mechanism by the Activation Mode of Amide and Enantioselective Syntheses of Melinonine-E and Strychnoxanthine" *Org. Lett.* **2018**, 20, 2386–2390.
2. Kuan Zheng, Defeng Shen, Ran Hong*, "Biomimetic Synthesis of Lankacidin Antibiotics" *J. Am. Chem. Soc.* **2017**, 139, 12939–12942.
3. Li Zhai, Xuechao Tian, Chao Wang, Qi Cui, Wenhua Li, Sha-Hua Huang*, Zhi-Xiang Yu*, Ran Hong*, "Construction of Morphan Derivatives by Nitroso-Ene Cyclization: Mechanistic Insight and Total Synthesis of (±)-Kopsone" *Angew. Chem., Int. Ed.* **2017**, 56, 11599–11603.

4. Lin Yang, Zuming Lin, Sha-Hua Huang*, Ran Hong*, "Stereodivergent Synthesis of Functionalized Tetrahydropyrans Accelerated by Mechanism-Based Allylboration and Bioinspired oxa-Michael Cyclization" *Angew. Chem., Int. Ed.* **2016**, *55*, 6280–6284.
5. Hao Liu, Jing Yu, Xinyu Li, Rui Yan, Ji-Chang Xiao, Ran Hong*, "Stereoselectivity in *N*-Iminium Ion Cyclization: Development of an Efficient Synthesis of (\pm)-Cephalotaxine" *Org. Lett.* **2015**, *17*, 4444–4447.
6. Jie Ouyang, Rui Yan, Xianwei Mi, Ran Hong*, "Enantioselective Total Synthesis of (–)-Hosieine A" *Angew. Chem., Int. Ed.* **2015**, *54*, 10940–10943.
7. Lin Yang, Guoli He, Ruifeng Yin, Lili Zhu, Xiaoxia Wang, Ran Hong*, "Synthesis of Polyketide Stereoarrays Enabled by A Traceless Oxonia–Cope Rearrangement" *Angew. Chem., Int. Ed.* **2014**, *53*, 11600–11604.
8. Lili Zhu, Jisheng Luo, Ran Hong*, "Total Synthesis of (\pm)-Cafestol: A Late-Stage Construction of the Furan Ring Inspired by A Biosynthesis Strategy" *Org. Lett.* **2014**, *16*, 2162–2165.
9. Yan Wang, Kuan Zheng, Ran Hong*, "Chiral Silver Phosphate-catalyzed Cycloisomeric Kinetic Resolution of α -Allenic Alcohols" *J. Am. Chem. Soc.* **2012**, *134*, 4096–4099.
10. Yan Wang, Lili Zhu, Yuying Zhang, Ran Hong*, "Bioinspired and Concise Synthesis of (\pm)-Stemoamide" *Angew. Chem., Int. Ed.* **2011**, *50*, 2787–2790.