

# UniCat Colloquium

## PROF. DR. AIWEN LEI

College of Chemistry and Molecular Sciences, Wuhan University, China

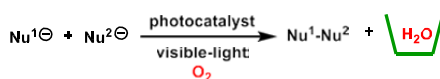
### *Green Oxidative Cross-Coupling using Visible-light: From O<sub>2</sub> to Oxidant-free*

Comparing with classic transition-metal catalyzed cross-coupling reactions, the oxidative cross-coupling reactions between two nucleophiles provides a more direct and powerful tool for the development of green and efficient bond-forming methodologies, which can avoid the separate steps of pre-functionalization and de-functionalization.

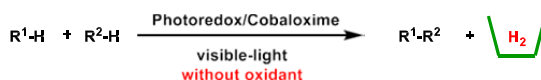
With respect to the development of new sustainable and green synthetic methods, using mild oxidant in the oxidative cross-coupling reactions has become an important goal in the field of green synthetic chemistry.

Using visible-light photocatalysis, the lecture will show that we have successfully developed several green oxidative cross-coupling reactions of hydrocarbons with O<sub>2</sub> as the terminal oxidant or through the liberation of H<sub>2</sub>.

#### Photocatalyzed Green Oxidative Coupling: Dioxygen Activation



#### Photoredox/Cobaloxime Dual Catalytic System



**Wednesday, February 08, 2017 at 5:15 PM**

TU Berlin, Institute of Chemistry  
Straße des 17. Juni 115, 10623 Berlin

Building C, Lecture Hall **C 264**

**Prof. Dr. Oestreich (TUB)**  
Organizer

Coffee and cake will be served 30 minutes before the lecture. Guests are cordially invited to attend!  
Prof. Dr. Matthias Driess - Chair of the Cluster of Excellence UniCat - [www.unicat.tu-berlin.de](http://www.unicat.tu-berlin.de)