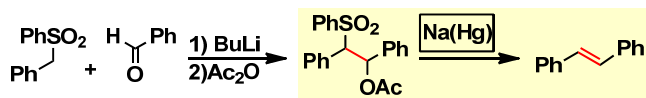


ピレン誘導体を光触媒に用いた還元的脱スルホニル化反応

(岡山理大工) 渡部 光・奥田 靖浩・折田 明浩



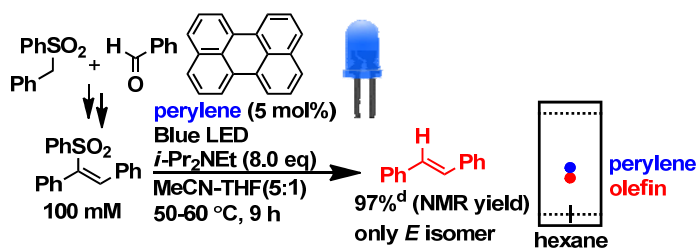
1. Julia Olefination



Julia, M.; Paris, J. M. *Tetrahedron Lett.* 1973, 4833

2. Perylene-Photocatalyzed

Alternative Julia Olefination

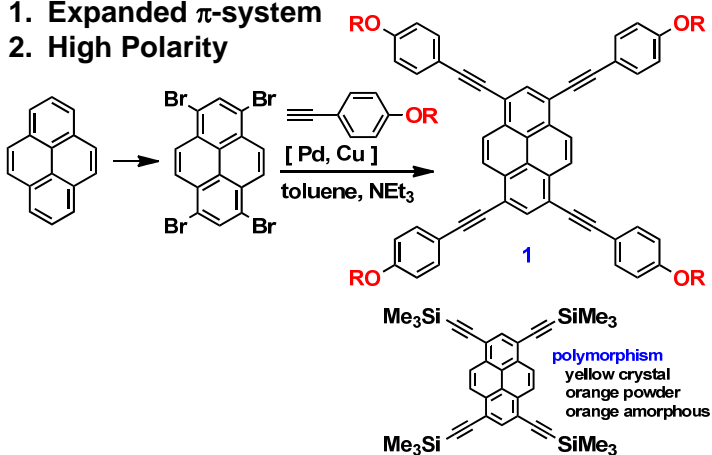


Orita et al, *Chem. Lett.* 2020, 49, 409.

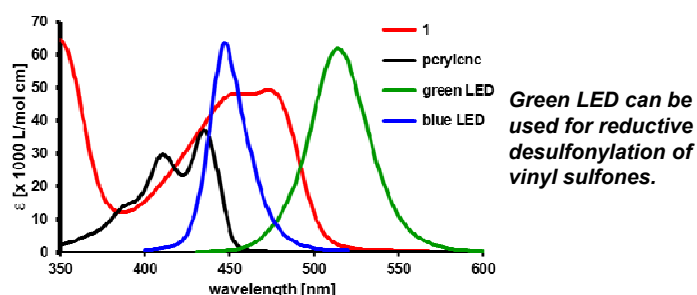
This Work

Easily Separable Photocatalyst

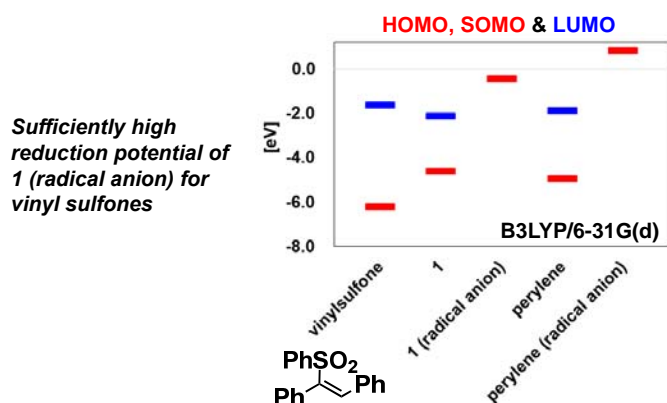
1. Expanded π -system
2. High Polarity



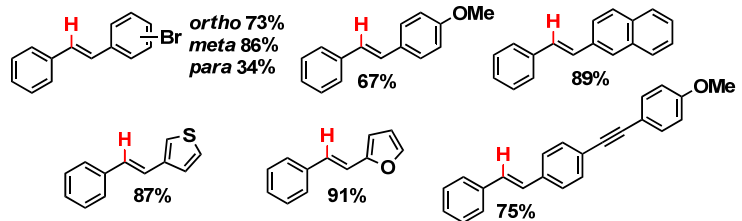
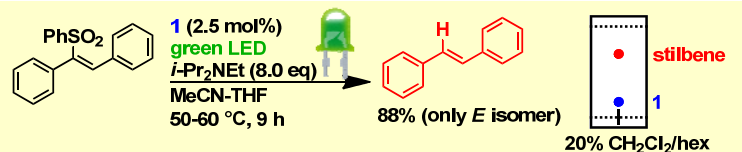
Orita et al, *Organometallics* 2017, 36, 3, 556.



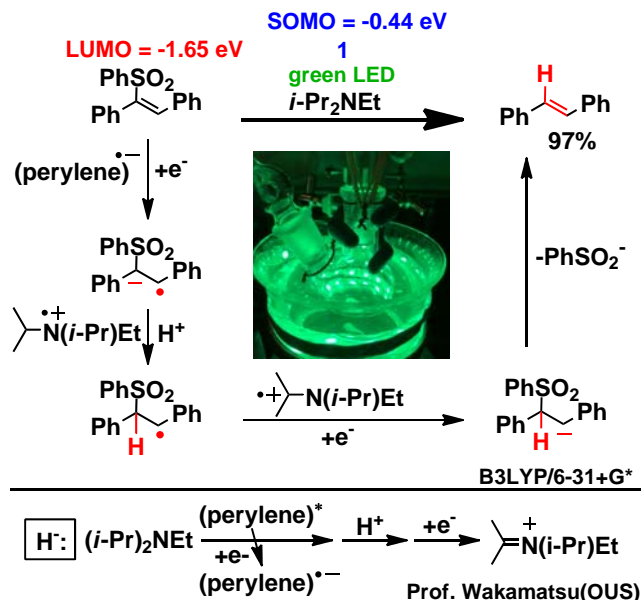
UV-vis absorption spectra of **1** and perylene in CHCl_3 and emission spectra of blue and green LEDs.



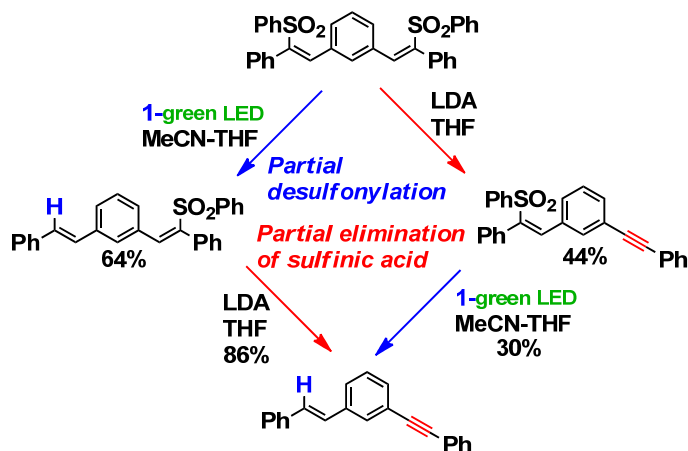
Results



Plausible Mechanism



Synthesis of π -Expanded Compounds



Acknowledgement

Acknowledgment: This work was supported by a Grant-in-Aid for Scientific Research on Innovative Areas "Middle Molecular Strategy: Creation of Higher Bio-functional Molecules by Integrated Synthesis" (18H04430) and Grant-in-Aid for Scientific Research (C) (15K05440 and 18K05134), Grant for Promotion of OUS Research Projects and Okayama Prefecture Industrial Promotion Foundation.