

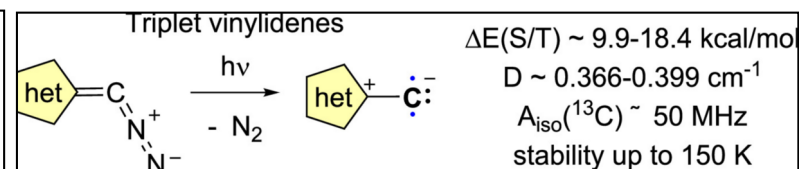
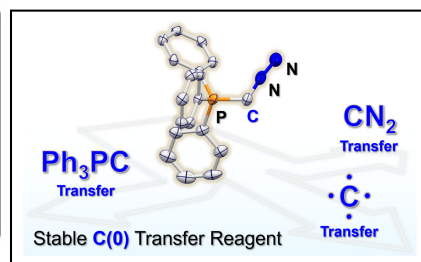
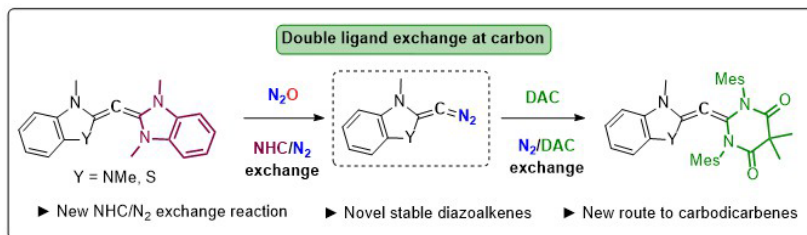
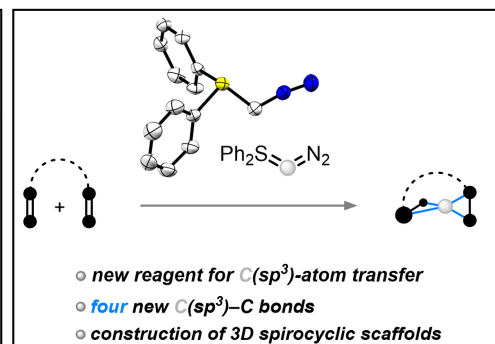
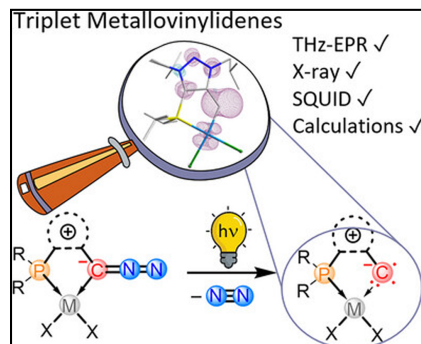
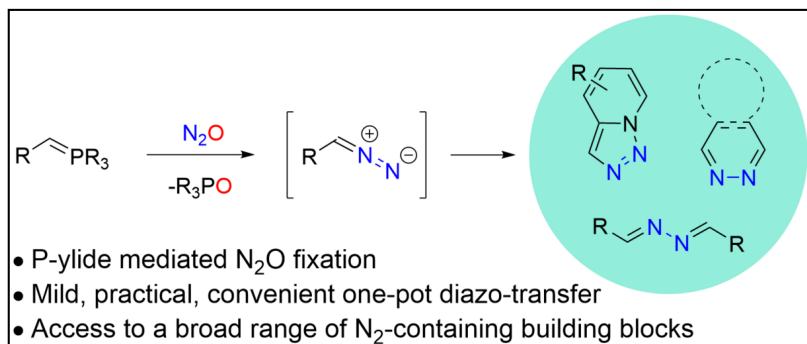
第98回有機元素化学セミナー

The 98th Organoelement Seminar Series

Prof. Max M. Hansmann

(Technische Universität Dortmund, Germany)

"Cumulenetic diazo compounds: From reactive intermediates to novel reagents for C-atom transfer"



The direct transfer of carbon atoms to organic substrates, enabling the formation of new carbon-carbon bonds, is a highly valuable synthetic transformation, as it permits the efficient construction and modification of carbon frameworks. Despite its potential, general and operationally safe precursors for single-carbon incorporation remain scarce. Recently, our group has developed a class of reagents capable of mediating C-atom transfer, based on ylides with the structures R_3PCN_2 and R_2SCN_2 . These reagents enable the direct introduction of $C(sp)$ and $C(sp^3)$ -atoms to afford alkynes, butatrienes, and even 3D structures such as (bridged) spiropentanes. Moreover, this concept has been extended to reactive fragments such as CN_2 and CCO moieties, thereby providing access to pyrazoles and bicyclic scaffolds incorporating cyclopropane rings.

11:00-12:30, June 11 (Thu), 2026@Room M-123 (1st floor, main building, Institute of Science Tokyo)
Host: Makoto Yamashita (Sch. of Sci.) (yamashita.m.6dbb@m.isct.ac.jp)