



化学研究所

化学研究所・附属元素科学国際研究センター 有機分子変換化学セミナー



日時：2024年 3月 14日 16:00-17:15, 場所：M442C号室

触媒的ヒドロシリル化反応の反応機構：実験結果の謎を解く

The catalytic hydrosilylation of unsaturated molecules: Solving the discrepancy between the proposed reaction mechanisms and experimental results

九州大学名誉教授・九州大学グリーンテクノロジー研究教育センター特任教授

Specially-Appointed Professor and Professor Emeritus, Kyushu University

永島 英夫 先生 【*Hideo Nagashima, Prof. Ph. D.*】



Transition metal-catalyzed hydrosilylation is an essential technology for the industrial production of silicones, and is utilized as a reduction reaction in synthetic organic chemistry. The Chalk-Harrod and modified Chalk-Harrod cycles are widely accepted in organometallic textbooks as mechanisms for the hydrosilylation reactions, however, they are not consistent in explaining several unique experimental results which we accumulated over the years. In this presentation is described how the DFT calculations resolve these discrepancies.

連絡先：中村正治（内線3180）