ICIQ

Institut Català d'Investigació Química

2011

Seminar Program

Av. Països Catalans, 16, Campus Sescelades (St. Pere i St. Pau), Tarragona. Tel. 977920200

"Allylic Silanes and Boronates by Catalytic C-H and C-OH Functionalization"

Prof. Dr. Kálman J. Szabó

Department of Organic Chemistry, Stockholm University (Sweden)

Monday March 7th, 2011. ICIQ Auditorium, 12 p.m.

Kálman Szabó is Professor at the Department of Organic Chemistry at the Arrhenius Laboratory, Stockholm University. He obtained his PhD at the Lund University, Sweden, with Professor S. Gronowitz in 1993, and did his postdoctoral research at the Gothenburg University with Professor D. Cremer (1993-5). Szabó did his habilitation at Uppsala University in 1997, and in 1998 he joined the Department of Organic Chemistry at Stockholm University, where he was appointed to professor in 2003. His major research interests involve theoretical and experimental aspects of organic reaction mechanisms, organometallic chemistry and homogeneous catalysis.

Lecture abstract: The presentation is focused on development of palladium and iridium catalyzed procedures for synthesis of allylboronates and allylsilanes from allyl alcohols and alkenes. The reactions usually proceed with a high regio- and stereoselectivity. The activation of the hydroxy group in allyl alcohols can be achieved under mild conditions without Lewis-acid additives. The C-H functionalization reactions were performed using classical methods and a newly developed oxidative strategy as well.

Recent Publications:

N. Selander, B. Willy, K. J. Szabó: Selective C-H Borylation of Alkenes by Palladium Pincer Complex Catalyzed Oxidative Functionalization. *Angew. Chem. Int. Ed*. **2010**, 4051-4053.

N. Selander, K. J. Szabó: Catalysis by Palladium Pincer Complexes. *Chem. Rev*. ASAP.

N. Selander, J. R. Paasch, K. J. Szabó: Palladium-Catalyzed Allylic C–OH Functionalization for Efficient Synthesis of Functionalized Allylsilanes. *J. Am. Chem. Soc*. **2011**, *133*, 409-411.