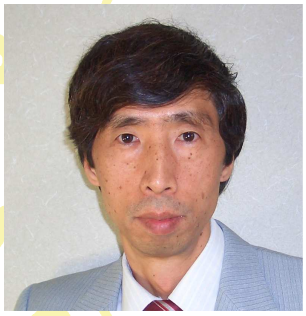
Univerzita Karlova v Praze, Přírodovědecká fakulta

Sekce chemie PřF UK v Praze
zve všechny zájemce na přednášku z cyklu

Quo Vadis Chemie

Design of High-Performance Organocatalysts for Asymmetric Catalysis



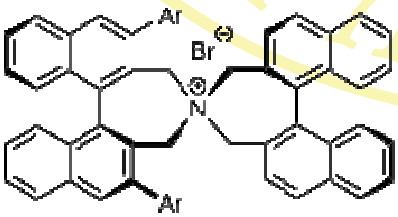
kterou přednese

Profesor Kenji Maruoka

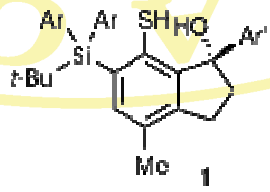
Department of Chemistry, Kyoto University

dne 30.9. v 14:00 hod.
v posluchárně CH2, v budově chemických kateder PřF UK
Hlavova 8, Praha 2

Abstrakt:



Maruoka Catalyst®



1

The design of new catalysts and new organic transformations in an environmentally-benign manner is increasingly important in recent years for the construction of new and useful chiral molecules from simple organic resources. In this context, organocatalysis has recently emerged as a field of research providing practical alternative or complementary technologies to the more traditional transition metal catalyzed systems. Accordingly, we have rationally designed various high-performance chiral organocatalysts, and some of them are found to be quite useful for the development of environmentally-benign asymmetric organic transformations under essentially neutral conditions. Very recently, we have found that certain organothiyl radicals exhibit unique properties in organoradical chemistry. The detail on the design of such new organoradical catalysts of type **1** in addition to the synthetic application to the asymmetric radical cyclization will be presented in my lecture.