



Einladung zum Vortrag von

Prof. Dr. Radovan Sebesta
Comenius University in Bratislava,
Faculty of Natural Sciences,
Department of Organic Chemistry

„Asymmetric catalysis using ferrocene catalysts and organocatalysts”

The lecture will give and an overview of our recent research. The presentation will be organized into three sub-topics: 1) stereoselective domino reactions with organometallic reagents; 2) organocatalytic synthesis of pharmaceutically relevant compounds; 3) stereoselective synthesis of chiral ferrocene derivatives. In the first part, our stereoselective domino reactions, based on Cu-catalyzed 1,4-additions of organometallic reagents will be presented. Recently, we have described utilization of activated alkenes in the Cu-catalyzed additions of Grignard reagents to unsaturated lactones. Furthermore, we have demonstrated compatibility of naked carbenium ions with reactive organometallic species. The second theme will deal with organocatalytic syntheses of some biologically interesting compounds. Recent progress in the synthesis of antiviral drug oseltamivir, synthesis of α,β -diamino acids, improvements in syntheses of pregabalin, and baclofen will be presented. In the third topic, I shall present interesting findings, which we have observed during investigations of ferrocene ligand syntheses. Reasons governing stereoselectivity in the synthesis of ligand Taniaphos were elucidated. An interesting example of diastereoselective ortho-lithiation followed by retro-Brook rearrangement will also be given.

Mittwoch, 20. Januar 2016, 16:15 Uhr
Hörsaal 3
Währinger Straße 38, 1090 Wien

Prof. Nuno Maulide
Institut für Organische Chemie