

Department of Organic Chemistry invites you

to lectures given by

Prof. Tomáš Hudlický
Brock University, Canada



Monday 10.6. *Chemoenzymatic synthesis of morphine and Amaryllidaceae alkaloids and other natural products*
10:00

This lecture will provide an overview of the program in chemoenzymatic synthesis in the Hudlicky group. Enzymatic dihydroxylation of aromatic compounds will be briefly reviewed as background for discussion of several syntheses of diverse natural products: pancratistatin, codeine, tamiflu, balanol, idesolide, and kibdelone C. New aspects of [5+2] cycloaddition methodology will also be discussed.

Tuesday 11.6. *Merits of biocatalysis in environmentally benign manufacturing of pharmaceuticals*
10:00

This lecture will provide a brief overview and examples of enzymatic transformations that are superior to the corresponding traditional methods. From lipase desymmetrization to the use of mono- and dioxygenases the examples will illustrate the efficiency in the introduction of asymmetry as well as the operational ease of fermentations performed in aqueous medium. The latest examples of the use of arene cis-dihydrodiols in total synthesis will feature target-oriented investigations of substrate specificity of benzoates that are convenient starting materials for tamiflu, kibdelone C, and tetrodotoxin.

Wednesd. 12.6. *Constraints in total synthesis: How to combine the best of academic and industrial principles to achieve maximum efficiency*
10:00

This lecture will examine how principles of discovery versus process development affect the efficiency of synthetic endeavors. A historical introduction will be followed by discussion of several examples from our recent work in the field of opiate-derived medicinal agents.

Location: Faculty of Natural Sciences, 17. listopadu 12, Olomouc

lecture room 3.005



Inovace vzdělávání
v chemii a biologii
s ohledem na aktuální trendy
v biomedicínálním výzkumu