



FACULTY OF SCIENCE  
Charles University

School of Chemistry, Faculty of Science,  
Charles University invites for the lecture

# Quo Vadis Chemistry

## Epimeric Pyrroloimidazolones in the Asymmetric Synthesis of Substrates with Planar, Central and Axial Chirality

which will be delivered by



**Professor Costa Metallinos**

Department of Chemistry,  
Brock University, Canada

**on September 2, 2022 at 14:00**

the Lecture Hall CH3 at the School of Chemistry, Faculty of Science, Hlavova 8

In the past 11 years we have developed a versatile class of chiral auxiliaries derived from L-proline hydantoin for the highly diastereoselective induction of planar, central and axial chirality. These pyrroloimidazolones may be considered as “non-classical” auxiliaries in the sense that their epimeric forms often behave as pseudo-enantiomers, which allows for the preparation of enantiomeric products from a single L-proline-derived starting material. In addition, they contain a labile hemiaminal ether substituent that enables their conversion into other nitrogen-containing functional groups. Examples of how both aspects of pyrroloimidazolone chemistry may be exploited will be presented.

