

## **Abstract**

Charles University in Prague

Faculty of Pharmacy in Hradec Králové

Department of organic and bioorganic chemistry

Candidate: Bartoloměj Grobař

Supervisor: PharmDr. Petr Matouš, Ph.D.

Title of thesis: Synthesis and reactivity of enynes with terminal double bond

This work focuses on synthesis of structures containing terminal vinyl moiety and their subsequent reactivity. We tested various approaches that lead to formation of enynes, which are then cyclized using gold complex catalyst into tetrahydropyridines. Both utilize the addition of propargylamine protected by 4-methoxybenzenesulfonyl group to substituted butynone and methoxyphenyl propiolates. Tetrahydropyridine molecules that are successfully created, are further derivatized forming polycyclic structures.