

ABSTRACT

Presented diploma thesis follows the long-term study running at the Department of Organic Chemistry at the University of Chemistry and Technology Prague in the field of using flavinium salts as catalysts of oxidation reactions. The aim was to verify the reactivity of flavinium salt **13** with different types of *O*- and *N*-nucleophiles by monitoring of the corresponding C4a-adducts formation. In the thesis a simple alloxazinium salt **13** and one of the nucleophiles (hydroxylamine **25**) were prepared. According to the results obtained from the UV-VIS measurements nucleophile **25** is the only one of the newly tested which formed desired C4a-adduct **13d** with alloxazinium salt **13**.

KEYWORDS

flavinium salt, nucleophile, C4a-adduct, organocatalysis, IBSE