

## ÚOCHB AV ČR

ÚSTAV ORGANICKÉ CHEMIE A BIOCHEMIE AKADEMIE VĚD ČESKÉ REPUBLIKY, v. v. i. Institute of organic Chemistry and Biochemistry Academy of Sciences of the Czech Republic, v. v. i.

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## Supervisor's evaluation and report

on PhD thesis

## New C-H activations and cross-coupling reactions for modifications of deazapurine nucleobases

author: Nazarii Sabat

Nazarii Sabat did his PhD work under my supervision from 2012 till 2017. His topic was the development of C-H activation reactions for modification of pyrrolopyrimidine (7- or 9-deazapurine) nucleobases and synthesis of series of modified nucleobases for screening of biological activity. He succeeded in development of C-H amination, amidation, silylation and phosphonylation reactions of deazapurines and in synthesis of two large series of deazapurine bases through combination of cross-coupling reactions and nucleophilic substitutions. His work has been published in 5 papers (2 x Synthesis, JOC, RSC Adv. and Tetrahedron Lett.).

Nazarii is a very diligent and hard-working scientist. When he came from Ukraine, he had to learn a lot of new techniques but he managed it and quickly started to work very productively. In my opinion, he has a very promising potential for his future career in organic synthesis or in medicinal chemistry and he is already accepted for a postdoctoral position in France.

I am happy to conclude that N. Sabat fulfilled all the requirements for the PhD title and I recommend his thesis for defense and further proceeding to be awarded the PhD degree.

V Praze 6. 12. 2017

Michal Hocek, CSc., DSc.