

Přírodovědecká Jihočeská univerzita v Českých Budějovicích University of South Bohemia in České Budějovice

SUPERVISOR'S STATEMENT ON BACHELOR THESIS

Name of the student:

Clemens Eichler

Study program:

Biological Chemistry

Department/Institute: Analytical Bichemistry and Metabolomics

Thesis title:

Oximation in the LC-MS analysis of ecdysteroids

Supervisor: Dr. Petr Šimek, PhD, Dr. Stanislav Opekar, Ph.D.

Supervisor's affiliation: BC of the Czech Academy of Sciences, Institute of Entomology

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2
Ability to work with literature	0-3	3
Language and stylistics	0-3	3
Formal requirements – points in total		8
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0-3	2
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	3
Discussion quality – interpretation of results and their discussion with the literature	0-3	3
Experimental difficulty of the thesis, independence in experimental work	0-3	2
Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments)	0-3	2
Practical requirements – points in total		12
POINTS IN TOTAL (MAX/AWARDED)	24	20

 $^{^{1}\,\,}$ Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

Comments of the supervisor on the student and the thesis:

Clemens Eichler performed his bachelor's work in the Laboratory of Analytical Biochemistry and Metabolomics, Biology Centre of the Czech Academy of Sciences, České Budějovice. The applicant begun his first experiments in February 2017 and during the stay he became familiar with laboratory techniques associated with analytical and synthetic organic chemistry under tuition of Dr. S. Opekar. The experimental skills involved correct usage of microbalance, purification of organic solvents by distillation, setting up small scale synthetic experiments, their work-up with liquid-liquid extraction, evaporation on rotary evaporators, purification of organic compounds by preparative column chromatography and isolation of milligram amounts of the obtained reaction products. The applicant got familiar with solid phase extraction and separation analytical techniques such as thin layer chromatography and liquid chromatography coupled with mass spectrometric detection.

Our regular communication and numerous discussions proceeded smoothly except a more than year period, when the student interrupted communication with us without any notice. The student proved to be a skillful, teachable and enthusiastic student with very high theoretical background, being capable to work with literature sources and to interpret experimental data. I noticed that the student has mastered his experimental work, data processing and thesis excellently with only minor omissions.

Considering the personal qualities and capability of Clemens to adapt to the demanding university studying conditions, I would like to appreciate his approach and the results accomplished.

Therefore I can recommend the thesis to be defended before the University Committee.

Petr Šimek

Head of the Department Laboratory of Analytical Biochemistry&Metabolomics

Conclusion:

I recommend the thesis for the defense.

České Budějovice, May 31, 2019.

Signature