



Přírodovědecká
fakulta
Faculty
of Science

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

SUPERVISOR'S STATEMENT ON BACHELOR THESIS

Name of the student: Matin Kazemi
Study program: Biological Chemistry
Department/Institute: Institute of Chemistry
Thesis title: Isolation, purification and characterization of bacteriochlorophyll c for engineering of novel photonic materials

Supervisor: David Kaftan
Supervisor's affiliation: University of South Bohemia, Faculty of Science

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	1
Ability to work with literature	0-3	1
Language and stylistics	0-3	1
Formal requirements – points in total		3
(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	1
Discussion quality – interpretation of results and their discussion with the literature	0-3	0
Experimental difficulty of the thesis, independence in experimental work	0-3	1
Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments)	0-3	1
Practical requirements – points in total		5
POINTS IN TOTAL (MAX/AWARDED)	24	8

¹ Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

Comments of the supervisor on the student and the thesis:

The main goal of Matin's project was to optimize and validate an efficient method for purification of bacteriochlorophyll c for preparation of pigment aggregates and their subsequent imaging using Atomic Force Microscope. For the success of the project, Matin managed to acquire numerous skills essential for managing both the basic laboratory practices as well as the more advanced methods of analytical chemistry. Matin's responsibilities have included independent handling of cell cultures of thermophilic bacterial strain, absorption spectroscopy measurements and use of liquid chromatography for purification and analysis of pigments. Matin also gained limited experience in mass spectrometry during validation of the improved chromatography method that yielded highly purified pigment. Finally, Matin utilized the pure pigments in preparing the aggregates that she also successfully imaged using Atomic Force Microscope.

In summary, Matin has been instrumental in helping institute new methods and approaches in our group. Matin unfortunately did not utilize all her experience and skills she gained during her time with us while writing up her thesis. The text of the thesis is of inadequate quality, particularly in its discussion section.

Conclusion:

In conclusion, I **do not recommend**
the thesis for the defense.

In **České Budějovice** date **20. 1. 2020**



signature