

UNIVERSITY OF SOUTH BOHEMIA IN ČESKÉ BUDĚJOVICE



Faculty of Science

SUPERVISOR'S STATEMENT ON THE BACHELOR THESIS

Name of the student: Marko Dachev

Thesis title: Isolation and characterisation of light harvesting complexes from bacteria of the genus

Gemmatimonas

Supervisor: Mgr. Václav Šlouf, Ph.D.

Supervisor's affiliation: Institute of Physics and Biophysics, Faculty of Science, University of

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	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Extent of the thesis (for bachelor theses min. 18 pages, for masters theses min. 25 pages), balanced extents of the thesis divisions (recommended extent of the theoretical part is max. 1/3 of the total extent), logical structure of the thesis	0-3	3
Quality of the theoretical part (review) (number and relevancy of the references, recency of the references)	0-3	3
Accuracy in citing of the references (presence of uncited sources, uniform style of the references, use of correct journal titles and abbreviations)	0-3	2
Graphic layout of the text and of the figures/tables	0-3	3
Adequacy and clarity of the results and conclusions	0-3	3
Quality of the annotation	0-3	2
Language and stylistics, complying with the valid terminology	0-3	3
Accuracy and completeness of figures/tables legends (clarity even without reading the rest of the text, explanation of the symbols and labeling, indicating the units)	0-3	2
Formal requirements – points in total		21
(2) PRACTICAL REQUIREMENTS		
Clarity of the aims	0-3	3
Fulfilment of the aims	0-3	2
Discussion quality – interpretation of results and their discussion with the literature	0-3	3
Logic in the course of the experimental work	0-3	3
Completeness of the description of the used techniques	0-3	3
Experimental difficulty of the thesis, independence in experimental work	0-3	3

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

Quality of experimental data presentation	0-3	3
The use of up-to-date techniques	0-3	3
Contribution of the thesis to the knowledge in the field and possibility to publish the results (after eventual supplementary experiments)	0-3	3
Practical requirements – points in total		26
POINTS IN TOTAL (MAX/AWARDED)	51	47 ²

Suggestions and questions, to which the student has to answer during the defense:

Eventual mistakes, which have to be corrected:

Eventual additional comments of the supervisor on the student and the thesis:

This thesis is focused on the characterization of the light-harvesting complexes in a recently described phylum of chlorophototrophic bacteria, Gemmatimonadetes. To this end, various biochemical methods were applied with the aim to obtain the minimum unit of the light-harvesting antenna. This unit turned to be unique – it has structural characteristics similar to LH1 complexes (homological polypeptides), but spectral characteristics reminiscent of LH2 complexes (two spectral bands in the near-IR region).

Marko became familiar with various biochemical methods, which is a perfect starting point for his future career. Additionally, he studied hard to acquire knowledge in photosynthesis both on the general level as well as in the field of his work, the latter accomplished by studying scientific papers. Given the fact that Marko started working on the project in December 2014, the amount and quality of the results obtained after couple of months are outstanding.

Conclusion:

In conclusion, I

recommend/donotrecommend*

the thesis for the defense and I suggest the grade "1" .3

In Č. Budějovice date 9. 6. 2015

Signature

Enter the number of points awarded.

You can suggest a grade, which can be modified during the defense based on the presentation. However, if the reviewer is not present at the defense, the grade will not be counted.