Přírodovědecká fakulta
Faculty of Science

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

SUPERVISOR'S STATEMENT ON BACHELOR/DIPLOMA* THESIS

Name of the student: **Siroun Moura**
Study program: biological chemistry
Department/Institute: **Chemistry**
Thesis title: **Production and Biophysical Characterization of Phi8P4 Helicase**

Supervisor: **Zdeněk Franta, Tomáš Fessl**
Supervisor`s affiliation: UCH

	Point scale[1]	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2
Ability to work with literature	0-3	1
Language and stylistics	0-3	1
Formal requirements – points in total		4
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0-3	3
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	1,5
Discussion quality – interpretation of results and their discussion with the literature	0-3	1
Experimental difficulty of the thesis, independence in experimental work	0-3	1,5
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		9
POINTS IN TOTAL (MAX/AWARDED)	24	(13)[2]

* Choose one

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

2 Enter the number of points awarded.

Comments of the supervisor on the student and the thesis:

Siroun joined our lab in fall 2017. She started to work on the project involving cloning and recombinant production of Phi8P4 helicase from the bacteriophage Ø8. Recombinant protein was previously produced by our collaborators, however, due to the presence of his-tag at the N-terminus, protein showed limited binding to RNA. Siroun´s task was to re-clone the protein into the vector with C-terminal his-tag, optimize the protein production, purify the recombinant protein and verify its RNA binding activity. Siroun managed to optimize the protein production and to purify the recombinant protein in sufficient purity and quantity to perform activity assay. Siroun took part in development of RNA binding assay, which later proved the activity of her construct. Even though the given task proved to be relatively easy, it took almost three years to complete. The delay seems to be caused by the combination of two factors: firstly quite limited lab time for the biolchem students and secondly by relaxed time management on the student's side. Although Siroun showed quite high level of enthusiasm at the beginning of the project, this did not last long and caused several gaps in the project.

Nevertheless, Siroun´s performance was sufficient to fulfill all the criteria for obtaining bsc. degree.

Conclusion:

In conclusion, I

r e c o m m e n d

the thesis for the defense.

In **České Budějovice** date **14.07.2020**