



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: Simon Halas

Study program: Biological Chemistry

Department/Institute: UCh

Thesis title: Creating an in-vitro model system for studying phase separation in virus assembly

Supervisor: Roman Tůma

Supervisor's affiliation: UCh

	Point scale <sup>1</sup>	Points
<b>(1) FORMAL REQUIREMENTS</b>		
Formal and graphical quality of the thesis	0-3	2
Ability to work with literature	0-3	3
Language and stylistics	0-3	2
Formal requirements – points in total		7
<b>(2) PRACTICAL REQUIREMENTS</b>		
Fulfillment of the aims	0-3	3
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	2
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
<b>POINTS IN TOTAL (MAX/AWARDED)</b>	<b>19</b>	<b>(0-24)<sup>2</sup></b>

\* Choose one

<sup>1</sup> Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

<sup>2</sup> Enter the number of points awarded.

**Comments of the supervisor on the student and the thesis:**

Simon's project was built around cloning and preparation of a recombinant protein for crystallization, seemingly easy but not always straightforward task which offered many avenues to learn new and improve existing lab skills. Simon participated in all stages of recombinant protein production and crystallization, including construct design and cloning, expression and purification. He also mastered the sitting-drop vapor diffusion technique for crystallography. After initial problems with keeping records of his lab work Simon improved his standards and showed level of autonomy commensurate with his study stage. He was interested in the project and worked diligently towards the goals while improving his practical skills. The thesis is clearly written but would benefit from more illustrations (e.g. Introduction) and figures and legends have low standards (e.g. HPLC traces are rough screenshots with unexplained insets etc). While there is every little detail listed on mixing volumes for preparing a standard gel many important results are not documented (MALDI MS, crystals, SEC-MALS-DLS analysis). The discussion section was bit shallow, for example effects of the inadvertent mutation could have been discussed using a structural model based on the sequence homology. Likewise, the reasons for large aggregates of the full length protein were not discussed.

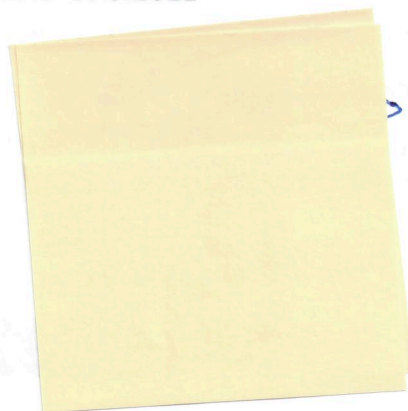
**Conclusion:**

In conclusion, I

r e c o m m e n d

the thesis for the defense.

In České Budějovice date 16.9.2021



Roman Tuma

signature