Faculty
of Science

Palacký University
Olomouc

Record of Dissertation Thesis Defence

Candidate:	Martin Šrejber
Study program:	P1417 Chemistry / Physical Chemistry
Department:	Department of Physical Chemistry
Head of committee:	doc. RNDr. Petr Jurečka, Ph.D.

After introducing the committee, Martin Šrejber gave his lecture:
"Modeling of biomembranes", presenting the results of several projects pursued during the study.

After the lecture, he responded to questions and comments in the review reports prepared by Assoc. Prof. Radka Svobodová and Assoc. Prof. Gabin Fabre.

Both reviewers stated in their reviews that the thesis met the necessary requirements for a successful defence. The following questions were also raised by the committee and answered by the candidate:

Assoc. Prof. Svobodová: What was the candidate's responsibility for individual manuscripts?

Assoc. Prof. Řezáč: Was the membrane database MolMeDB used by others?

Assoc. Prof. Svobodová: What are your future plans?

Prof. Kvítek: Do you have a suggestion for setting up optimal permeation of molecules?

Assoc. Prof. Jurečka: What was the temperature release for liposomal encapsulation? Was there a phase change at this temperature? How do you treat conformationally rich molecules in COSMO? What forcefield have you used for the combination of membrane and protein in order to have charges right and comparable?

Question from the audience: What force field was used for liposomal formulation simulations?

The student answered all the questions with sufficient knowledge, and the committee stated that he fulfilled the conditions for successfully defending his PhD thesis. (5 votes yes/0 no / 0 invalid)

Olomouc, 5.9.2023

doc. RNDr. Petr Jurečka, Ph.D.
Head of the Ph.D. committee