



Academy and University Center Nové Hradý

**Department of Structure and Function of Proteins**

Institute of Nanobiology and Structural Biology of GCRC

Academy of Sciences of the Czech Republic

assoc. Prof. RNDr. Rüdiger H. Etrich, PhD.

☎ +420 386 361 297 📠 +420 386 361 279 ✉ ettrich@nh.cas.cz



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## POSUDEK ŠKOLITELE

### SUPERVISOR'S RECOMMENDATION

Nové Hradý, February 15, 2013

To Whom it may concern

**Žofie Sovova** was working on her PhD thesis under my supervision on computational studies of Protein-lipid interactions, and as model systems she uses heterogenous membranes made of glyco- and phospholipids to mimic the photosynthetic tylakoid membrane and the simple PsbI systems (small helical protein with one transmembrane segment) or NKRP1, a natural killer cell receptor involved in early activation of the immune response. I know Žofie Sovova for more than 9 years now and thus was able to follow her studies from the very beginning. She was working in my lab from her first year of study on and later doing her bachelor thesis with me. Her bachelor thesis already was exceptional and I never saw a bachelor thesis of such high standard again. Her master thesis she did in the same department with Dr. Michal Kutý with great success and was admitted to the international PhD programme in Biophysics at the University of South Bohemia and joined me again for her PhD thesis. During her PhD studies she was closely collaborating with Prof. Marrinks group in Groningen, where she increased her knowledge and practical capabilities in the field of coarse-graining of protein-lipid interactions, and built up a model coarse-grained tylakoid membrane that is currently to be published. Her coarse-grained glycolipid parameters itself were published in JCTC just a month ago. Her first 3 month stay in Groningen was supported by a HPC-Europe2 grant, and she altogether spent nearly a year in Groningen. Žofie is not only an excellent scientist with brilliant ideas and hard working, she additionally has the gift to fascinate people to share her enthusiasm for science. In numbers, she belongs to the top 5% of the students in the our PhD programme, and was one of the best PhD students in computational biophysics. Žofie has a remarkable publication list for her age and stage of career. To sum it up, her studies and career until now and all the above mentioned clearly points to her ability to follow an academic career after finishing PhD. Žofie Sovova has excellent knowledge of computational chemistry, and additionally she always expressed her interest in practical aspects of chemistry and physics, too.

I can confirm that Žofie fulfilled all pre-requirements for finishing her PhD studies, published her work in impacted papers, passed the state exam with success etc. I believe, that her research presented in the submitted thesis will convince the reviewers and the doctoral commission that Zofie Sovova fullfills all demands needed for a succesfull defense of her doctoral thesis, and for my side, **I can recommend her for being award the PhD-degree.**

Best regards,

assoc. Professor Dr. Rüdiger Etrich, Ph.D.

Director

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