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Theoretical Study of Ions at Phase Interfaces

Submitted by Luboš Vrbka

"Oponentský posudek disertační práce"

The PhD thesis and the attached 10 publications are dealing with the behaviour of monovalent ions at air/water, ice/water and protein/water interfaces. The main method used in that contributions are molecular dynamic simulations. In three of these ten publications the molecular dynamics simulations are paralleled by experiments (photon electron spectroscopy or sum frequency generation spectroscopy). The topic of the research is highly actual and there is no doubt that all (computer) experiments were performed on the highest level. The thesis *per se* is logically structured and understandable written. Just a glance on the journals used for publishing these ten contributions, makes the use of scientometric parameters for the evaluation of scientific contributions superfluos. In summary, there is absolutely no doubt that this PhD thesis is fullfilling the criteria for obtaining a PhD degree at the Charles University as well as at any other university. Thus, I strongly recommend to award the scientific work of RnDr. Vrbka by the PhD title.

Praha, 7.02.2007

Martin Hof