



Academy and University Center Nové Hradý

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## POSUDEK ŠKOLITELE - SUPERVISOR'S RECOMMENDATION

Nové Hradý, September 7, 2018

To Whom it may concern

**Saurabh Kumar Pandey** was working on his PhD thesis under my supervision on the topic of allostery and action at a distance, one of the fundamental principles in protein function regulation, in the field of computational structural biology. The principal aim of his project was an *in silico* study on the molecular mechanism of allosteric activation of two systems, Arginine Repressor, the master feedback regulator of transcription in L-arginine metabolism and Orai, controlling store-operated calcium entry into the cell. Hereby he was working in close collaboration with experimentalists from Princeton University as well as from Linz University.

Saurabh joined my group in 2012, after having finished his master in India in the field of bioinformatics and having worked as a researcher for one year at the University of Rome in Italy and another two years at the Benares Hindu University in Varanasi, India. When applying, he was convinced that the computational work in our group suits his future interests for a PhD. Saurabh today is an extremely skilled researcher, masters all methodology applied here in computational biology (molecular dynamics in Gromacs, homology modeling, Yasara, QM/MM calculations, generation of force field parameters, PCA etc), and has a very solid theoretical background. During his PhD studies he had a research stay at Princeton University with Prof. Jannette Carey and a two-month research and training stay in Peter Fredollino's Lab at the University of Michigan in Ann Arbor. Saurabh has published 4 papers and one book chapter so far (and one more paper to be submitted), and I certainly regard him to be ready for defending his PhD and finding his own way within the scientific community.

I can confirm that **Saurabh Kumar Pandey** fulfilled all pre-requirements for finishing his PhD studies, published his work in impacted papers, passed the state exam with success etc. I believe, that his research presented in the submitted thesis will convince the reviewers and the doctoral commission that **Saurabh Kumar Pandey** fulfills also all demands needed for a successful defense of his doctoral thesis. Certainly, I can recommend him for being awarded the PhD-degree.

Best regards,

Prof. RNDr. Rüdiger Etrich, PhD.