



DEPARTMENT OF CHEMISTRY

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Biocomplexity Faculty Search Committee
C/o Professor Rob de Ruyter van Steveninck
Department of Physics
Indiana University, Swain Hall West 117
Bloomington, IN 47405-7105

Dear Professor Rob de Ruyter van Steveninck:

I write to express my support for Sergei Noskov as candidate for position in the Department of Physics. I had the pleasure of working with Sergei for nearly 2 years in the group of Benoit Roux at Weill Medical College of Cornell University. For much of this period we worked on related projects and had many opportunities to interact.

Sergei already had established himself as a good scientist prior to coming to New York in 2002, with his quantum mechanical and molecular dynamics studies of liquids and liquid mixtures (as well as other interesting studies) during his Ph.D., and into protein-protein, protein-ligand binding and P53-DNA recognition studies in Taiwan. He clearly had an excellent grasp of theoretical and computational physical chemistry and biology when I met him. In the group of Benoit Roux, Sergei has undertaken challenging projects that have raised the level of biophysical simulation and led us to reexamine some fundamentals of protein structure-function relationships. This culminated recently in an excellent publication in *Nature* which has demonstrated that assumptions about ion channel selectivity (made by even the most prominent leaders in ion channel field) were questionable. His *Nature* paper of 2004 on the mechanisms of selectivity in the potassium channel will remain a high impact paper in the decades to come.

Sergei offers a special presence in the department. His energy and enthusiasm for theory, computation and a deeper understanding are valuable assets. His ability to study complex biological systems and still seek an understanding at the most fundamental level is essential for success in this field. It is very rare to come across a researcher who is interested in important biological phenomena, and who has the necessary tools and physical intuition to make accurate and sensible judgments. Sergei is very easy to interact with and he is always keen to offer his opinions and insight. He is always present at group meetings and lectures and asks (and answers) interesting and challenging questions.

I have observed Sergei giving seminars within the department, and in front of large audiences at international meetings. Sergei is a good scientific communicator and I have no doubts that he would make an excellent teacher in a wide range of subjects and levels. The multidisciplinary nature of his work is sure to attract good students and postdocs, and collaborations campus and nationwide. I can say that Sergei is one of the most pleasant and stimulating postdocs I have encountered and have no hesitation in recommending him for appointment at your institution.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Allen', enclosed within a large, sweeping, horizontal oval stroke.

Toby W. Allen,
Assistant Professor