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## Letter of Recommendation

Dr. D. Battogtokh has applied for an open position in the Biocomplexity Institute and asked me for a recommendation letter. I know D. Battogtokh for a long time, because he did his Master and PhD degrees under my supervision. In his Master Thesis, he performed one of the first cellular automata simulations of spiral waves, pacemakers and other complex wave patterns in excitable media. His PhD thesis, over which he worked while staying in my laboratory in Berlin, was devoted to first systematic numerical investigations on the control of spatiotemporal chaos in reaction-diffusion systems through global delayed feedbacks. His results, obtained for a general model of the complex Ginzburg-Landau equation, have provided the basis for the experiments on control of turbulence in surface chemical reactions which were subsequently carried out in our Department and published by us in 2001 in *Science*.

From my group in Berlin, Dr. D. Battogtokh went to Japan, to stay as a foreign postdoc fellow with Prof. Y. Kuramoto in the University of Kyoto. During his stay of several years, he performed numerical investigations and a refined statistical analysis of spatiotemporal chaos in populations of nonlocally coupled oscillators. These results belong to the most interesting theoretical findings coming from the lab of Y. Kuramoto in the last decade.

Later on, Dr. D. Battogtokh has stayed in the USA in the Universities of Louisiana and Georgia, working on problems in physical chemistry and computational cell biology. In the last few years, he belongs to the group of Prof. J. Tyson in Virginia. His recent publications with J. Tyson on turbulence in birhythmic media open an interesting perspective in mathematical biology.

Dr. D. Battogtokh is a mature and experienced scientist, with an ability to perform independent research and excellent skills in large-scale computer simulations. I recommend him as a good candidate for your faculty position.

Alexander S. Mikhailov,

Professor, Head of Research Group

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