

Assistant Professor **Thorsten Ritz** is a biophysicist. His appointment is part of a cluster of four FTE allocated to the Schools of Biological and Physical Sciences for a Molecular Design Initiative. Dr. Ritz received his Diplom degree from the University of Frankfurt in 1996 and then joined Klaus Schulten's theoretical biophysics group at the University of Illinois. He finished his Ph.D. under the direction of Schulten and Nienhaus at the University of Ulm in 2001. Then Dr. Ritz received a post-doctoral fellowship from the Fetzer Institute that allowed him to work in the Phillips group in the Department of Biology at Virginia Tech and with Peter Hore's group in the Department of Physics at Oxford.

Ritz's area of science is very broad and has already published 13 papers at the interface of the physical and biological sciences. Currently he is interested in the assembly of protein aggregates in cells though his study of light harvesting systems (photosynthesis). It is clear that Dr. Ritz is on the leading edge of these studies. He is also interested in the effect of weak magnetic fields on biochemical reactions –in particular on photosynthesis. This route led him to study and propose a new chemical mechanism for how birds use the geomagnetic field to provide them a sense of direction. Here he has proposed several experiments to verify this new idea that could solve a very fundamental problem in sensory biology. Dr. Ritz is also a gifted classical guitarist, entertainer, and teacher.