

Julius Springer Prize for Applied Physics 2006 goes to Viola Vogel for pioneering work in bionanotechnology

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This year's Julius Springer Prize for Applied Physics will be awarded to Dr. Viola Vogel for her creative and pioneering work on bionanotechnology exploring single molecule mechanics and nanomotors for technical applications. The award, accompanied by USD 5,000, will be presented during the 2006 Spring Meeting of the Materials Research Society (MRS) in San Francisco, CA on 18 April 2006.

Viola Vogel has deciphered engineering principles of biological nanosystems for the development of new technologies. Vogel has pioneered the use of biological motors to build assembly lines for biological and synthetic cargo at the nanoscale level, and has explored how mechanical forces can switch the functional states of proteins. This promises to lead to novel ways of combatting bacterial infections and engineering the interactions of cells with synthetic surfaces. Applications can also be found in tissue engineering and the development of new materials and pharmaceutical products.

Vogel is a professor in the Department of Materials at the Swiss Federal Institute of Technology (ETH) in Zürich and also heads the ETH's Laboratory for Biologically Oriented Materials. After completing her graduate research at the Max Planck Institute for Biophysical Chemistry, she received her Ph.D. in physics at Frankfurt/Main University, followed by two years as postdoctoral fellow at the University of California at Berkeley. She was a faculty member of the Department of

Bioengineering at the University of Washington and was the founding director of the Seattle Center for Nanotechnology.

The Julius Springer Prize for Applied Physics recognizes researchers who have made an outstanding and innovative contribution to the fields of applied physics. It has been awarded annually since 1998 by the Editors-in-Chief of the Springer journals *Applied Physics A – Materials Science & Processing* and *Applied Physics B – Lasers and Optics*.

Source: Springer

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