

## PRESS RELEASE

### ***JPK Instruments installs first optical tweezers system in the Netherlands***

**Berlin, 10<sup>th</sup> June 2009** - *JPK Instruments, a world-leading manufacturer of nanoanalytic instrumentation for research in life sciences and soft matter, is pleased to announce the installation of its unique NanoTracker™ optical tweezers system in the laboratory of Dr. Remus Dame at Leiden University.*

JPK Instruments has recently installed its NanoTracker™ system, a versatile force-sensing optical tweezers platform. Dr. Remus Dame, an assistant professor of Leiden University in the Netherlands, had worked with home-built optical tweezers instrumentation earlier in his career. With the advent of a commercial system, he is able to carry out his research without the extra worries to design, build and maintain another homemade system.

Optical tweezers are a microscope-based technique that can be used to manipulate molecules or cells with high precision on the nanometer scale. In more advanced 'force-sensing' systems, the forces that one exerts can actually be recorded with high precision, too. This approach has been used to study many mechanical aspects of biological systems, such as those involving motor proteins or DNA. However, it has largely been the playground for physicists and biophysicists, who have the expertise to develop such intricate instruments themselves.

Dame has done postdoctoral research in such a biophysics group, resulting in a series of publications in many peer-reviewed scientific journals including Nature (Nature 444:387-390, 2006). With a background in (bio)chemistry, he deliberately did not want to specialize in instrument development while setting up his own lab, but preferred to spend his time on tackling interesting biological questions with the right techniques. For him, the occurrence of off-the-shelf optical tweezers platforms came at the right moment.

Dame will use his JPK NanoTracker™ to continue his research on the physical interaction of DNA and its associated proteins. For him, the availability of ongoing support offered by JPK Instruments, both technically and in terms of applications, provided a strong argument to purchase the NanoTracker system.

For further details, please contact the JPK web site, [www.jpk.com](http://www.jpk.com).

### **About JPK Instruments AG**

JPK Instruments AG is a world leading manufacturer of nanoanalytic instruments that enable unparalleled access at the nanotechnology level. JPK was recognized as Germany's fastest growing nanotechnology company in 2007 and 2008 (Deloitte). The product portfolio is based around atomic force microscopes and optical tweezers for a wide range of applications, from soft matter physics to nano-optics, from surface chemistry to cellular and molecular biology. Leading-edge instruments from JPK are used by the most renowned research institutes across the world. Headquartered in Berlin and with operations in Dresden, Cambridge (UK) and Singapore, JPK maintains a global network of distributors and support centers and provides on the spot applications and service support to an ever-growing community of researchers.

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