

## PRESS RELEASE

## Leading scientists meet at the NanoBioVIEWS first International Symposium on Optical Tweezers in Life Sciences

Berlin, 4th June 2008:

The 1st International Symposium on the applications and uses of optical tweezers in life science research was hosted by JPK Instruments in Berlin on 15th May 2008. It was held at the Magnus Haus, the home of Heinrich Gustav Magnus, a renowned 19th century German chemist and physicist, and seat of the German Physical Society.

Optical tweezers are becoming of increasing importance to researchers working in the life sciences. Judging from the attendance of around 100 scientists from around the world, the need for a forum to discuss and push the limits of such technology was extremely well received. The format of the meeting saw invited presentations supported by a diverse poster competition sponsored by JPK Instruments, leaders in providing innovative nanotechnology solutions to the life sciences. Three sessions of oral presentations covered the technical aspects of optical tweezers as well as single molecule and live cell applications using this technology.

The invited speakers are world-leading scientists in the field: The first session considered the theory and application of optical tweezers and was presented by Professor Ernst-Ludwig Florin, University of Texas and Dr. Erik Schäffer, Technical University of Dresden. The second session covered the area of single molecule study and featured talks of Professor Martin Hegner from Trinity College Dublin, Professor Justin Molloy from UK's National Institute for Medical Research and Professor Marileen Dogterom from the FOM Institute in Amsterdam. Finally, the third session focused on investigating living cell behaviour. The speakers were Professor Lene Oddershede from the NBI, Copenhagen, Professor Alexander Rohrbach from IMTEK in Freiburg and Professor Andrea Robitzki of the University of Leipzig. The talks led to many questions and discussion between the speakers and the audience demonstrating the value of such an annual forum.

It was exciting to see such a diversity of opportunity for optical tweezers exploitation. It is another example of technology that transcends traditional boundaries between scientific disciplines with physics meeting biology in a most exciting manner. Torsten Jähnke, one of JPK's founders, said the company was extremely pleased with





the attendance. It gave him only one problem – it will require an even bigger venue for next year's meeting!

Finally a word about NanoBioVIEWS: This is the name given to a new series of international meetings initiated by JPK Instruments to further the scientific knowledge exchange on instrumentation and applications of nanotechnology in the life sciences.

To learn more about this successful meeting and to read about the presentations and posters, please visit http://www.nanobioviews.net.



The speakers from the 1st International Symposium on Optical Tweezers with JPK's organizing team in the gardens of the Magnus Haus.

From the left to the right:

Andrea Robitzki (BBZ Leipzig), Justin Molloy (NIRM London), Marileen Dogterom (AMOLF Amsterdam), Martin Hegner (Trinity College Dublin), Torsten Jähnke (JPK), Lene Oddershede (NBI Copenhagen), Gerd Behme (JPK), Helge Eggert (JPK), Sven-Peter Heyn (JPK), Ernst-Ludwig Florin (Texas Univ.), Erik Schäffer (TU Dresden, in front), Alexander Rohrbach (IMTEK Freiburg) and Carmen Friedrichsen (JPK).

## **About JPK Instruments AG:**

JPK Instruments AG is a leading manufacturer of nano-analytic instruments – particularly atomic force microscope (AFM) systems – for research in life sciences and soft matter. One of Germany's most innovative nanotechnology companies, JPK was among the first to recognize the revolutionary opportunities this new field would open up for biomedical and pharmaceutical research. From the beginning, JPK has tailored its instrument platforms to meet the challenges in these areas.





JPK has developed powerful state-of-the-art solutions for high-resolution imaging, force measurement, nanomanipulation and nanolithography for life science applications. At the center of JPK's current portfolio are the BioAFM NanoWizard®, the CellHesion® module (for studying cell adhesion and cell mechanics phenomena), and the TAO module (for use in optical spectroscopy). The secret of JPK's success lies in its high level of application expertise and its close interaction with leading scientists and research centers in nanotechnology.

Founded in 1999, the company is headquartered in Berlin and maintains a global network of distributors and support centers. In 2004 it launched nAmbition GmbH, a Dresden subsidiary specializing in the development of nano-instruments for application in molecular medicine and pharmaceutical research. In August 2006, this was followed by the 100% acquisition of lpi light power instruments, which is focussing on the development of optical nano-instrumentation for life science applications in research and industry.

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