

For the 16th time now, PicoQuant is hosting the annual International Workshop on "Single Molecule Spectroscopy and Ultrasensitive Analysis in the Life Sciences".

The workshop program includes contributed talks, poster sessions, and talks by eight renowned invited speakers who will present their recent findings and developments.

Aim and Purpose

The aim of this workshop is to provide an interdisciplinary platform for users as well as developers from physics, chemistry and biology to share their experience, exchange information and report their recent findings and developments in the field of ultrasensitive optical detection and microscopy down to the single-molecule level.

Ultrasensitive spectroscopic techniques evolve to become standard tools in fundamental biological and biomedical research, as they allow the study of function, structure and interaction of individual single biomolecules.

Since the first report of the detection of a single molecule in solution in 1976, the range of techniques and methods has constantly grown. Single molecules can be detected using widefield and confocal fluorescence microscopy, scanning optical nearfield microscopy (SNOM), atomic force microscopy (AFM) or Raman scattering. Even superresolution measurements below Abbe's classical diffraction limit are possible with confocal microscopes and techniques like stimulated emission depletion microscopy (STED), photo-activated localization microscopy (PALM) or stochastic optical reconstruction microscopy (STORM).

Not only improving and extending the existing arsenal of single molecule techniques and methods are still of paramount interest, but also the beneficial usage of the existing and already established techniques is a major challenge for applications ranging from chemical analysis to biophysics, biological and biomedical research, medical diagnostics and material research.

Invited Speakers (and their tentative titles)

Aleš Benda (J. Heyrovský Institute of Physical Chemistry, Prague, Czech Republic)
"New possibilities offered by EM-CCD detection in classical confocal microscope"

Jonas Korlach (Pacific Biosciences, USA)
"Real-time DNA sequencing from single DNA molecules"

Gerhard J. Schütz (University of Linz, Austria)
"Chips, cells and single molecules - towards a functional understanding of the nanoscopic organization of the cellular plasma membranes"

Paul R. Selvin (University of Illinois, Urbana, USA)
"FIONA looks at individual molecular motors walk and run"

Steven A. Soper (Louisiana State University, USA)
"Moving single molecule detection into the clinic for in vitro diagnostics"

Philip Tinnefeld (LMU München, Germany)
"From single molecules to superresolution"

Jerker Widengren (KTH - Royal Institute of Technology, Sweden)
"Transient state monitoring by FCS and related techniques"

Jörg Wrachtrup (University of Stuttgart, Germany)
"Imaging magnetic fields with nm resolution: a new dimension in bioanalytics"

Student Award

PicoQuant especially wants to encourage young scientists. A special prize for the "**Best Student Talk**" worth **750 Euro** will be awarded by PicoQuant. Undergraduate and graduate students are invited to submit their contributions until June 1, 2010. Please indicate during the registration/abstract submission, if you wish to participate in the contest.

Call for Papers

We invite all researchers working in the field of Single Molecule Spectroscopy to submit contributions on new and relevant topics, either as a talk or a poster.

Deadline for abstracts is June 1, 2010



Workshop 2009

Registration and Fees

To participate in the workshop you need to **register by September 3, 2010 at the latest**. Since the number of participants is limited we recommend an early registration. For registrations until June 1, 2010 we offer early bird prices.

To register please use the online form on our website.

As in previous years PicoQuant will grant a fee waiver to a few participants from the university/academic sector. For more details please visit our website.

Workshop fees

Binding registration and payment	until June 1, 2010	June 1 until September 3, 2010
Industry and Private Sector	750 €	900 €
University/academic	240 €	280 €

Cancellation before August 15, 2010: 75% refund
Cancellation after August 15, 2010: 25% refund

Location

The workshop will be held at the WISTA campus in Berlin-Adlershof.

Adlershof is located in the south-east of Berlin. To get to the city center of Berlin it only takes about 25 minutes.

Accommodation

We have negotiated special rates for two hotels, that are located on the campus and in walking distance to the workshop location.

Booking details are available on our website.



The science and technology park WISTA in Berlin-Adlershof



The Brandenburger Gate in Berlin

PicoQuant's Workshop since 1995



Participants of the 14th workshop in 2008



Poster session at the 15th workshop in 2009

About PicoQuant

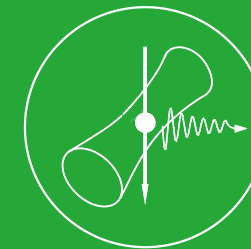
PicoQuant GmbH is a research and development company and leading in the field of Single Photon Counting Applications. The company was founded in 1996 and is based in the science and technology park in Berlin-Adlershof, Germany. Furthermore, in April 2008 PicoQuant Photonics North America Inc. (PQPI) was established with head office in the USA. PicoQuant's product line includes pulsed light sources, photon counting instrumentation, fluorescence lifetime spectrometers and time-resolved confocal microscopes.

Contact

For all details visit our website:
www.picoquant.com/_workshop.htm

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16th International Workshop on „Single Molecule Spectroscopy and Ultrasensitive Analysis in Life Sciences”

September 15 - 17, 2010
at WISTA Campus
Berlin-Adlershof, Germany

Organised by



PICOQUANT