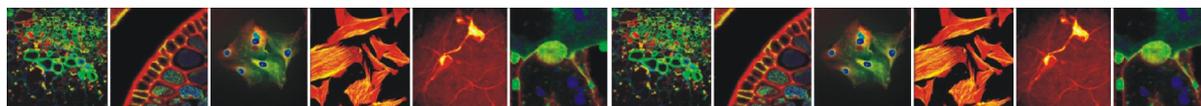


5th Hands-On Workshop on
“Making Single Molecule Fluorescence
(Lifetime) Measurements Simple”



A joint workshop between



PICOQUANT

and



April 26 - 28, 2010
Brookhaven National Laboratory, Upton, New York

www.picoquant.com/_sm-us-workshop.htm
www.bnl.gov/smf

Motivation & Plans

The workshop is a 2 1/2-day event which focusses on latest developments in single molecule spectroscopy and fluorescence lifetime imaging. The topics covered during this workshop include basic Single Molecule Detection (SMD) techniques, fluorescence microscopy, Fluorescence Lifetime Imaging (FLIM), Förster Resonance Energy Transfer (FRET) and Fluorescence Correlation Spectroscopy (FCS).

The workshop includes lectures as well as hands-on lessons with (time-resolved) microscopy equipment.

This workshop is intended for researchers interested in learning about new optical microscopy techniques / methods and single molecule spectroscopy. It is intended for all levels of expertise, including graduate students, technicians and professional researchers. Basic knowledge about light microscopy is beneficial, but not necessary to attend this workshop.

Invited Speakers

- **Volker Buschmann** (PicoQuant GmbH),
"Recent Technical Developments in Time-Resolved Microscopy down to the Single Molecule Level"
- **Mircea Cotlet** (Brookhaven National Laboratory),
"All in One Protein: FRET, Kindling and Blinking in Single Proteins of HcRed"
- **Rainer Erdmann** (PicoQuant GmbH),
"Advanced FRET and FCS Measurements with Laser Scanning Microscopes Based on Time-resolved Techniques"
- **Samantha Fore** (PicoQuant Photonics North America),
"Time-Resolved Single Molecule & Antibunching Studies of the MEH-PPV Conjugated Polymer System"
- **Zygmunt "Karol" Gryczynski** (University of North Texas),
"Plasmonic Approach to Study Biological Processes"
- **Ahmed Heikal** (University of Minnesota Duluth),
"Single-molecule diffusion studies of MHC Class I proteins in fibroblast cells"
- **Joseph R. Lakowicz** (University of Baltimore),
"Single Molecule Detection and Photophysics Using Plasmonic Nanostructures"
- **Antoine Van Oijen** (Harvard Medical School),
"Single Molecule Studies of Multi-Protein Complexes"
- **Elizabeth Rhoades** (Yale University),
"Probing the Conformations of Polymorphic Proteins"
- **Peter So** (Massachusetts Institute of Technology),
"Wide-Field Two-Photon Imaging and Microfabrication"
- **Haw Yang** (Princeton University),
"Protein Large-Amplitude Conformational Transitions: Dynamics, Mechanics, and Functional Roles"

Call for Papers

The time schedule includes 8 time slots for contributed talks (25+5 minutes). If you are interested in giving a contributed talk, please submit a 100 word abstract no later than March 1, 2010 along with your workshop registration. Submit your abstract to the following email address SMFWorkshop@bnl.gov

Hands-on Experiments

- Open frame MicroTime 200: a home built single molecule set-up based on PicoQuant core components.
- Olympus FluoView FV1000, upgraded with FLIM and FCS capabilities.
- TIRFM Olympus IX81 with CW excitation and EMCCD detection in dual-view format (two color detection).
- FluoTime 200: time-resolved fluorescence spectrometer.

Registration & Fees

Binding registration and payment:

- until March 1, 2010: 130 USD
- after March 1, 2010: 170 USD

Location

The workshop will be held at the Brookhaven National Laboratory, Upton, New York 11973 in the Center for Functional Nanomaterials located at Brookhaven Avenue, building 735.

Information & Correspondence

For further please visit to our websites: www.picoquant.com/_sm-us-workshop.htm or www.bnl.gov/smf

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