

# Press Release

For immediate release  
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## PicoQuant releases a polarization extension for laser scanning microscopes

**The new polarization unit allows to measure fluorescence anisotropy**

**Berlin (Germany), 21 December 2011** – PicoQuant GmbH has released a polarization extension for its upgrade kit for confocal laser scanning microscopes (LSM). Since several years, time-resolved fluorescence measurements can be performed with commercially available LSM that have been upgraded with a suited upgrade kit. With the new extension, upgraded microscopes can now also perform polarization measurements.

The polarization extension for the LSM upgrade kit permits to access single molecule dynamics such as fluorescence anisotropy or polarization-resolved fluorescence correlation spectroscopy. Applications include the study of e.g. membrane dynamics, molecular rotation and orientation as well as molecule aggregation or cluster formation. Calculation of the static anisotropy can be done using the newest release of PicoQuant's fluorescence lifetime imaging and correlation software "SymPhoTime".

The polarization extension is directly mounted to the scan head of the confocal microscope. It splits the fluorescence according to its polarization and guides the light to two single photon sensitive detectors via two optical fibers. The insertion of the polarization sensitive beam splitter is reversible and switching between polarization or spectral light separation is easily possible.

### Technical Data

Adaptable to the following microscopes:

Olympus FluoView FV300, Olympus FluoView FV1000

Zeiss LSM510, Zeiss LSM 710, Zeiss LSM 780

Wavelength range: 450 nm – 700 nm



### **About PicoQuant**

PicoQuant GmbH is a research and development company in the field of optoelectronics. The company was founded in 1996 and is based in the science and technology park Berlin-Adlershof, Germany. The company is a worldwide leader in the field of single photon counting applications. The product line includes pulsed diode lasers and LEDs, photon counting instrumentation, fluorescence lifetime spectrometers and time-resolved confocal microscopes. PicoQuant employs currently around 50 people. Since April 2008 Sales and Support in North America is handled by PicoQuant Photonics North America Inc.

### **Attachment**

Picture of the polarization beam splitter

Caption: Picture of the polarization beam splitter attached to the detection output of a laser scanning microscope.

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