



WEBINARS

Join us for a **FREE Webinar**

Get More Out of Your Optical Measurements

Thursday, September 16, 2021 11:00 AM - 12:00 PM EDT

[Register Now](#)

Presented by



.: About This Webinar

Maximizing the information captured within optical measurements is the key to discovering smaller effects and observing faster processes.

Both scales are at the heart of optical measurements, whether minuscule length changes in interferometers or subtle absorption changes observed with spectroscopic techniques. Such applications share a challenge: after converting the small photonic signal into an electronic one, the latter must be recorded despite the inevitable overlaid noise floor. Measurement strategies such as lock-in amplification and boxcar averaging help to average the signal while suppressing spurious noise.

To minimize the implementation effort, save precious measurement time and record high-quality data, it is essential to choose the best approach and settings for a given experiment.

In this webinar, Claudius Riek, Ph.D., of Zurich Instruments focuses on three techniques with requirements that are typical within their respective application areas to provide practical guides for different setups in optics and photonics:

- Linear spectroscopy — for example, tunable diode laser absorption spectroscopy (TDLAS);
- Ultrafast measurements — for example, pump-probe spectroscopy; and
- Laser scanning microscopy — for example, stimulated Raman spectroscopy (SRS) or coherent anti-Stokes Raman spectroscopy (CARS).

By taking a close look at these techniques, you will learn how to:

- Choose the most suitable measurement scheme, such as lock-in detection or boxcar averaging;
- Tune your measurement settings to maximize the signal-to-noise; and
- Capture your data in the most efficient way.

Who should attend:

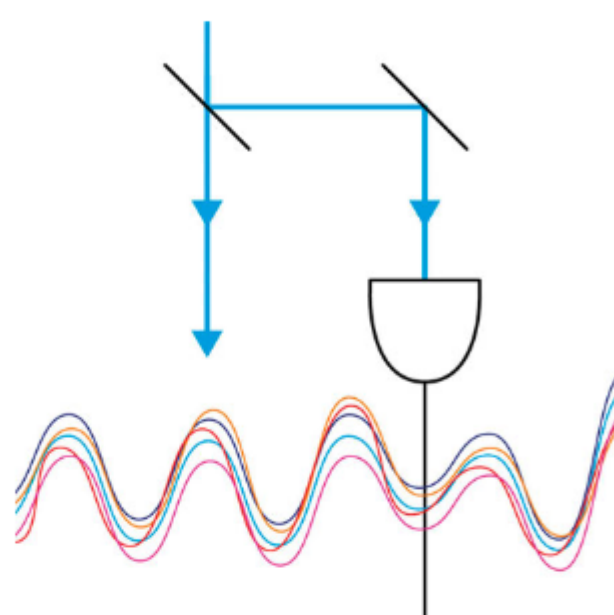
All those working with signal analysis from optical systems for sensing and imaging. Whether you are a researcher, an engineer, or a student who is planning or upgrading an experiment, you will learn which specifications are relevant for measurement instruments; which settings will allow you to maximize the information content of your recorded data; and how to minimize the time taken to acquire your first data.

About the presenter:

Claudius Riek, Ph.D., is an application scientist responsible for all photonics applications at Zurich Instruments. He has seven years of experience in ultrafast photonics, in particular THz time-domain spectroscopy, laser scanning microscopy, and frequency combs, and he is curious to look into new applications beyond optics and photonics.

About Zurich Instruments:

Zurich Instruments builds lock-in amplifiers, quantum computing control systems, impedance analyzers, arbitrary waveform generators, phase-locked loops, and boxcar averagers for scientists and technologists in advanced research laboratories. In combination with LabOne®, the Zurich Instruments control software, these products exemplify the company's mission to simplify laboratory setups, support high-quality data acquisition, and unlock new measurement approaches for cutting-edge research.



.: Mark Your Calendar

Date: Thursday, September 16, 2021

Time: 11:00 AM - 12:00 PM EDT

Space is limited. Reserve your Webinar seat now at: <https://attendee.gotowebinar.com/register/4251662348086675726?source=Eblast>

After registering you will receive a confirmation email containing information about joining the Webinar.

SYSTEM REQUIREMENTS

Operating System

Windows® 7 or later, Mac OS® X 10.9 or later, Linux®, Google Chrome™ OS
Android™ OS 5 or later, iOS® 10 or later

Web Browser

Google Chrome™ (most recent 2 versions)
Mozilla Firefox® (most recent 2 versions)

Mobile Devices

Android™ 5 or later
iPhone® 4S or later
iPad® 2 or later
Windows Phone® 8+, Windows® 8RT+

.: More from Photonics Media

Upcoming Webinars

- Next Leading IR and 3D Sensors: Improved Process and Quality Control for IoT, 9/7/2021 10:00:00 AM EDT
- Silicon Nitride Photonics with MEMS: Enabling New Sensing and Filtering Systems, 9/8/2021 1:00:00 PM EDT
- Expanding Quantum Frontiers with Superconducting Single-Photon Detectors, 9/21/2021 10:00:00 AM EDT

Archived Webinars

- Toward Global Quantum Networks
- Vision Spectra Conference: July 20-22
- European Photonics Manufacturing Services Funded by EC

Don't miss out!

Sign up for our Webinar Alerts email today and never miss an upcoming event.

We respect your time and privacy. You are receiving this email because you are a Photonics Spectra magazine subscriber. You may use the links below to manage your subscriptions or contact us.

Questions: info@photonics.com

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949
© 1996 - 2021 Laurin Publishing. All rights reserved. Photonics.com is Registered with the U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.