

Invitation to European FDTD Solutions Training Course

**To be held at the Institute of Experimental Physics V,
University of Wuerzburg, Germany (bio.physik.uni-wuerzburg.de)**

March 29 and 30, 2010

Please join us for the upcoming tutorial. Lumerical Solutions invites you to attend a training seminar designed specifically to meet the needs of your research and development work.

General

This course is suitable for anyone interested in quickly learning how to use FDTD Solutions to build 2D and 3D models of micro-optical and nano-photonic devices. No previous experience with FDTD Solutions is required.

The FDTD Solutions software will be installed on the computers of the training facility. There is no need for you to bring your own laptop.

Training location

The training will take place in the PC room of the Institute of Experimental Physics V, University of Würzburg, Am Hubland, 97074 Würzburg, Germany; Details (driving directions, hotel recommendations, etc.) will be sent to you after we have received your registration.

How long is the training event?

The course starts on Monday, March 29, at 9:00, and ends on Tuesday, March 30, at approx 17:00.

What Topics will be addressed?

The course consists of two parts -- a general introduction to FDTD Solutions (day 1) and advanced topics (day 2).

Day 1

Description: This one-day course is open to anyone interested in using the finite-difference time-domain (FDTD) method to model wavelength-scale optical devices and phenomena. This training session gives hands-on experience using FDTD Solutions to create simulations and analyze results step-by-step.

Topics:

- Overview of the FDTD method and when it should be applied
- How to efficiently obtain steady state, continuous wave results from a time domain method
- Features and workflow of FDTD Solutions:
 - Using the GUI Layout Editor effectively
 - Treating design problems efficiently with the FDTD Solutions workflow
 - Creating optical structures and defining material properties
 - Types of sources
 - Choosing monitors to obtain spatial, time and wavelength dependent data
 - Analyzing data and plotting results
 - Scripting commands (basic)

Workshop:

- Simple example – Reflection spectrum of etched lines in silicon
- Getting Started examples
- Advanced example – Silicon moth eye anti-reflector
- User-supplied examples
- Q&A: user-supplied examples and questions

Day 2

Description: Gain greater understanding of the more advanced features of FDTD Solutions and its state-of-the-art parallel computational engine. In this session, you will learn how to take advantage of the optimized engine to speed up your simulations and increase your productivity, how to handle dispersive materials over broad wavelength ranges, and how to optimize designs using scripting. This training session will treat advanced application examples.

Topics:

- Advanced Features of FDTD Solutions
 - Scripting language for parameter sweeps and design optimization
 - Structure groups and analysis groups
 - Far field analysis with the GUI and using scripting
 - Advanced boundary conditions

Geschäftsführer
Dr. Bernhard Michel
Eberhard Lange

Sitz der Gesellschaft:
Schwabach

Handelsregister:
HRB 22426
Amtsgericht Nürnberg



- Dispersive and anisotropic materials
- Interoperability with ASAP and user-defined sources
- Importing structures from external files
- Coherence and polarization in FDTD and how to obtain incoherent, unpolarized results
- Parallel Computation
- Applying the features to an advanced example – CMOS image sensors

Workshop:

- Advanced examples
- User-supplied examples
- Q&A: user-supplied examples and questions

Cancellation policy

Please book your seat as soon as possible. Cancellation requests made more thirty (30) days prior to the scheduled start date are entitled to a full refund, or the tuition maybe applied to a future tutorial within 6 months. Lumerical Solutions will make every effort to avoid cancelling or postponing any of its scheduled tutorials. However, if for any reason the tutorial must be cancelled or postponed, the participants will be notified by phone/email at least 14 days prior to the scheduled start date. In this regard, a participant may reschedule for a future program or receive a full refund. Lumerical Solutions is not responsible for travel expenses in the event of a tutorial postponement or cancellation. Lumerical Solutions reserves the right to postpone a tutorial at any time if necessary.

Contact information

Interested? Don't hesitate to contact Bernhard Michel for further information, for registration to the tutorial or if you need a formal quotation. His contact information is:

Dr. Bernhard Michel
Simuloptics GmbH
O'Brien Strasse 2
D-91126 Schwabach
Phone: +49 9122 830 300
Fax: +49 9122 830303
Email: bm@simuloptics.de

We are looking forward to meeting you in Würzburg.

Geschäftsführer
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 Eberhard Lange

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