OTF Studio

PROGRAM

Langbein Kolb Consulting

Modern application of optical thin films - solutions using OTF Studio
09.03-11.03.2027, Bad Wiessee, Germany

- Organized by Langbein Kolb Consulting and OTF Studio GmbH, this 3-day workshop shows how OTF Studio addresses real optical thin-film design and reverse engineering challenges:
  - **Introductory day**: OTF Studio from the very beginning, with minimal theory and maximum practical training.
  - **Advanced days 2 and 3**: Smart tools to solve design and characterization challenges across various application areas.
- **Location:** Hotel Terrassenhof, Adrian-Stoop-Str. 50, 83707, Bad Wiessee, Germany (https://www.terrassenhof.de/)
- **Important:**
  - Please **bring your laptops** with you. The software should be either installed in advance or you need to have administrative permission to install the software before the workshop starts.
  - **Test keys** for use during the workshop will be provided. Alternatively, a cloud license.
  - Please book your hotel room at Terrassenhof (keyword: "OTF Studio Workshop") or any other hotel; accommodation costs are not included in the course fee and must be paid by you directly at the hotel.
- **Who should attend:** The workshop is tailored for optical coatings engineers, scientists, students, and technicians who are engaged in design, characterization, monitoring, production, and development of optical thin films. No deep knowledge of mathematics or physics is required.
  - **The Introductory Day** is for participants who have not yet used any thin-film design program or who want to learn the basics of OTF Studio, including interface, the software structure, and design tools.
  - **The Advanced Days** require a basic understanding of thin-film design. All software modes will be explained with examples, including analysis, design, monolayers characterization, reverse engineering, monitoring, and production support.
- **What will you learn:**
  - OTF Studio main principles: interface, analysis and design workflow, post-production characterization, and monitoring algorithms.
  - Powerful algorithms and features through practical design tasks - including antireflection coatings, high reflectors, dichroic, bandpass and notch filters, polarizers, beamsplitters, color coatings, meta-dielectrics, laser-related designs, advanced materials, and more.
  - Quick introduction to integrating OTF Studio COM and taReo in your production environment using the COM interface and taReo.
- **More:**
  - Included in the fee is a trial license and training material (presentations, examples).
  - You can look forward to shared meals and coffee breaks that offer time for networking and discussions.
  - We would be delighted to receive your valuable feedback and feature requests.
  - If you are interested in presenting a poster, we have space for 2-3 posters that can be discussed during coffee breaks.
- The preliminary agenda is provided below, subject to potential modifications.

Local attractions:

- Tegernsee is an alpine lake in Upper Bavaria. Surrounded by the Bavarian Alps, it is one of Germany's most beautiful regions, known for its clear water, mountain scenery and traditional Bavarian charm.

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09.03.2027, Tuesday, Introductory Day

08:30 | Registration, welcome coffee.

08:45 | Short introduction of OTF Studio GmbH. General concepts of user interface, data storage, and operations with projects. OTF Studio modes.

10:30 | **Coffee break**

11:00 | Environment panel. Databases of elements (layer materials, designs, substrates, etc.) Creating layer materials, substrates, and designs. Plots and diagrams. Interactive analysis. **Training**

12:30 | **Lunch**

14:00 | Targets and specifications. Local design optimization and synthesis methods of OTF Studio. Monte Carlo analysis and Yield simulations. Data exchange with other programs. **Training.**

15:30 | Coffee break

16:00 | **Training.** Designing from scratch: AR coatings, high reflectors, beamsplitters, band-pass filters, dichroic filters.

18:00 | Day concludes

10.03.2027, Wednesday, Advanced Day

08:30 | Registration, coffee.

08:45 | Advanced design methods and options: electric field optimization and LIDT analysis, stress optimization, expressions, linked targets, multi-environments, stacks, robust synthesis, multi-start optimization, design simplification tools, deep search, floating constants.

10:30 | Coffee break

11:00 | **Training**

12:30 | **Lunch**

14:00 | Import of measurement data. Characterization of monolayers. Oscillator models. **Training**.

15:30 | Coffee break

16:00 | Reverse engineering: models and algorithms; batch processing and visualization; multi-scan measurements. Reverse engineering of stacks.

18:00 | Day concludes

19:00 | **DINNER (incl. in workshop fee)**

11.03.2027, Thursday, Advanced Day

08:30 | Optical monitoring. Simulators. **Training.**

10:30 | Coffee break

11:00 | Designing of special classes of optical coatings (notch filters, narrow bandpass filters, color coatings, laser-related coatings)

12:30 | **Lunch**

14:00 | Designing of special classes of optical coatings (continue). **Training.**

14:30 | Advanced materials

15:00 | Development of own projects using OTF Studio and taReo tools; Programming with OTF; Support of the production of optical coatings.

15:30 | Using ML, DNN, and AI as assisting tools during multilayer design. Help assistant of OTF Studio.

16:00 | Workshop concludes

Hotel:

Please book your hotel room at Terrassenhof or any other hotel; accommodation costs are not included in the course fee and must be paid by you directly at the hotel.

How to reach the location:

By train, take the BRB from Munich Central Station to Tegernsee, then a local bus to Bad Wiessee. By car, it is about one hour from Munich via the A8 (exit Holzkirchen).

Participant fees:

⇒ **Full three-days** – introductory and advanced days: **€ 1,200**

⇒ **Only advanced** days: **€ 800**

⇒ The Introductory day alone cannot be booked.

⇒ Net prices, German VAT will be added

Company discount 20%: if three attendees from the same company participate.

Registration

- **via e-mail i.langbein@gmx.de**
- Registration form at **https://www.otfstudio.com/workshops**
- More at our website: https://otfstudio.com