



PROGRAM

Langbein Kolb Consulting

OTF Studio Workshop

27.05-29.05.2026, Jena, Germany

- ◆ Organized by **Langbein Kolb Consulting** and **OTF Studio GmbH**, this hands-on workshop shows how **OTF Studio Software** addresses real-world challenges in optical thin-film design. The workshop consists of three days:
 - ◆ **Introductory day:** OTF Studio from the very beginning, with minimal theory and maximum practical training.
 - ◆ **Advanced days 2 and 3:** Exploration of smart tools to solve design and characterization challenges across various application areas.
- ◆ **Location:** Jena, located in the German state of Thuringia, is one of Europe's key centers for optics and photonics. Hotel Schwarzer Bär, Lutherplatz 2, 07743 Jena.
- ◆ **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.
 - Please book yourself the hotel room at Schwarzer Bär or any other hotel. The costs for the hotel room are not included in the course fee. They have to be paid directly by you at the hotel.
- ◆ **Who should attend:** The workshop is tailored for optical coatings engineers, scientists, students, and technicians who are engaged in the design, characterization, monitoring, production, and development of optical thin films. No deep knowledge of mathematics or physics is required.
 - **The Introductory Day** is addressed to those who have not yet used any thin-film design program or who want to learn the basics of OTF Studio, including the menus, the program structure, and its different modes.
 - **The Advanced Days** require a basic understanding of thin-film design. Complex design examples will be discussed, and all program modes will be explained with examples, including analysis and 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.
 - Exploring OTF Studio's 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.
 - Multiple examples and demonstrations related to OTF Studio features and algorithms. Training.
 - Quick introduction to integrating OTF Studio COM and taReo in your production environment using the COM interface and taReo.
- ◆ **Guest speaker:** Dr. Jens Lieder, Jenoptik.
- ◆ **More:**
 - Trial license in the case of interest; training materials (presentations, examples).
 - You can look forward to shared meals and coffee breaks that offer time for networking and discussions about collaborations with OTF Studio.
 - Your feedback and requests for new features are valuable to us, and we would be delighted to receive them.

Local attractions:

- The Carl Zeiss Planetarium, opened in 1926, is the world's oldest continuously operating large-scale projection planetarium.
- Naumburg (30 km north of Jena) is a historic town best known for its UNESCO listed Naumburg Cathedral.



Preliminary Agenda

27.05.2026, Wednesday, Introductory Day

08:30 | Registration, hardware keys to participants.

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

10:30 | Coffee break

11:00 | Creating and operating layer materials, substrates, and designs. Plots. Variator. Compare designs. **Training**

12:30 | Lunch

14:00 | Basic design options: creating simple targets; starting designs; local design optimization. Synthesis methods of OTF Studio. Monte Carlo analysis and Yield simulations. **Training.**

15:30 | Coffee break

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

18:00 | Day concludes

28.05.2026, Tuesday, Advanced Day

08:30 | Registration, hardware keys to participants.

08:45 | Advanced design methods and options: electric field optimization, stress optimization, expressions, linked targets, multi-environments, stacks, robust, multi-start, Smart Brush.

10:30 | Coffee break

11:00 | **Training**

12:30 | Lunch

14:00 | Color optimization. Integrals and values. Quick overview of options for architecture glass. **Training.**

15:30 | Coffee break

16:00 | Laser-related coatings . Narrow band-pass filters. Notch filters. **Training**

16:30 | Operations with measurement data. Import/Export. Characterization of monolayers. **Training.**

18:00 | Day concludes

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

29.05.2026, Friday, Advanced Day

08:30 | Reverse engineering with OTF Studio: models and algorithms; batch processing and visualization; Multi-scan measurements; feedback to deposition process. Values and colors. Overview of options for large area coatings. Variator.

10:30 | Coffee break

11:00 | **Training**

12:00 | **Invited talk:** Dr. Sven Laux, Dr. Jens Lieder, Dielectric mirror for 193 nm - A quarter - century review

12:30 | Lunch

14:00 | Optical monitoring. Presentation of OTF Studio OM mode and **Training**.

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

15:30 | OTF Studio development roadmap

16:00 | Day concludes. Farewell coffee.

How to reach the location:

Please book yourself the hotel room at Schwarzer Bär (<https://www.schwarzer-baer-jena.de/en/home-en/>, keyword: "Langbein Kolb Consulting") or any other hotel. The costs for the hotel room are not included in the course fee. They have to be paid directly by you at the hotel.

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>