



Modern application of optical thin films - solutions using OTF Studio

06.10-08.10.2026, Mainz, 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: Mainz,** hotel Erbacher Hof, Grebenstraße 24-26, 55116 Mainz, Germany (<https://bistummainz.de/haus/erbacher-hof/en/conference-center/meeting-rooms/>).
- ♦ **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 Erbacher Hof 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 the 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 wants 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:**
 - Trial license; training materials (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 to present 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:

- Mainz is a historic Rhine-river city known for its Roman heritage, the cathedral, and Gutenberg's legacy. It combines a lively university atmosphere with charming old-town streets and excellent wine culture.



06.10.2026, Tuesday, 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. **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. Data exchange with other programs and measurement devices. **Training.**

15:30 | Coffee break

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

18:00 | **Day concludes**

07.10.2026, Wednesday, 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 | Import of measurement data. Characterization of monolayers. Training.

15:30 | Coffee break

16:00 | Reverse engineering with OTF Studio: models and algorithms; batch processing and visualization; multi-scan measurements; feedback to deposition process. Variator. Reverse engineering of stacks.

18:00 | **Day concludes**

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

08.10.2026, Thursday, Advanced Day

08:30 | Optical monitoring.

10:00 | **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)

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

16:00 | **Workshop concludes**

Hotel:

Please book your hotel room at Erbacher Hof 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:

You can reach Mainz easily by train, car, or plane: the city has frequent ICE connections, direct motorway access (A60/A63), and is about 30 minutes from Frankfurt Airport by regional train.

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>