

# PROGRAM

# **OTF Studio Workshop**

# 21.10-23.10.2025, Garmisch-Partenkirchen, Germany

- Organized by Langbein Kolb Consulting and OTF Studio GmbH, this hands-on workshop is your gateway to discovering how <u>OTF Studio Software</u> can tackle real-world challenges in optical thin film design. Learn to apply key principles directly within the software environment and explore how its smart tools can help solve design and characterization problems across various application areas. The workshop emphasizes practical training, giving you direct experience in applying OTF Studio Software to real-world optical thin film challenges.
- Location: Garmisch-Partenkirchen is a scenic Alpine town in Bavaria, southern Germany. The town lies 88 km from Munich, with hourly regional trains from Munich Central Station (approx. 1 hr 23 min travel time).
- 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.
  - Please book yourself the hotel room at Riessersee Hotel (<u>https://www.riessersee-hotel.de/en/home</u>, keyword: "Langbein Kolb Consulting") before 21.07.2025 (date set by 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, PhD 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.
- What will you learn:
  - OTF Studio main principles, interface, design, characterization, reverse engineering, and monitoring algorithms.
  - Exploring OTF Studio's powerful algorithms and features through practical design tasks including antireflection coatings, high reflectors, long-/short-pass, bandpass and notch filters, polarizers, beamsplitters, color coatings, meta-dielectrics, phase-specific designs, and more.
  - Main principle of characterization and reverse engineering.
  - Multiple examples and demonstrations related to OTF Studio features and algorithms.
  - Quick introduction to integrating OTF Studio COM and taReo in your production environment using the COM interface and taReo.
- **Highlights:** Guest speaker:
  - Mr. Nico Schmidt, Opcos AG, Switzerland, www.opcos.ch
- More:
  - We are there to help with all your design, characterization, automatization, reverse engineering, and monitoring challenges. Trial license in the case of interest; training materials (presentations, examples).

## Local attractions:

- The Zugspitze via the Zugspitzbahn cogwheel train or cable car, both offering a scenic and direct route to Germany's highest peak.
- Partnach Gorge.
- Peaceful walk around Lake Eibsee.





# Preliminary Agenda

# Langbein Kolb Consulting

# 21.10.2025, Tuesday

**08:30** | Registration, hardware keys to participants. Short introduction of OTF Studio GmbH.

**08:50** | General concepts of OTF Studio Software: User interface, data storage and operations with projects; catalogs. **Interactive Training.** 

## 10:30 | Coffee break

**11:00** | Session continues: Import/Export options. Creating and operating layer materials, substrates, and designs. Plots. Variator. Compare designs. **Interactive Training** 

# 12:30 | Lunch

**13:30** | Basic Design Options: creating and operating design targets; starting designs; local design optimization. Synthesis methods of OTF Studio. Production-friendly designs. Monte Carlo analysis and Yield simulations. **Interactive Training.** 

15:00 | Coffee break

**15:30** | Session continues. Designing from scratch: AR coatings, high reflectors, beamsplitters, band-pass filters, dichroic filters.

18:00 | Day concludes

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

# 22.10.2025, Wednesday

**08:30** | Advanced design methods and options: electric field optimization, stress optimization, expressions, linked targets, multi-environments, stacks.

- 10:00 | Coffee break
- 10:30 | Training
- 12:30 | Lunch

**13:30** | Color optimization. Linked colors. Integrals and values. Quick overview of options for architecture glass. **Interactive training.** 

15:00 | Coffee break

**15:30** | Laser-related coatings (dispersive mirrors, Multi-Coating). Narrow band-pass filters. Training

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

## 18:00 | Day concludes

18:30 | DINNER (incl. in workshop fee)

# 23.10.2025, Thursday

**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.

# 10:00 | Coffee break

# 10:30 | Training

**11:45** | Invited talk: Mr. Nico Schmidt "Custom remote control for OTF Studio"

## 12:30 | Lunch

**13:30** | Optical monitoring. Presentations of OTF Studio OM mode and **interactive Training**.

**14:30** | Advanced materials

**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 | Farewell coffee - departure

How to reach the location:

Please book yourself the hotel room at Riessersee Hotel (https://www.riessersee-hotel.de/en/home keyword: "Langbein Kolb Consulting") before 31.07.2025 (date set by 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:

Early bird (until 31.07.2025)... ...... 1050 Euro\*

Standard (from 01.08.2025)..... .....1150 Euro\*

\*) 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
- https://www.otfstudio.com/workshops
- More at our website: https://otfstudio.com