



Langbein Thelen Consulting

Agenda of the 22nd European OptiLayer workshop

Optical Coatings for Modern Applications

Organized by OptiLayer GmbH and Langbein&Thelen Consulting

April 17-19, 2018

Schott Suisse SA, Rue Galilée 2, CH-1401 Yverdon-Les-Bains, Switzerland

Tuesday, April 17 (beginner's day)

9:00	Opening remarks
9:10	Basic principles of OptiLayer software, evaluation of coatings
9:55	Exercises
10:40	Coffee break
11:00	Design techniques
11:45	Exercises
12:30	Lunch
13:30	Import and export of data in OptiLayer software
14:15	Exercises
15:00	Coffee break
15:20	Optical characterization
16:05	Exercises
17:00	Day concludes



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Wednesday, April 18

- 9:00 General-purpose design techniques and practical aspects of designing.
- 9:45 Production-friendly design techniques (thin layer removal, design cleaner, random optimization, variator)
- 10:30 Coffee break**
- 10:50 Advanced design/evaluation tools: stacks, cone angles, line widths, optimization of absorption, robust synthesis, floating constants in targets, integral targets, sensitivity-directed refinement, taper function
- 11:35 Color evaluation, design of coatings for color applications and architecture glass.
- 12:20 Lunch**
- 13:20 Design of multilayers for ultrafast applications
- 14:05 Design of WDM, narrow band pass filters, and high reflectors
- 14:50 Coffee break**
- 15:10 Demonstrations of OptiLayer design tools / Advanced design class
- 15:55 Demonstrations of OptiLayer design tools / Advanced design class
- 16:40 Questions and problems on the fly / Advanced design class
- 17:30 Day concludes**
- 18:00 Workshop reception (dinner will be provided)**

Thursday, April 19

- 9:00 Advanced production characterization of single layers on the basis of spectral photometric and spectral ellipsometric data
- 9:45 Post-production characterization of multilayer optical coatings.
- 10:30 Coffee break**
- 10:50 Advanced post-production characterization of multilayer coatings (quasi-random errors, colors, U- and g-values, variator, multi-scan data processing, evolutionary algorithm, vacuum materials)
- 11:45 Overview of monitoring techniques for optical coating production (generation of monitoring spreadsheets)
- 12:20 Lunch**
- 13:30 Pre-production error analysis and simulation options
- 14:15 Implementation of OptiRE into design-production chains (COM automation)
- 15:00 Coffee break**
- 15:20 OptiReOpt library for control of production with broadband optical monitoring
- 16:05 Closing remarks**