

Symposium “Optical Layers: Basic Research and Applications” Berlin, February 25-29, 2008

Today, optical coatings are an integral part in many technical devices and consumer products. Obvious examples for mass products are antireflective coatings on ophthalmic glasses, camera objectives, binoculars, or the optical systems in disc players and DVD-writers. Besides these basic applications, optical coatings can be found in a broad variety of future and innovative fields including laser technology, information and display technology, lighting and architectural glasses, medicine and biology, in addition to the demanding fields of semiconductor lithography, space missions and fundamental research. In many cases, progresses in fundamental physics or other research areas are directly related to the availability of high quality optical coatings. Typical examples can be found in laser technology, which is considered as one of the major pacemakers of optical thin film technology. Also, many experiments in modern quantum physics or advanced measurement approaches, as for instance gravitational wave detection, high precision time standards, or the study of chemical reactions in the fs-scale, are only possible with advanced optical coatings. Another research area with highest impact on optical coating development is laser fusion which is based on laser systems with extremely high output energies in the MJ-regime.

The present Symposium “Optical Layers: Basic Research and Applications” is dedicated to prominent topics of modern optical thin film technology. Besides fundamental aspects of optical coating production, recent developments in deposition processes will be presented. Also selected examples for industrial coating production and applications in semiconductor lithography as well as laser technology will be outlined. The symposium which is also supported by the DGaO (Deutsche Gesellschaft für angewandte Optik) will be held during one day and also offers the opportunity to contribute papers and posters.