



## SPIE Optical Systems Design



Visit us at the SPIE trade fair in Jena  
from September 8-9 at booth 203.

Discover unique solutions and the wide variety of applications for optical coatings and components. We are looking forward to welcoming you as our guest.

### Highlight

At this year's SPIE conference on "Optical Systems Design" in Jena, Jan Broßmann will hold a presentation on 9 September about "Low scattering filter coatings made by plasma-assisted reactive magnetron sputtering".

In multi-spectral instruments, the spectral separation is performed by optical bandpass filters. Thin-film coatings with large coating thicknesses (up to 20µm) and a high number of layers are necessary to meet the spectral requirements. With increasing coating complexity, particular attention has to be paid to scattering.

The talk summarizes the main factors for scattering in thin-film filters. Derived from these considerations, the realization of complex bandpass filters with demanding requirements and a focus on low scattering will be presented.

[more information](#)

## CrBlack™ Coating

Sensor Lids / Projection Display / Lense Apertures

### New Datasheet available

Optics Balzers has improved its capabilities in the area of black chrome deposition. Wide spectral regions, for example from 300nm to 1200nm, can be covered with the new black chrome layer structure, which allows very low reflectivity over a large angle range. Optical density above OD4 can be reached regularly and a very low pin-hole size (<10µm) and density is achieved. Structuring is possible both with lift-off and etching technology. These coatings are used to absorb undesired scattered light in many applications as sensor lids, structured sensor filters, projection display applications etc. and are therefore frequently combined with other coatings. Different substrate geometries up to 200mm diameter and square as well as materials, including metal, are available.



[read datasheet](#)

## Sentinel 2A – on the way!

The Sentinels are a fleet of satellites designed specifically to deliver the wealth of data and imagery that are central to the European Commission's Copernicus programme. Sentinel-2 carries an innovative wide swath high-resolution multispectral imager with 13 spectral bands for a new perspective of our land and vegetation. The mission will mainly provide information for agricultural and forestry practices and for helping manage food security.



Sentinel-2A was launched on 23 June 2015 and Sentinel-2B will follow in the second half of 2016. Optics Balzers Jena was part of the manufacturing consortium from the early engineering phase up to the delivery of optical filters and beam splitter components for Sentinel 2A and 2B instruments. Furthermore Optics Balzers Jena has already been selected to deliver improved optical components for upcoming follow-up missions Sentinel 2C and 2D.

[more information](#)

## Our next Events

### ELIV, Baden-Baden, Germany

Visit us at ELIV in Baden-Baden from October 14-15, 2015 and meet with our expert for some specific advice.

[more information](#)

### BiOS / Photonics West, San Francisco, California

We have the pleasure of welcoming you from February, 13-18, 2016 to Optics Balzers at [SPIE BiOS and Photonics West](#), The Moscone Center, in San Francisco, California, USA. Come to our booth to discover the unique solutions and the wide variety of applications that optical components allow. We look forward to welcoming you as our guest.

[more information](#)

Further information regarding our attendance of trade fairs will be posted regularly at [www.opticsbalzers.com/event](http://www.opticsbalzers.com/event).

Take a look!

## News from Marketing

The following datasheet is available now:

### Datasheet

- [OBA-050-PE CrBlack™ Coating](#)