### Registration by fax + 49 6732 935 123

٦	I will attend	the	symposium	"Optical	Materials"
-	as guest				

I will attend the symposium "Optical Materials" as sponsor

Attendance Fee

Members of German Photonic Innovation Networks 150,00 € pp (+19% VAT, corr. 178,50 € gross) Non-members 195,00 € pp

(+19% VAT, corr. 232,05 € gross)

# Photonics

# **Photonics Hub Symposium**

# **Optical Materials**

#### Title, Last name, First name

Company

E-Mail

1.00

Street (invoice address)

ZIP Code, City (invoice address)

#### Signature

With my signature I accept the terms and conditions of Photonics Hub GmbH (available at www.photonics-hub.de/kontakt/agb).

Note: According to Art 6 GDPR (EU General Data Protection Regulation) we inform you about the electronic storage of your data and the processing in the automatic procedure.

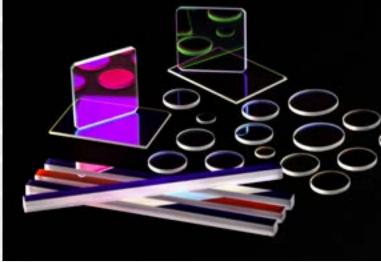
Online registration www.photonics-hub.de/Veranstaltungen

## Location

Hotel Wetzlarer Hof Obertorstraße 3 35578 Wetzlar Seminarraum Siena-Colchester Germany



bayern photonics



Courtesy of SUSS MicroOptics

September 26th, 2019 Wetzlar



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#### **Optical Materials**

Optical materials such as optical glasses, fused silica, calcium fluoride and glasses for infrared light are the enabling materials for optical technologies. The transparence of glasses and its ability to refract light rays very precisely enables high resolution imaging. Optical materials are available for applications in the wavelength range from vacuum ultraviolet and visible light up to near and middle infrared. For designing high quality optical system for a wild field of wavelength, the combinations of different optical glasses are necessary because of dispersion.

The large variety of applications makes it essential to develop a lot of different types of glasses with specific optical properties. Additionally some materials such as fused silica, calcium fluoride and optical infrared glasses also open wavelengths in the range of UV and IR. The transmission rate and blocking of light in a specific wavelength range can be controlled by optical filters.

Information about types, production, optical properties as well as its characterization methods helps to find out the right material for individual applications. This event offers considerable information about optical materials, especially optical glasses, and gives an overview about upcoming development trends. Furthermore the participants get information about long-term availability of the different materials.

Courtesy of SCHOTT AG



#### Program

#### 09:30 Registration

- 10:00 Welcome talk Jens Lienemann, Photonics Hub GmbH Dr. Ralf Jedamzik, Schott AG
- 10:10 Optical glass: Glass program and trends in glass developments Dr. Ralf Jedamzik, Schott AG
- 10:50 Overview of silica glass manufacturing methods and some typical properties Sebastian Stoebenau, Heraeus Quarzglas GmbH & Co. KG

#### 11:20 Coffee break

- 11:40 Optical glass: Properties and their measurement Dr. Ralf Jedamzik, Schott AG
- 12:30 Optical Properties of Selected Quartz Glasses in the UV and IR Sebastian Stoebenau, Heraeus Quarzglas GmbH & Co. KG

#### 13:00 Lunch break

14:00 High end coated filters: Applications, specifications and production processes Dr. Ralf Biertümpfel, Schott AG

- 14:30 Calcium Fluoride and Barium Fluoride: Crystalline Materials for Applications from DUV to IR Dr. Gordon von der Gönna, Hellma Materials GmbH
- 15:00 ZnS and ZnSe optical ceramics for applications from VIS to LWIR Dr. Gordon von der Gönna, Hellma Materials GmbH

#### 15:30 Coffee break

16:00 Infrared materials and low expansion glass ceramic ZERODUR Dr. Ralf Jedamzik, Schott AG

#### 16:30 Closing words



