

Optics Needs Vacuum - Metrology in XHV



15 June 2012

VACOM Production & Technology Center

Jena-Großlobichau
Germany

Optics Needs Vacuum - Metrology in XHV

Dear colleagues,

we cordially invite you to attend the 1st VACOM Conference “Optics Needs Vacuum - Metrology in XHV“ held on 15 June 2012 at VACOM’s Production & Technology Center in Jena-Großlöbichau (Germany).

Pushing physics towards smaller and smarter structures requires a strong connection between optics and vacuum technology. Even though it seems that both industries have not much in common, the demands of optical processes especially in EUV encourage further innovations in vacuum technology and metrology.

At the 1st VACOM Conference experienced scientists from both European industry and research centers will present their demands and prospects in developing the innovative overlap of optics and vacuum, accompanied by recent advancements in the highly evolving, interdisciplinary field.

During the conference we will discuss cleanliness requirements, contamination risks and metrology techniques with respect to their current status and restrictions, and with joint focus on approaches to overcome existent limitations. Hence it will be a great opportunity to exchange ideas, meet with peers and have a great time.

The conference is part of VACOM’s 20th anniversary celebration. Our attractive social program includes a “Thuringian Evening“, i.e. an informal get-together with traditional cuisine, on 15 June 2012 and a fantastic show at the Planetarium Jena where optics enables a view into a vacuum that is unequaled on earth on 16 June 2012, 10:00 am.

We sincerely hope that you will join us. We look forward to welcoming you at the 1st VACOM Conference.

Jens Bergner & Dr. Ute Bergner
Presidents of VACOM

Program 15 June 2012

- 09:15 - 09:45 **Check-in and badge pick-up**
- 09:45 - 10:00 Welcome and opening by VACOM's President Dr. Ute Bergner
- Session 1** **Vacuum Metrology** Chair: Prof. Dr. Harald Bergner
- 10:00 - 10:45 Dr. Karl Jousten,
Physikalisch-Technische Bundesanstalt (PTB), Berlin
Towards standardization of calibration of partial pressure measurement devices
- 10:45 - 11:15 Nikolas von Freyhold
VACOM Vakuum Komponenten & Messtechnik GmbH, Jena
X-ray compensation in Bayard-Alpert gauges for measurements in XHV
- 11:15 - 11:45 Dr. Jaroslaw Iwicki
VACOM Vakuum Komponenten & Messtechnik GmbH, Jena
Maintaining cold cathode discharges in the XHV range
- 11:45 - 13:00 **Lunch**
- Session 2** **Vacuum & Optics** Chair: Dr. Michael Flämmich
- 13:00 - 13:45 Prof. Dr. Norbert Kaiser
Fraunhofer Institut f. Angewandte Optik u. Feinmechanik (IOF), Jena
Mo/Si multilayers for EUV lithography
- 13:45 - 14:15 Dr. Thomas Rietmann
VACOM Vakuum Komponenten & Messtechnik GmbH, Jena
Vacuum suitable optics - merging optical components & UHV
- 14:15 - 14:30 **Coffee Break**
- Session 3** **Ultra Clean Vacuum** Chair: Dr. Michael Flämmich
- 14:30 - 15:15 Dr. Michael Wahl
Institut für Oberflächen- u. Schichtanalytik (IFOS), Kaiserslautern
Vacuum based surface analytics for leading-edge technology
- 15:15 - 15:45 Dr. Oliver Posth
VACOM Vakuum Komponenten & Messtechnik GmbH, Jena
Cleaning and quality control of assemblies for ultra-high and ultra-clean vacuum
- 15:45 - 16:30 Ton van de Kerkhof
ASML, Veldhoven (NL)
Contamination risk and contamination control strategy
- 17:30 **"Thuringian Evening"** at VACOM Jena-Großlobbichau

1st VACOM[®] Conference

Conference Location

VACOM Production & Technology Center

In den Brückenäckern 3 ■ 07751 Großlöbichau (50° 56' N , 11° 41' O)



Important Information

Please note that the participation in the conference will be limited.

Registration opens	16 March 2012		
Conference fees	by 16 May 2012	300 €	
	after 16 May 2012	400 €	

Conference Web Site

Please have a look at www.vacom.de/conference for registration, accomodation and further details.

Contact

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