

## Organizers

VDE/VDI-Society Microelectronics, Microsystems and Precision Engineering (GMM)  
Dr.-Ing. Ronald Schnabel  
Stresemannallee 15  
60596 Frankfurt/Main, Germany  
Phone: +49-69-6308 227  
Fax: +49-69-6308 9828  
E-Mail: gmm@vde.com

In cooperation with:

UBC Microelectronics  
Dr. Uwe Behringer  
Auf den Beeten 5  
72119 Ammerbuch, Germany  
Phone: +49-171-455-3196  
Fax: +49-7073-50216  
E-Mail: uwe.behringer.ubc@t-online.de



**Venue:**  
**Hilton Hotel**  
**in Dresden**



Dresden at  
the River Elbe

## The EMLC 2016 International Program Committee

Conference Chair Jo Finders, ASML, Veldhoven,  
The Netherlands

Co-Conference Chairs Brid Connolly, Toppan Photomasks  
GmbH, Dresden, Germany  
Chris Gale, Applied Materials,  
Dresden, Germany  
Naoya Hayashi, DNP, Saitama, Japan

Program Chairs Uwe Behringer, UBC Microelectronics  
Ammerbuch, Germany  
Ines Stolberg, Vistec Electron Beam,  
Jena, Germany  
Daniel Sarlette, Infineon, Dresden,  
Germany  
Rolf Seltmann, Globalfoundries,  
Dresden, Germany

## Other Members

Carola Blaesing, Carl Zeiss SMS GmbH, Jena, Germany  
Parkson Chen, Taiwan Mask Corp., Hsinchu, Taiwan  
Natalia Davydova, ASML, Veldhoven, The Netherlands  
Dave Farrar, HOYA Corporation, London, UK  
Bertrand Le Gratiet, ST Microelectronics, Crolles, Cedex, France  
Rik Jonckheere, IMEC, Leuven, Belgium  
Barbara Lauche, Photonics MZD GmbH, Dresden, Germany  
Carlos Lee, EPIC, Brussels, Belgium  
Harry Levinson, Globalfoundries, Santa Clara, CA, USA  
Hans Loeschner, IMS Nanofabrication AG, Vienna, Austria  
Jan Hendrik Peters, Carl Zeiss SMS GmbH, Jena, Germany  
Chris Progler, Photonics Inc., USA  
Emmanuel Rausa, Cymer, USA  
Douglas J. Resnick, Molecular Imprints, Austin, TX, USA  
Klaus-Dieter Röth, KLA-Tencor MIE, Weilburg, Germany  
Thomas Scheruebl, Carl Zeiss SMS GmbH, Jena, Germany  
Ronald Schnabel, VDE/VDI-GMM, Frankfurt, Germany  
Steffen Schulze, Mentor Graphics Corp. Wilsonville, OR, USA  
Jacques Waelpoel, ASML, Veldhoven, Netherlands  
Jim Wiley, ASML US Inc., Santa Clara, CA, USA  
John Whittey, Oakdale CA, USA  
Carlton Willson, University of Texas, Austin, TX, USA  
Hermann Wolf, Photonics MZD GmbH, Dresden, Germany  
Stefan Wurm, SEMATECH, Albany, NY, USA  
Larry Zurbrick, Agilent Technologies, Santa Clara, CA, USA

Cover picture: Courtesy of Toppan Photomasks

# GMM

VDE/VDI-GESELLSCHAFT  
MIKROELEKTRONIK, MIKROSYSTEM-  
UND FEINWERKTECHNIK



**Call for Papers**

## The 32<sup>nd</sup> European Mask and Lithography Conference EMLC 2016

June 21 – 22, 2016

Hilton Hotel

Dresden, Germany

[www.EMLC2016.com](http://www.EMLC2016.com)



The VDE/VDI-Society Microelectronics, Microsystems and Precision Engineering (GMM) and UBC Microelectronics in cooperation with BACUS, PMJ, SEMI-Europe, and SPIE, are pleased to announce the

## 32<sup>nd</sup> European Mask and Lithography Conference, EMLC 2016

at the Hilton Hotel in Dresden, Germany  
June 21 - June 22, 2016

The focus of this 2-day conference is state-of-the-art of mask technology and lithography, such as mask manufacturing, mask business, lithography and mask applications, emerging mask & lithography technologies, and mask & lithography equipment.

This conference has annually brought together scientists, researchers, engineers and developers from around the world to present papers at the forefront of research, manufacturing and application. It provides a place where mask makers, mask users, and their tool suppliers become acquainted with new developments and results.

### Conference Schedule

The conference will be opened with a Keynote Session on Tuesday, June 21, 2016 at 09:00 a.m. and close on Wednesday, June 22, 2016, late afternoon. The Poster Session will be held on Tuesday evening followed by the Conference Banquet Dinner at the Pulverturm in Dresden.

### Technical Exhibition

On Tuesday and Wednesday (June 21<sup>st</sup> and 22<sup>nd</sup> 2016) there will be a technical exhibition with booth space for about 30 exhibitors. Presentation tables and pin boards will be available. To be part of this Technical Exhibition, please return the **enclosed registration** form to the Conference Exhibition Organization as soon as possible, since exhibition space is limited.

### Exhibition Organization

Dr. Uwe Behringer,  
UBC Microelectronics,  
Auf den Beeten 5,  
D-72119 Ammerbuch, Germany  
Phone: +49-171-4553196  
Fax: +49-7073-50216  
E-Mail: uwe.behringer.ubc@t-online.de

### Abstract Information

Abstract quality will be the basis for selection of conference presentations. The abstracts will be assessed for:

- Originality of work
- Specific results reported
- Potential impact and interest to the attendees.

Therefore, we highly recommend that your abstract contains enough detail to clearly describe the content of your presentation. We recommend an abstract length of **two pages** including figures, diagrams, formatted text as Word and PDF.

Commercial papers, papers with no new research / development content, and papers where significant information is missing will not be accepted.

All accepted abstracts will be printed, bound and handed out to the participants of the conference.

In order to submit your abstract, please open the web site

**www.EMLC2016.com**

**There you will find a link for the submission of papers**

#### ■ **Deadline for Abstracts: Friday, March 25<sup>th</sup> 2016**

#### ! **By submitting an abstract you agree to**

- Present your work in person at the conference and
- • Submit a manuscript in time

Authors will be notified of the acceptance of their submissions by **April 4<sup>th</sup> 2016**; further manuscript format and layout instructions will be provided at that time.

### Manuscripts:

Please submit the original of the manuscript as early as possible but not later than the

#### ■ **Deadline for Manuscripts: camera ready June 13<sup>th</sup> 2016**

Further information on the submission procedure can be found at **www.emlc2016.com**

All manuscripts will be subjected to a critical peer review before they are accepted for publication.

**Please note that late submissions may not be published.**

Manuscripts will be published by VDE Verlag in cooperation with SPIE Digital Library.

### Conference Topics

Presentations are solicited for the following and related topics:

#### Mask Manufacturing

- Mask Data Preparation
- Pattern Generation: Writing, Etch, etc.
- Photomask Processes & Materials
- Metrology Tools & Technologies
- Defect Inspection & Repair
- Cleaning & Haze
- Pellicles & Mask Boxes
- Mask Process Yield & Cycle Time
- Photomasks for RET & OPC; PSM
- Masks for NGL: E-Beam, EUV, NIL, etc.

#### Mask Business

- Mask Business and Management
- Mask Cost and Mask Development Strategy
- Future Mask Demand

#### Lithography and Mask Application

- Double Patterning
- DSA (Directed Self-Assembly)
- RET, OPC, PSM, MEEF
- Resist
- Mask Defect Printability
- Optical Materials
- Immersion Lithography
- Immersion Defectivity
- Alternate Immersion Fluids
- Lithography Process Control
- Lithography Simulation

#### Emerging Mask and Lithography Technologies

- EUV Materials, Tools & Processes
- EUV Mask Infrastructure
- NIL
- Direct Write/ML<sup>2</sup>, Maskless Technologies

#### Mask and Lithography Equipment

- Mask Manufacturing

#### Semiconductors in MEMS Applications

#### Patterned Media