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Uwe F.W. Behringer
Jo Finders
Editors

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Harry J. Levinson, HJL Lithography (United States)

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Rolf Seltmann, RS litho (Germany)

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Bertrand Le-Gratiet, STMicroelectronics (France)
Serap Savari, Texas A&M University (United States)

Foreword

On behalf of the VDE/VDI/-GMM organisation, the EMLC2019 sponsors, and the EMLC2019 organizing committee, we welcome you to the proceedings from the 35th European Mask and Lithography Conference, EMLC2019, at the Hilton Hotel in Dresden, Germany.

The conference has annually brought together scientists, researchers, engineers, and technologists from research institutes and companies from around the world to present innovations at the forefront of mask lithography and mask technology.

This year, we were proud to present the following at the EMLC2019: three tutorials + welcome speaker + three keynotes + 15 invited talks + 14 oral talks + 12 posters, as well as 48 conference presentations.

Tutorials

- 1st Tutorial: Andreas Erdmann, Fraunhofer IISB, Erlangen, Germany, "Alternative Lithographic Techniques for Non-IC Applications"

- 2nd Tutorial: Laurent Pain, CEA-LETI, Grenoble, France, "Lithography Alternative Solutions"

- 3rd Tutorial: Martin Sczyrba, AMTC, Dresden, Germany, "Photomask Making Processes and Technologies."

The EMLC2019 conference was dedicated to research, technology, and related processes. It provided an overview of the current state of mask and lithography technologies and future strategy. Mask manufacturers and users had the opportunity to familiarize themselves with the latest developments and results.

As welcome speaker, Robert Franke, Director Office of Economic Development, City of Dresden, presented: "Smart City Dresden: Bringing Future Technologies on the Road."

The first keynote speaker was Udo Bischof from Robert Bosch GmbH (Germany). His talk was titled, "Future Trends and Drivers for Sensor Technologies".

The second keynote speaker was Naoya Hayashi of Dai Nippon Printing (Japan). His presentation was on "Electron Multi-Beam Writing of Leading-Edge Masks and NIL Master Templates."

The third keynote speaker was Harry J. Levinson from HJL Lithography, LLC (United States). Harry reported on "The Potential of EUV Lithography."

Technical Exhibition

Parallel to the conference presentations, a technical exhibition took place on Tuesday and Wednesday where mask and device manufacturers presented their companies and their products.

Conference Dinner Banquet

On Tuesday evening, the conference dinner took place on the cruise ship PD Krippen.

Cleanroom Tour

On Thursday morning, the Fraunhofer-Institute for Photonic Microsystems IPMS in Dresden organized a cleanroom tour.

Uwe F.W. Behringer
EMLC2018 Conference Chair