Don't Miss "Showcase of Proven Leadership in EUVL Infrastructure Development" by CXRO!

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EUVL scanner is now ready, but utilizing it for commercial production requires many other technologies to be ready as well. These supporting technologies are called EUVL infrastructure, and the main components are photomask, resist, metrology, and computation. The Center for X-Ray Optics (CXRO) has been in the forefront of enabling EUVL infrastructure for three decades by developing and enabling development of these technologies, and this showcase will review its programs and facilities.

Consisting of nine presentations from leading EUVL experts from CXRO and other groups at Berkeley Lab, the showcase will run from 11:30 a.m. to 4:30 p.m. at CXRO, located at Lawrence Berkeley National Laboratory (LBL) in Berkeley, CA and lunch will be provided. The showcase is part of The 2019 EUVL Workshop. You can read the Workshop's detailed agenda and review abstracts at our website www.euvlitho.com.

"For a new technology like EUV Lithography to be successful, the supporting ecosystem must be developed years in advance," said Patrick Naulleau, director of CXRO. "One of the key components of this development is the design, testing and construction of a micro-exposure tool (MET). The MET is used by researchers from around the world for early learning in key areas such as resists, processing, and masks."

MET development at CXRO has helped the industry develop masks, resists and processing for 0.3 NA scanners, while these advanced scanners were being readied for market. Now as the industry prepares to develop high NA scanners, CXRO is the place where you can test resist, mask and processing for high NA. CXRO has been very busy supporting their industrial partners in this development.

In addition, CXRO has a world class optics calibration facility powered by a synchrotron light source that enables leadership in the development of many advanced technologies. Capabilities of CXRO are augmented by another lab at LBL called the Molecular Foundry. Here fundamentals of EUV resists are being studied to allow us to better design new resists, and develop solutions for current challenges.

To keep up to speed with developing EUVL infrastructure, you don't want to miss the CXRO showcase. Papers will include:

- "Achieving Diffraction-limited Performance on the Berkeley MET5" (Ryan Miyakawa)

- “A SHARP Tool for Current and Future Nodes of EUV Lithography” (Markus Benk)
- “Measuring Chemical Image in Photoresist” (Luke Long)
- “Quantitative Phase Imaging for EUV Photomasks” (Stuart Sherwin)
- “Photoemission Study on EUV materials” (Jonathan Ma)
- “Measurement of Electron Blur” (Oleg Kostko)
- “Assessing the Impact of Latent Imaging of Resists via Grazing Incidence Resonant X-ray Scattering” (Isvar Cordova)
- “Gentle High-Speed Atomic Force Microscopy using Encased Cantilevers and Spiral Scanning” (Paul Ashby)
- “Fundamental Dynamics of Bond-selective Chemistry Initiated by Low-energy Electrons” (Dan Slaughter)

CXRO also will offer additional presentations on EUVL infrastructure during the Optics and Patterning session of the EUVL Workshop, including:

- “Overview, Status and Performance of the 0.5-NA EUV Microfield Exposure Tool at Berkeley Lab” (Chris Anderson)
- “Update on EUV Optics Calibration” (Erick Gullikson)

For information on how to register for the workshop and attend the program showcase, please visit www.euvlitho.com. For any specific questions about the CXRO showcase, please contact Dr. Isvar Cordova at LBL at iacordova@lbl.gov.