

## Community

# News

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## AOT Board member Andreas Erdmann elected SPIE Fellow

SPIE, is the international society for optics and photonics, will promote 32 new Fellows of the Society this year, to recognize the significant scientific and technical contributions of each in the multidisciplinary fields of optics, photonics, and imaging. This year, Andreas Erdmann from the Fraunhofer Institute for Integrated Systems and Device Technology in Erlangen, Germany, and a member of the Editorial Board of *Advanced Optical Technology* will be among them.

SPIE Fellows are honored for their technical achievements and for their service to the general optics community and to SPIE in particular. More than 1200 SPIE members have become Fellows since the Society's inception in 1955.

Andreas Erdmann is recognized for his achievements in modeling of optical and extreme ultraviolet lithography. A much sought-after technical expert, Erdmann has spent 27 years in research and development in applied optics, including holography, nonlinear optics, guided wave optics and modeling of optical systems, including 20 years in lithography modeling. He has become a major contributor to the field of lithography simulation, in which he has made significant contributions to simulation software. Notable are his development and application of rigorous electromagnetic methods for accurate modeling of light-scattering effects in advanced lithography, investigations of mask topography effects including

mask-induced focus-shifts and other aberration-like effects, characterization of defects on optical and extreme ultraviolet masks, and exploration of wafer topography effects.

Among his major contributions to the lithographic community is his dedication to students at the Fraunhofer Institute and at the Friedrich-Alexander University Erlangen-Nürnberg. Many of his students now work at the major semiconductor companies. He is a prolific and respected technical researcher who has given 22 invited and keynote talks and over 188 presentations at technical conferences. He has published more than 219 publications in scientific journals, and last year he conducted the topical issue on 'Optical Lithography' in *Advanced Optical Technologies*. For the past 13 years, he has organized and chaired the influential Fraunhofer International Lithography Simulation Workshop.

Erdmann is a leader within SPIE and provides great service to the community through his work in organizing and participating in conferences as an instructor, editor, and reviewer. He is a regular contributor to SPIE conferences, winning both best paper and best poster awards. He has participated in the leadership of the SPIE Advanced Lithography Symposium for many years, serving on the program committee for the past 5 years and as conference co-chair of Optical Microlithography for the past 2 years.

<http://spie.org/about-spie/fellows-and-senior-members/fellows>

