

# PROCEEDINGS OF SPIE

## ***Modeling Aspects in Optical Metrology II***

**Harald Bosse**  
**Bernd Bodermann**  
**Richard M. Silver**  
*Editors*

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# Contents

- ix Conference Committee  
xi Introduction

---

## SESSION 1 OPTICAL SYSTEMS

---

- 7390 02 **Lithography simulation: modeling techniques and selected applications (Invited Paper)** [7390-01]  
A. Erdmann, T. Fühner, F. Shao, P. Evanschitzky, Fraunhofer-Institut für Integrierte System und Bauelementetechnologie (Germany)
- 7390 03 **Metallic nonlinear magneto-optical nonreciprocal isolator** [7390-02]  
H. J. El-Khozondar, Islamic Univ. of Gaza (Palestinian Territory, Occupied) and Technische Univ. München (Germany); R. J. El-Khozondar, Al-Aqsa Univ. (Palestinian Territory, Occupied) and Institute of Physical Metallurgy and Metal Physics (Germany); M. M. Shabat, Islamic Univ. of Gaza (Palestinian Territory, Occupied); A. W. Koch, Technische Univ. München (Germany)
- 7390 04 **Traceability of the F25 vision system for calibration of grated structures with submicron accuracy** [7390-03]  
A. I. Mares, R. H. Bergmans, G. J. W. L. Kotte, R. R. Tromp, VSL Dutch Metrology Institute (Netherlands)
- 7390 05 **Inverse optical design: building and testing an artificial eye** [7390-04]  
A. V. Goncharov, National Univ. of Ireland, Galway (Ireland); B. Lerat, Institut d'Optique (France); M. Nowakowski, C. Dainty, National Univ. of Ireland, Galway (Ireland)
- 7390 06 **Inspection of misalignment factors in lens assembly** [7390-05]  
X. Li, L. Zhao, Z. P. Fang, A\*STAR Singapore Institute of Manufacturing Technology (Singapore)

---

## SESSION 2 WAVE PROPAGATION AND POLARIZATION

---

- 7390 07 **Measurement errors from internal shear strain within fiber-Bragg-grating sensors** [7390-06]  
M. S. Müller, T. C. Buck, H. J. El-Khozondar, A. W. Koch, Technische Univ. München (Germany)
- 7390 08 **Variable waveplate-based polarimeter for polarimetric metrology** [7390-07]  
A. Peinado, A. Lizana, Univ. Autònoma de Barcelona (Spain); J. Vidal, Univ. Autònoma de Barcelona (Spain) and ALBA Synchrotron Light Source Facility (Spain); C. Lemmi, Univ. de Buenos Aires (Argentina); A. Márquez, Univ. de Alicante (Spain); I. Moreno, Univ. Miguel Hernández de Elche (Spain); J. Campos, Univ. Autònoma de Barcelona (Spain)
- 7390 09 **Spatial elliptical polariscope for polarization distribution measurements** [7390-08]  
W. A. Woźniak, S. Drobczyński, P. Kurzynowski, Wrocław Univ. of Technology (Poland)

7390 0A	<b>Temperature sensitivity of TE double-negative metamaterial optical sensor</b> [7390-09] H. J. El-Khozondar, Islamic Univ. of Gaza (Palestinian Territory, Occupied) and Technische Univ. München (Germany); M. Müller, Technische Univ. München (Germany); R. J. El-Khozondar, Al-Aqsa Univ. (Palestinian Territory, Occupied) and Institute of Physical Metallurgy and Metal Physics (Germany); M. M. Shabat, Islamic Univ. of Gaza (Palestinian Territory, Occupied); A. W. Koch, Technische Univ. München (Germany)
---------	--

---

### SESSION 3    INTERFEROMETRY AND PHASE

---

7390 0B	<b>Adaptive Bessel-autocorrelation of ultrashort pulses with phase-only spatial light modulators</b> [7390-10] S. Huferath-von Luepke, Bremer Institut für angewandte Strahltechnik (Germany); M. Bock, R. Grunwald, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany)
7390 0C	<b>Assistance system for optical sensors</b> [7390-11] R. Schmitt, F. Koerfer, Fraunhofer-Institut für Produktionstechnologie (Germany); J. Seewig, Technische Univ. Kaiserslautern (Germany); W. Osten, Univ. Stuttgart (Germany); A. Weckenmann, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany)
7390 0D	<b>Shape measurement of diffuse and transparent objects by two wavelength contouring using phase retrieval</b> [7390-12] A. Anand, The Maharaja Sayajirao Univ. of Baroda (India); V. K. Chhaniwal, Parul Institute of Engineering & Technology (India); G. Pedrini, W. Osten, Univ. Stuttgart (Germany)
7390 0E	<b>Sensing performance of a Shack Hartmann wavefront sensor versus the properties of the light beam</b> [7390-13] L. P. Zhao, A*STAR Singapore Institute of Manufacturing Technology (Singapore); W. J. Guo, Nanyang Technological Univ. (Singapore); X. Li, A*STAR Singapore Institute of Manufacturing Technology (Singapore); Z. W. Zhong, Nanyang Technological Univ. (Singapore)
7390 0F	<b>Full-field absolute phase measurements in the heterodyne interferometer with an electro-optic modulator</b> [7390-14] Y. L. Chen, H. C. Hsieh, W. T. Wu, D. C. Su, National Chiao Tung Univ. (Taiwan)
7390 0G	<b>Method for measuring the refractive index distribution of a GRIN lens with heterodyne interferometry</b> [7390-15] H. C. Hsieh, Y. L. Chen, W. T. Wu, D. C. Su, National Chiao Tung Univ. (Taiwan)

---

### SESSION 4    MAXWELL SOLVERS

---

7390 0H	<b>Three-dimensional finite-element simulations of enhanced light transmission through arrays of holes in metal films (Invited Paper)</b> [7390-16] S. Burger, L. Zschiedrich, J. Pomplun, F. Schmidt, Zuse Institute Berlin (Germany) and JCMwave GmbH (Germany); B. Kettner, Zuse Institute Berlin (Germany); D. Lockau, Zuse Institute Berlin (Germany) and Helmholtz-Zentrum Berlin für Materialien und Energie (Germany)
7390 0I	<b>Reduced basis method for fast and robust simulation of electromagnetic scattering problems</b> [7390-17] J. Pomplun, F. Schmidt, Zuse Institute Berlin (Germany) and JCMwave GmbH (Germany)

- 7390 0J **Comparison of electromagnetic field solvers for the 3D analysis of plasmonic nanoantennas** [7390-18]  
J. Hoffmann, C. Hafner, P. Leidenberger, J. Hesselbarth, ETH Zürich (Switzerland); S. Burger, Zuse Institute Berlin (Germany)
- 7390 0K **Method of matrix Riccati equation for nanoshape control of diffraction gratings** [7390-19]  
M. Yu. Barabanenkov, V. V. Kazimiruk, S. Yu. Shapoval, Institute of Microelectronics Technology and High Purity Materials (Russian Federation)

---

**SESSION 5 SURFACE METROLOGY**

---

- 7390 0L **Power spectral density specification and analysis of large optical surfaces** [7390-20]  
E. Sidick, Jet Propulsion Lab. (United States)
- 7390 0M **Measuring and modelling the appearance of coated steel surfaces** [7390-21]  
V. Goossens, E. Stijns, Vrije Univ. Brussel (Belgium); S. Van Gils, Ocas N.V. (Belgium); R. Finsy, H. Terryn, Vrije Univ. Brussel (Belgium)
- 7390 0N **Analysis of the positioning error on lateral shearing surface reconstruction with a Fizeau interferometer** [7390-22]  
J. Vidal, J. Nicolas, ALBA Synchrotron Light Source Facility (Spain); J. Campos, Univ. Autònoma de Barcelona (Spain)
- 7390 0O **A model based approach to reference-free straightness measurement at the Nanometer Comparator** [7390-28]  
C. Weichert, M. Stavridis, M. Walzel, C. Elster, A. Wiegmann, M. Schulz, R. König, J. Flügge, Physikalisch-Technische Bundesanstalt (Germany); R. Tutsch, Technische Univ. Braunschweig (Germany)

---

**SESSION 6 SCATTEROMETRY**

---

- 7390 0P **Angle-resolved optical metrology using multi-technique nested uncertainties (Invited Paper)** [7390-24]  
R. M. Silver, B. M. Barnes, H. Zhou, N. F. Zhang, R. Dixson, National Institute of Standards and Technology (United States)
- 7390 0Q **On numerical reconstructions of lithographic masks in DUV scatterometry** [7390-25]  
M.-A. Henn, R. Model, M. Bär, M. Wurm, B. Bodermann, Physikalisch-Technische Bundesanstalt (Germany); A. Rathsfeld, Weierstrass-Institute für Angewandte Analysis und Stochastik (Germany); H. Gross, Physikalisch-Technische Bundesanstalt (Germany)
- 7390 0R **Numerical investigations of prospects, challenges, and limitations of non-imaging optical metrology of structured surfaces** [7390-26]  
B. Bodermann, M. Wurm, Physikalisch-Technische Bundesanstalt (Germany)
- 7390 0S **Critical dimension measurements using a 193 nm scatterfield microscope** [7390-27]  
R. Quintanilha, National Institute of Standards and Technology (United States); Y. Sohn, B. M. Barnes, KT Consulting Inc. (United States); L. Howard, Precera, Inc. (United States); R. Silver, National Institute of Standards and Technology (United States)

- 7390 0T **Evaluation of measurement uncertainties in EUV scatterometry** [7390-23]  
H. Gross, F. Scholze, Physikalisch-Technische Bundesanstalt (Germany); A. Rathsfeld, Weierstrass-Institute für Angewandte Analysis und Stochastik (Germany); M. Bär, Physikalisch-Technische Bundesanstalt (Germany)
- 7390 0U **Nanoshaped objects of equal phase volume: scattered far field comparison** [7390-29]  
A. Normatov, B. Spektor, Technion-Israel Institute of Technology (Israel)
- 7390 0V **Specular and diffuse scattering from random asperities of any profile using the rigorous method for x-rays and neutrons** [7390-30]  
L. I. Goray, St. Petersburg Physics and Technology Ctr. for Research and Education (Russian Federation) and Institute for Analytical Instrumentation (Russian Federation)

---

**SESSION 7 HOLOGRAPHY AND OCT**

---

- 7390 1F **Multiplexing and demultiplexing of digital holograms recorded in microscopic configuration** [7390-31]  
M. Paturzo, Istituto Nazionale di Ottica Applicata, CNR (Italy) and Istituto di Cibernetica, CNR (Italy); P. Memmolo, Istituto Nazionale di Ottica Applicata, CNR (Italy), Istituto di Cibernetica, CNR (Italy), and Univ. degli Studi di Napoli Federico II (Italy); A. Tulino, Univ. degli Studi di Napoli Federico II (Italy); A. Finizio, L. Miccio, P. Ferraro, Istituto Nazionale di Ottica Applicata, CNR (Italy) and Istituto di Cibernetica, CNR (Italy)
- 7390 0X **Estimation of 3D reconstruction errors in a stereo-vision system** [7390-32]  
A. Belhaoua, Lab. des Sciences de l'Image, de l'Informatique et de la Télédétection (France); S. Kohler, Lab. Modélisation Intelligence Processus Systèmes (France); E. Hirsch, Lab. des Sciences de l'Image, de l'Informatique et de la Télédétection (France)
- 7390 0Y **Towards deconvolution in holography** [7390-33]  
N. Wang, C. Fallidorf, C. von Kopylow, Bremer Institut für angewandte Strahltechnik (Germany)
- 7390 0Z **Roughness measurement methodology according to DIN 4768 using optical coherence tomography (OCT)** [7390-34]  
M. M. Amaral, M. P. Raele, Instituto de Pesquisas Energéticas e Nucleares (Brazil); J. P. Caly, IPT-Instituto de Pesquisas Tecnológicas do Estado de São Paulo (Brazil); R. E. Samad, N. D. Vieira, Jr., A. Z. Freitas, Instituto de Pesquisas Energéticas e Nucleares (Brazil)

---

**POSTER SESSION**

---

- 7390 10 **Modeling of adaptive compensation of aberrations of optical system using deformable mirror** [7390-35]  
A. Miks, J. Novak, P. Novak, Czech Technical Univ. in Prague (Czech Republic)
- 7390 11 **Optimized square Fresnel zone plates for microoptics applications** [7390-36]  
J. M. Rico-García, F. J. Salgado-Remacha, L. M. Sanchez-Brea, J. Alda, Univ. Complutense de Madrid (Spain)

- 7390 12 **Optical testing of a parabolic trough solar collector by a null screen with stitching** [7390-37]  
V. I. Moreno-Oliva, Univ. de la Ciénega del Estado de Michoacán de Ocampo (Mexico); M. Campos-García, Univ. Nacional Autónoma de México (Mexico); F. Granados-Agustín, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico); M. J. Arjona-Pérez, Univ. de la Ciénega del Estado de Michoacán de Ocampo (Mexico); R. Díaz-Uribe, M. Avendaño-Alejo, Univ. Nacional Autónoma de México (Mexico)
- 7390 13 **Talbot effect with aberrated beams** [7390-38]  
F. J. Torcal-Milla, L. M. Sanchez-Brea, E. Bernabeu, Univ. Complutense de Madrid (Spain)
- 7390 14 **Modelling of laser range measurement of underwater objects in maritime environment** [7390-39]  
R. Ostrowski, Military Univ. of Technology (Poland); A. Cywinski, Polish Naval Academy (Poland)
- 7390 15 **Numerical and experimental study of the characteristic functions of polygon scanners** [7390-42]  
V.-F. Duma, M. Nicolov, Aurel Vlaicu Univ. of Arad (Romania)
- 7390 16 **Determination of phase and modulation transfer function (PTF and MTF) of a printer by the convolution of transmission function measurement** [7390-41]  
K. Madanipour, A. Bostani, P. Parvin, Amirkabir Univ. of Technology (Iran, Islamic Republic of)
- 7390 17 **Optical characteristics of a one-dimensional photonic crystal with an additional regular layer** [7390-40]  
V. A. Tolmachev, Trinity College Dublin (Ireland) and Ioffe Physico-Technical Institute (Russian Federation); A. V. Baldycheva, E. Yu. Krutkova, T. S. Perova, Trinity College Dublin (Ireland); K. Berwick, Dublin Institute of Technology (Ireland)
- 7390 18 **Modeling of the polarization mode dispersion in the single mode optical fiber links** [7390-43]  
L. Cherbi, Univ. of Sciences and Technology Houari Boumediene (Algeria); M. Mehenni, Polytechnic National School Algiers (Algeria)
- 7390 19 **Far field of binary phase gratings with errors in the height of the strips** [7390-45]  
J. M. Rico-García, L. M. Sanchez-Brea, Univ. Complutense de Madrid (Spain)
- 7390 1A **Fabrication of tunable grating with silver nanoparticles** [7390-46]  
T.-K. Liu, W.-C. Hung, National Sun Yat-Sen Univ. (Taiwan); M.-S. Tsai, Y.-C. Tsao, National Chiayi Univ. (Taiwan); I-M. Jiang, National Sun Yat-Sen Univ. (Taiwan)
- 7390 1B **Interferometric Ronchi test by using substructured gratings** [7390-47]  
M. Campos-García, Univ. Nacional Autónoma de México (Mexico); F. Granados- Agustín, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico)
- 7390 1C **Depth-of-field extension and 3D reconstruction in digital holographic microscopy** [7390-49]  
I. Bergoënd, Ecole Polytechnique Fédérale de Lausanne (Switzerland); T. Colomb, Lycée Tec SA (Switzerland); N. Pavillon, Ecole Polytechnique Fédérale de Lausanne (Switzerland); Y. Emery, Lycée Tec SA (Switzerland); C. Depeursinge, Ecole Polytechnique Fédérale de Lausanne (Switzerland)

- 7390 1D **Diffraction microtomography with sample rotation: primary result on the influence of a missing apple core in the recorded frequency space** [7390-50]  
S. Vertu, Physikalisch-Technische Bundesanstalt (Germany); I. Yamada, J.-J. Delaunay, The Univ. of Tokyo (Japan); O. Haeberlé, Lab. MIPS, Univ. de Haute Alsace (France); J. Flügge, Physikalisch-Technische Bundesanstalt (Germany)
- 7390 1E **Prospects and limits of the Rayleigh Fourier approach for diffraction modelling in scatterometry and lithography** [7390-51]  
J. Bischoff, Optical Simulations & Research Ilmenau (Germany)

*Author Index*

# Conference Committee

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**Wolfgang Osten**, Universität Stuttgart (Germany)

- 3 Interferometry and Phase  
**Bernd Bodermann**, Physikalisch-Technische Bundesanstalt (Germany)
- 4 Maxwell Solvers  
**Andreas Erdmann**, Fraunhofer-Institut für Integrierte System und Bauelementetechnologie (Germany)
- 5 Surface Metrology  
**Markus Bär**, Physikalisch-Technische Bundesanstalt (Germany)
- 6 Scatterometry  
**Irwan Setija**, ASML Netherlands B.V. (Netherlands)
- 7 Holography and OCT  
**Richard M. Silver**, National Institute of Standards and Technology (United States)

## Introduction

This year, the conference on **Modeling Aspects in Optical Metrology** is organized for the second time as an integral part of the SPIE Europe Optical Metrology Symposium. Initially suggested by Prof. Wolfgang Osten, the idea behind this conference was to establish a forum to present and discuss in particular basic methods, techniques, and algorithms which are necessary for a proper modeling and simulation of applied optical metrology techniques.

The use of optical metrology techniques in production control is increasing and thus it is of ever greater importance to fully understand the optical measurement process. This requires the ability of quantitatively predicting the dependence of the output of an optical sensor or an optical measurement system on variations of the measurement object, the sensor itself, and the measurement environment. Only if these influences on the measurement result are properly taken into account in a suitable model of the measurement process, the measurement result and its associated measurement uncertainty can be used for example for reliable control of production processes. Moreover, the ability to understand and model a measurement process is also a prerequisite for comparison of measurement results with those of other independent measurement methods.

The two-day conference covers the following technical sessions: optical systems, wave propagation and polarization, interferometry and phase, Maxwell solvers, surface metrology, scatterometry, and holography and optical coherence tomography (OCT). In addition to the oral presentation sessions on Monday 15 June and Tuesday 16 June, there will also be a poster session on Monday afternoon.

I would like to thank all contributors as well as co-chairs and the members of the program committee for their support of this conference, and I am looking forward to seeing you in Munich!

**Harald Bosse**



