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# ***Novel Optical Systems Design and Optimization XV***

**G. Groot Gregory**  
**Arthur J. Davis**  
*Editors*

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# Contents

- vii *Conference Committee*
- ix *Introduction*

---

## SESSION 1 INSTRUMENTATION

---

- 8487 02 **Design and implementation of an imaging nephelometer** [8487-1]  
D. K. Frayer, M. Taylor, National Security Technologies, LLC (United States)
- 8487 03 **An examination of the sensitivity and systematic error of the NASA GEMS Bragg Reflection Polarimeter using Monte-Carlo simulations** [8487-3]  
R. Allured, The Univ. of Iowa (United States); T. Okajima, NASA Goddard Space Flight Ctr. (United States); R. Soufli, M. Fernández-Perea, Lawrence Livermore National Lab. (United States); R. O. Daly, H. Marlowe, S. T. Griffiths, The Univ. of Iowa (United States); M. J. Pivovarov, Lawrence Livermore National Lab. (United States); P. Kaaret, The Univ. of Iowa (United States)
- 8487 04 **Measurement of optical characteristics in dielectric liquid lens by Shack-Hartmann wave front sensors** [8487-5]  
Y. T. Tung, C. Y. Hsu, J. A. Yeh, P. J. Wang, National Tsing Hua Univ. (Taiwan)
- 8487 05 **Compact motorized circular wheel of polarization optics for ultra-broadband polarization state generation** [8487-35]  
C.-J. Weng, National Chiao Tung Univ. (Taiwan) and Instrument Technology Research Ctr. (Taiwan); D.-R. Liu, Instrument Technology Research Ctr. (Taiwan); K.-Y. Hsu, Y.-F. Chen, National Chiao Tung Univ. (Taiwan)

---

## SESSION 2 NOVEL SYSTEMS

---

- 8487 06 **Optical system designs based on bi-directional sensor devices** [8487-6]  
C. Grossmann, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany) and Friedrich-Schiller Univ. (Germany); U. Gawronski, F. Perske, G. Notni, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany); A. Tünnermann, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany) and Freidrich-Schiller Univ. (Germany)
- 8487 07 **LED illuminator for a microdisplay projector** [8487-7]  
S. Magarill, Synopsys, Inc. (United States)
- 8487 08 **8-views autostereoscopic single projector system** [8487-8]  
Y. Wang, Delta Electronics, Inc. (Taiwan)

- 8487 09 **Geometrical stereo matching image guidance for ground vehicle on focused image pixel grouping and stacked images statistical operation** [8487-9]  
A. Akiyama, Kanazawa Technical College (Japan); N. Kobayashi, Kanazawa Institute of Technology (Japan); H. Kumagai, Tamagawa Seiki Co., Ltd. (Japan); E. Mutoh, Kawasaki Heavy Industries Ltd. (Japan); H. Ishii, Nihon Univ. (Japan)

---

**SESSION 3 DESIGN METHODS**

---

- 8487 0A **Non-MacAdam color discrimination ellipses (Invited Paper)** [8487-10]  
P. Goldstein, Philips Color Kinetics (United States)
- 8487 0B **Asphere design for dummies** [8487-11]  
K. Oka, S. Sparrold, Edmund Optics, Inc. (United States)
- 8487 0C **Radially symmetric freeform lens design for extended sources** [8487-12]  
P. Goldstein, Philips Color Kinetics (United States)
- 8487 0D **Approaching direct optimization of as-built lens performance** [8487-13]  
J. P. McGuire Jr., T. G. Kuper, Synopsys, Inc. (United States)
- 8487 0E **Novel approach for merit function optimization in hybrid imaging system through finite impulse response method** [8487-14]  
C.-C. Chang, Y.-L. Chen, K.-V. Chen, H.-Y. Tsao, C.-W. Chang, Industrial Technology Research Institute (Taiwan)

---

**SESSION 4 COMPUTATIONAL TOOLS**

---

- 8487 0F **Open source data analysis and visualization software for optical engineering (Invited Paper)** [8487-15]  
G. A. Smith, B. J. Lewis, M. Palmer, D. W. Kim, A. R. Loeff, J. H. Burge, College of Optical Sciences, The Univ. of Arizona (United States)
- 8487 0G **Analysis and compression of plenoptic camera images with Zernike polynomials** [8487-16]  
J. Schwiegerling, G. C. Birch, J. S. Tyo, College of Optical Sciences, The Univ. of Arizona (United States)
- 8487 0H **Photorealistic rendering application to the design of LED flash lens** [8487-17]  
J.-L. Chern, Power Lens Technology, Inc. (Taiwan)
- 8487 0I **Design of scale distorting imaging devices with tilted object plane** [8487-19]  
C. Hahlweg, bbw Hochschule, Univ. of Applied Sciences (Germany); L. Pescoller, Peret GmbH (Italy)
- 8487 0J **Acquisition errors in micro-satellite synthetic aperture telescopes** [8487-20]  
I. Glaser, Holon Institute of Technology (Israel)

---

**SESSION 5 BIOMEDICAL SYSTEMS**

---

- 8487 OK **Extended depth of field system for long distance iris acquisition** [8487-21]  
Y.-L. Chen, S.-H. Hsieh, K.-E. Hung, S.-W. Yang, National Chiao Tung Univ. (Taiwan); Y.-H. Li, Feng Chia Univ. (Taiwan); C.-H. Tien, National Chiao Tung Univ. (Taiwan)
- 8487 OL **Development of a numerical framework for studying intrinsic parameter of a micro-lens-based optical detector** [8487-22]  
S. Paar, X. Jiang, W. Semmler, J. Peter, German Cancer Research Ctr. (Germany)
- 8487 OM **A novel electro-optical pump-probe system for bioelectromagnetic investigations** [8487-23]  
A. De Angelis, V. Couderc, P. Leproux, A. Labruyère, A. Tonello, S. El Amari, D. Arnaud-Cormos, P. Leveque, Xlim Institute (France)
- 8487 ON **Design of a confocal fluorescence microscope: space saving and affordable** [8487-24]  
C. Bechtel, Technische Univ. Dresden (Germany); J. Knobbe, H. Gröger, H. Lakner, Fraunhofer-Institut für Photonische Mikrosysteme (Germany); F. Reichert, Univ. Hamburg (Germany)
- 8487 OO **Design of an optical probe compatible for multimodal imaging** [8487-25]  
M. Choi, S. Lee, J. Chang, E. Lee, K.-D. Jung, W. Kim, Samsung Advanced Institute of Technology (Korea, Republic of)
- 8487 OP **An optimized adaptive optics experimental setup for *in vivo* retinal imaging** [8487-26]  
S. E. Balderas-Mata, L. G. Valdivieso González, G. Ramírez Zavaleta, E. López Olazagasti, E. Tepichin Rodríguez, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico)

---

**SESSION 6 MUSIC AND HISTORY**

---

- 8487 OQ **Topics in optics and music (Invited Paper)** [8487-27]  
A. W. Sparks, L-3 WESCAM Sonoma Operations (United States)
- 8487 OR **The unique sound of the Uni-Vibe pedal** [8487-28]  
C. Hahlweg, bbw Hochschule, Univ. of Applied Sciences (Germany); H. Rothe, Helmut-Schmidt Univ. (Germany)
- 8487 OS **Uranium glass in optics: historical review and current research** [8487-29]  
C. Hahlweg, W. Zhao, H. Rothe, Helmut-Schmidt Univ. (Germany)

---

**POSTER SESSION**

---

- 8487 OT **An overview of radial supporting ways for large-size movement mirror: a case study of a large-aperture rotating prism** [8487-30]  
A. Li, Tongji Univ. (China) and Shanghai Institute of Optics and Fine Mechanics (China); W. Wang, Y. Ding, Tongji Univ. (China); Y. Liang, Shanghai Ocean Univ. (China); J. Sun, Shanghai Institute of Optics and Fine Mechanics (China); Y. Zhu, Zhejiang Univ. of Science and Technology (China); Z. Li, Tongji Univ. (China); L. Wang, L. Liu, Shanghai Institute of Optics and Fine Mechanics (China)

- 8487 0U **Hybrid information transmitting system** [8487-31]  
E. Dashkevich, St. Petersburg State Univ. of Aerospace Instrumentation (Russian Federation)
- 8487 0W **Two-dimensional Mueller matrix phase tomography of self-similarity birefringence structure of biological tissues** [8487-33]  
V. O. Ushenko, Chernivtsi National Univ. (Ukraine)
- 8487 0Z **Correlation processing of polarization inhomogenous images in laser diagnostics of biological tissues** [8487-37]  
L. Trifonyuk, Rivne Regional Oncological Hospital (Ukraine)
- 8487 10 **Optical system for study of temporal dynamics of a change in the complex degree of polarization in liquor laser images** [8487-38]  
D. T. Popovitch, Bukovinian State Medical Univ. (Ukraine)
- 8487 11 **Stokes polarimetry of biological tissues oncological changes** [8487-39]  
A. O. Karachevtsev, L. Y. Kushnerick, V. O. Ushenko, Chernivtsi National Univ. (Ukraine)

*Author Index*

# Conference Committee

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## Introduction

This year in San Diego, California, we held the fifteenth conference of Novel Optical Systems Design and Optimization. The conference was very well attended and featured oral presentation topic tracks in Instrumentation, Novel Systems, Design Methods, Computational Tools, Biomedical Systems and Music and History. In addition, there was a poster session, a joint Optical Engineering Plenary Session and Technical Group Events.

The session on Design Methods was particularly well attended with standing room only in the meeting room. Also, the "Music and History" session was a brand new "experimental" session topic for us and this was well received. The topic appears to have struck a favorable chord amongst attendees and we look forward to growing participation next year.

Three invited papers were presented during the conference:

- Peter Goldstein of Philips Color Kinetics presented his work on formalizing a tangible and consistent method for color discrimination on the CIE chromaticity diagram. [8487-10]
- Dr. Greg Smith from the College of Optical Sciences, University of Arizona gave a real time demonstration of his group's open source, easy to use optical data analysis and visualization software SAGUARO. [8487-15]
- Andrew Sparks of L-3 WESCAM gave a lively media rich talk on the use of optics in the field of music. [8487-27]

The Novel Optical Systems Design and Optimization committee wanted to explore some new technology niches this year and this seems to have been a successful and positive endeavor. We look forward to continuing this effort next year!

Our thanks go to those who helped make this conference a success, especially the authors, audience, SPIE staff, and program committee. The authors share the credit for making this conference an unqualified success. The audience built upon this success by being active and asking engaging questions. The SPIE staff, especially the Technical Program Coordinators who ensured that everything ran smoothly before, during, and after the meeting. The program committee provided excellent assistance to ensure the quality of the content while also presiding over a number of the sessions. It was composed of Andrew Cheng, Jyh-Long Chern, Frank Grochocki, Andrew Harvey, Joseph Howard, Richard Juergens, John Koshel, Scott Lerner, Rongguang Liang, Paul Manhart, Rubén

Mohedano, Jorge Ojeda-Castaneda, Craig Olson, Andrew Rakich, Michael Robinson, Kevin Rolland-Thompson, José Sasián, David Shealy, Andrew Sparks and Marija Strojnik.

Next year we will return for the sixteenth iteration of this conference. The chairs will be G. Groot Gregory and Arthur J. Davis. The planning for Novel Optical Systems Design and Optimization XVI in 2013 is already underway, so please start planning submissions, questions, and attendance. Focus themes are being decided at this time. If you would like to assist with the 2013 or later conference please contact one of us. We look forward to seeing you in 2013!

**G. Groot Gregory**  
**Arthur J. Davis**