

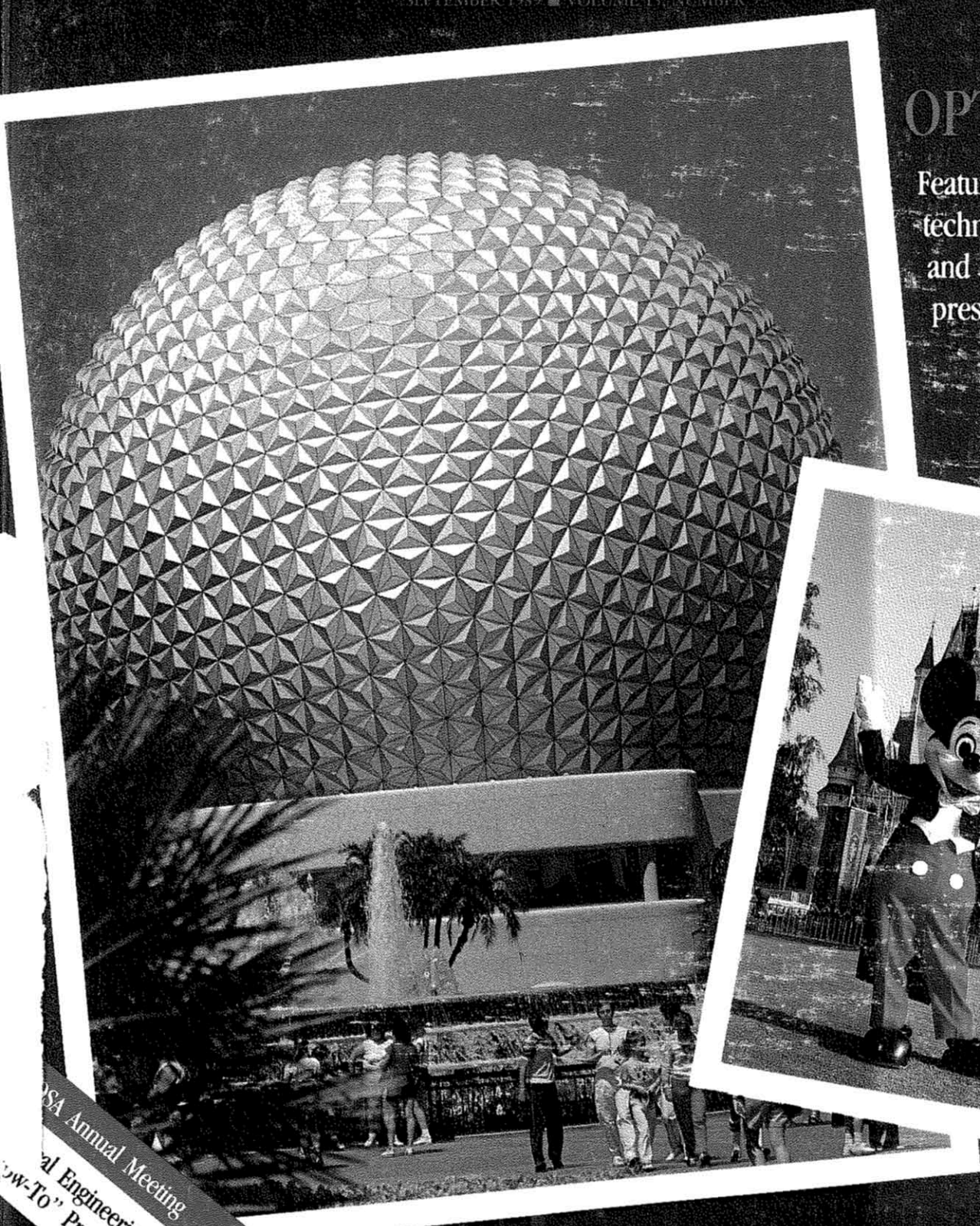
# OPTICS

N E W S

SEPTEMBER 1989 ■ VOLUME 15, NUMBER 9

## OPTICS '89

Featuring a major  
technical exhibit  
and product  
presentations



OSA Annual Meeting  
Engineering  
"How-To" Program

PROGRAM ISSUE

# OSA awards fellow status to 31 members

The Optical Society of America has awarded the rank of fellow to 31 of its members, bringing the total number to 787.

According to the Society's bylaws, "Any regular member who has served with distinction in the advancement of optics is eligible for transfer to the class of fellow." No more than one-tenth of the total membership may be fellows.

The 1989 fellows were approved by the Board of Directors at its May meeting in Washington, D.C., based on the recommendation of the 1988 Fellows and Honorary Members Committee. Their names, affiliations, and citations are listed below.

**Robert R. Alfano**, *City College of New York*. For studies of ultrafast phenomena in solids, liquids, and biological materials.

**Ravindra A. Athale**, *BDM Corp.* For contributions to the field of optical computing.

**Rodolfo Bonifacio**, *University of Milan*. For fundamental contributions in the fields of superfluorescence, optical bistability, and free-electron lasers.

**Robert D. Burnham**, *Amoco Technology Co.* For pioneering work in the development of semiconductor lasers.

**Federico Capasso**, *AT&T Bell Laboratories*. For seminal contributions to photoconductivity, photodetectors, and optical properties of quantum-well structures.

**I-Cheng Chang**, *Applied Technology Division of Litton*. For contributions to the theory of acousto-optical devices and their application to optical signal processing systems.

**Veniamin P. Chebotayev**, *Academy of Sciences-Siberian Branch*. For pioneering contributions to high-resolution laser spectroscopy.

**Arthur N. Chester**, *Hughes Research Laboratories*. For technical contributions in the fields of lasers and electro-optics and for outstanding research management.

**James H. Churnside**, *NOAA/ERL Wave Propagation*

*Laboratory*. For contributions to atmospheric optics.

**Paolo G. Cielo**, *National Research Council of Canada*. For development of original optical techniques for metrology and sensing.

**Anna Consortini**, *Univ. de Firenze*. For contributions to the understanding of the statistical properties of laser propagation in the atmosphere.

**William J. Dallas**, *University of Arizona*. For pioneering work in computer-generated holograms and medical imaging.

**Jerry A. Gelbwachs**, *The Aerospace Corp.* For pioneering work in ultrasensitive detection and atomic resonance filters.

**Richard E. Grojean**, *Northeastern University*. For invention and development of novel optical instrumentation and for services to the optics community as educator and scientist.

**Chander P. Grover**, *National Research Council of Canada*. For contributions in optical metrology, imaging, and information processing.

**Joseph L. Horner**, *Rome Air Development Center*. For work on image restoration, holographic optical elements, correlation filters, and pattern recognition.

**H. Jeffrey Kimble**, *California Institute of Technology*. For pioneering experiments on photon antibunching, optical bistability, and squeezed light.

**Yajun Li**, *Pennsylvania State University*. For contributions to diffraction theory and coherence.

**Robert M. Marks II**, *University of Washington*. For contributions to image recovery and synthesis, optical processing, and electro-optical neural networks.

**G. Michael Morris**, *Institute of Optics, Rochester*. For contributions to image processing, holography, and quantum-limited imaging.

**Shaul Mukamel**, *University of Rochester*. For development of methods for calculating molecular nonlinear opti-

cal processes in condensed phases.

**Roger P. Netterfield, CSIRO.** For contributions to the techniques of optical thin film deposition.

**Kurt E. Oughstun, University of Vermont.** For contributions in the field of optical wave propagation and scattering.

**Laurence S. Rothman, Air Force Geophysics Laboratory.** For contributions to understanding the spectra of atmospheric molecules.

**Theodore T. Saito, Lawrence Livermore National Laboratory.** For efforts in transforming diamond machining into a practical optical fabrication technique.

**Richard G. Smith, AT&T Bell Laboratories.** For contributions to the development of solid state lasers, nonlinear optical devices, and optical communications.

**Roger H. Stolen, AT&T Bell Laboratories.** For contributions to the understanding of nonlinear phenomena in fibers as well as the invention of unique fibers.

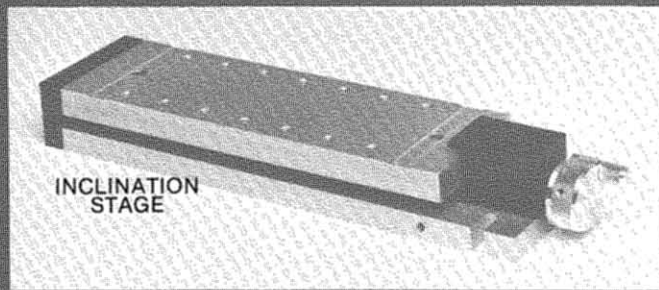
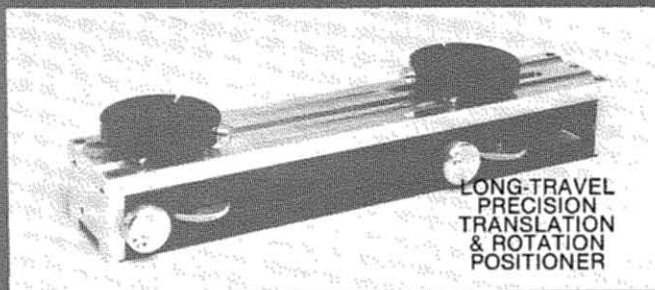
**Andrew C. Tam, IBM.** For contributions to laser-matter interactions.

**Robert F. Wagner, Food and Drug Administration.** For pioneering work in the assessment and improvement of image quality in medical imaging.

**Alan M. Whitman, Tel Aviv University.** For fundamental contributions to understanding phenomena associated with propagation through atmospheric turbulence.

**Henry M. van Driel, University of Toronto.** For many contributions to understanding the interaction of laser radiation and semi-conducting materials.

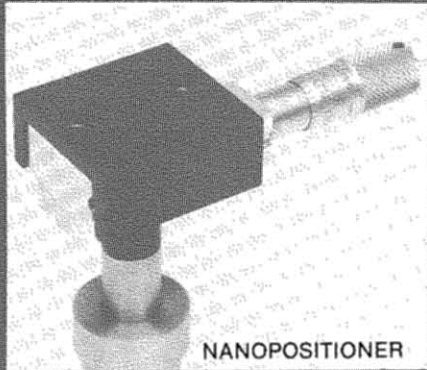
## NEW CONCEPTS IN MICROPOSITIONING



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