OSA's 2005 Fellows

Fifty-seven outstanding scientists were elected to the class of Fellow by the OSA Board of Directors at the Society's annual meeting in October 2004. Many of the new Fellows will receive recognition at OSA meetings in 2005. Please join us in congratulating them.

Ilesanmi Adesida
University of Illinois at Urbana-Champaign, Illinois
For contributions to high-sensitivity optoelectronic devices and integrated circuits and the methods for their fabrication.

J. Stewart Aitchison
University of Toronto, Ontario, Canada
For contributions to optical spatial solitons and nonlinear integrated optics.

Filbert J. Bartoli
National Science Foundation, Arlington, Virginia
For contributions in opto-electronics research and leadership in formulating and guiding major government research programs to the long-term benefit of the nation's science and engineering community.

Wilhelm Becker
Max Born Institute
Berlin, Germany
For contributions to quantum mechanical description of intense laser-atom processes, such as above-threshold ionization and high-order harmonic generation, and his quantum description of free-electron lasers.

Lindsay Charles Botten
University of Technology, Sydney, Australia
For seminal advances in physical and mathematical understanding of periodic structures, in particular the optical and electromagnetic properties of diffraction gratings and photonic crystals.

John C. Cartledge
Queen's University at Kingston, Ontario, Canada
For contributions to fiber-optic communications, in particular modulated optical signals and transmission system performance.

Gee-Kung Chang
Georgia Institute of Technology, Atlanta, Georgia
For contributions to DWDM optical networking and optical label switching technologies.

Chungte Bill Chen
Raytheon, El Segundo, California
For remarkable achievements in applying diffractive optical elements to the design of classical and conformal optical systems to obtain wide fields of view along with excellent aberration correction.

Yun C. Chung
Korea Advanced Institute of Science and Technology, Daejeon, South Korea
For contributions to the fundamental understanding of high-capacity lightwave systems and networks.

Steven T. Cundiff
JILA/University of Colorado and NIST, Boulder, Colorado
For contributions to ultrafast laser spectroscopy of semiconductors and to carrier-envelope phase stabilization of modelocked lasers.

Cid Bartolomeu de Araújo
Universidade Federal de Pernambuco, Brazil
For sustained contributions in the fields of nonlinear optics and laser spectroscopy of condensed matter and to optics education.

Casimir DeCusatis
IBM Corporation, Poughkeepsie, New York
For noteworthy and sustained contributions to the design, packaging, testing and deployment of optical fiber data communication networks.

David Howard Foster
The University of Manchester, Manchester, U.K.
For sustained contributions to the perception of color, form and motion over a period of thirty years.

Costas Fotakis
FORTH-Institute of Electronic Structure & Laser, Crete, Greece
For decades-long leadership of, and personal research contribution to, the field of laser applications to art conservation as manifested through publications, conference organization, and international advocacy.

Min Gu
Swinburne University of Technology, Hawthorn, Australia
For pioneering contributions to multiphoton fluorescence and three-dimensional optical microscopy and to three-dimensional optical data storage and polymer-based photonic crystals.

Peter S. Guilfoyle
OptiComp Corporation, Zephyr Cove, Nevada
For contributions to massively parallel (N3/N4) optical interconnect architecture with prototype demonstrations including component advancements in design and fabrication.

James S. Harris
Stanford University, Stanford, California
For many seminal contributions to crystal growth for semiconductor optoelectronic devices and to a broad range of optoelectronic devices.

Mark Hillery
Hunter College of CUNY, New York
For contributions to quantum informatics and quantum optics with particular reference to his work on quantum cloning, amplitude squared squeezing and quantization of electrodynamics of nonlinear media.

Chennupati Jagadish
Australian National University, Canberra, Australia
For seminal contributions to III-V compound semiconductor optoelectronics and optoelectronic device integration.

Bahram Jalali
University of California at Los Angeles, California
For contributions to silicon photonics.

Julian D. C. Jones
Heriot-Watt University, Edinburgh, U.K.
For a world-leading track record in optical fiber sensors, optical instrumentation and laser material interactions, and for outstanding contributions to U.K. research strategy and planning.

Robert M. Jopson
Bell Laboratories/Lucent Technologies, Holmdel, New Jersey
For pioneering the use of optical phase conjugation to mitigate impairments in lightwave systems, for innovative discoveries in polarization-mode dispersion phenomena and measurement techniques and for sustained service to OSA.

James D. Kafka
Spectra-Physics Lasers, Mountain View, California
For seminal contributions to ultrafast optics and to optical engineering through design, development and commercialization of laser systems.

Raman Kashyap
Ecole Polytechnique de Montreal, Quebec, Canada
For extensive contributions to the study and application of fiber Bragg gratings.

Georg Korn
Max Born Institute, Berlin, Germany
For contributions to ultrafast and high-intensity laser science extending from the visible to the x-ray regime.

Masanori Koshiba
Hokkaido University, Sapporo, Hokkaido, Japan
For contributions to the design and modeling of photonic crystal devices, circuits and fibers.

Denise M. Krol
University of California
at Davis, California
For significant contributions to photosensitivity and laser spectroscopy in glass fibers.

Paul G. Kwiat
University of Illinois at
Urbana-Champaign, Illinois
For numerous seminal contributions to the field of experimental quantum optics and quantum information science.

Byoungho Lee
Seoul National University,
Seoul, South Korea
For contributions in information processing and nonlinear optics.

Yu-Hwa Lo
University of California at
San Diego, La Jolla, California
For contributions to integrated optoelectronics and compound semiconductor materials processing.

Abhijit Mahalanobis
Lockheed Martin,
Orlando, Florida
For outstanding contributions to automatic target recognition, distortion invariant object recognition and optical pattern recognition.

Jonathan P. Marangos
Imperial College, London, U.K.
For pioneering work on coherent short-wavelength sources, atomic coherence and coherent control and strong-field physics of molecules and clusters.

Mario Martinelli
CoreCom, Milan, Italy
For contributions in interferometric fiber-optic sensors and polarization devices, including the study of the Faraday Rotator Mirror effect, and optical communications.

Richard A. Mathies
University of California at
Berkeley, California
For innovative contributions to experimental and interpretive methods in resonance Raman spectroscopy and the application of these methods to elucidate ultrafast dynamical processes in photochemistry and photobiology.

Mark A. Neifeld
University of Arizona,
Tucson, Arizona
For significant contributions and advancement of the fields of holographic data storage, error codes for optical data storage, and holograph, and for distinguished service to the Society as associate editor of Applied Optics.

Joseph W. Nibler
Oregon State University,
Corvallis, Oregon
For leadership in high-resolution coherent-Raman spectroscopy and its application to studies of free radicals, plasmas and ultracold clusters formed in free-jet expansions.

David N. Nikogosyan
National University of Ireland,
University College Cork, Ireland
For contributions to lasers and optical materials through a wide range of publications and internationally recognized contributions to ultrafast spectroscopy and biophotonics.

John Pendry
Imperial College London, U.K.
For many and distinguished contributions to the theory of photonic bandgap materials, left-handed metamaterials and negative refraction.

Michel Piché
Université Laval, Quebec, Canada
For outstanding contributions to the theory and experimental study of optical resonators, wave propagation and generation of ultrashort laser pulses.

Jean-Paul Pocholle
Thales Research and
Technology, Orsay, France
For pioneering work on fiber nonlinearities and dispersion, solid state laser dynamics and optical parametric oscillators.

Craig D. Poole
EigenLight Corporation,
Somersworth, New Hampshire
For contributions to the understanding and mitigation of polarization-mode dispersion and chromatic dispersion in lightwave systems.

Sudhakar Prasad
University of New Mexico,
Albuquerque, New Mexico
For the elucidation of fundamental concepts in quantum optics, optical imaging and applications of information theory to imaging.

Dennis W. Prather
University of Delaware,
Newark, Delaware
For contributions to the development of theoretical electromagnetic models as well as the design and experimental validation of micro- and nano-photonic optical elements and devices.

William A. Reed
Photons Work LLC,
Summit, New Jersey
For extensive contributions to the design, measurement and applications of optical fibers.

David J. Richardson
University of Southampton, U.K.
For extensive contributions to photonics, in particular the development of holey fibers, high-power fiber lasers and short pulse fiber lasers.

Joseph Rosen
Ben-Gurion University of the
Negev, Beer-Sheva, Israel
For initiating the research of optical correlation in 3D space and introducing computer generated holography for controlling the diffraction and propagation properties of optical beams.

Barry C. Sanders
University of Calgary,
Alberta, Canada
For significant contributions to optical quantum information science and quantum optics, including development and assessment of optical implementations of quantum information protocols and tasks.

Alexander Sergienko
Boston University, Massachusetts
For seminal contributions to the development of quantum measurement techniques in optics using entangled-photon states.

Yunlong Sheng
Université Laval, Quebec, Canada
For original contributions to phase mask diffractive optics, holography, wavelet transform and optical signal processing and pattern recognition.

K. Alan Shore
University of Wales, Bangor, U.K.
For significant contributions to the theory and experimental characterization of nonlinear optical and dynamical properties of semiconductor laser devices.

Yan Sun
Bookham Technology
Sunnyvale, California
For pioneering contributions to the understanding and management of the dynamic behavior of fiber amplifiers in optical networks.

Krishna Thyagarajan
Indian Institute of Science
and Technology Delhi, India
For developing novel techniques for analyzing optical waveguides and proposing novel fiber designs for dispersion compensation and optical amplification.

Alexander V. Tikhonravov
Moscow M.V. Lomonosov
State University, Russia
For many significant contributions that advanced the theory, design and manufacture of optical thin films.

Hailin Wang
University of Oregon,
Eugene, Oregon
For research on quantum optical processes in semiconductors, in particular electromagnetically induced transparency via exciton correlations and cavity QED with nanocrystals.

Kim A. Winick
University of Michigan,
Ann Arbor, Michigan
For seminal contributions to the field of passive and active glass and crystal integrated optics.

Min Xiao
University of Arkansas, Fayetteville
For studies in nonlinear optics, dispersion in electromagnetically induced transparency, and for the use of squeezed states in sub-shot-noise interferometric measurements.

Nikolay Zheludev
University of Southampton, U.K.
For contributions to the nonlinear optics of solids and to nanophotonics.