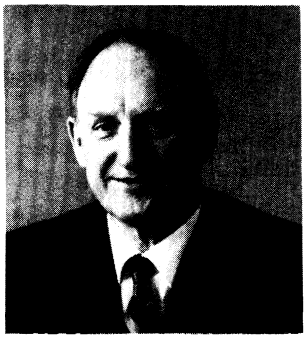

Kingslake Medal and Prize

This is the time of year that I have the opportunity in my editorial to congratulate the winner of the Rudolph Kingslake Medal and Prize for the best paper published in *Optical Engineering* during 1991. The winner was Brian E. Newnam for his paper "Extreme ultraviolet free-electron laser-based projection lithography systems." Our sincere congratulations to Dr. Newnam on this major award. Brian Newnam is a member of SPIE and works at the Chemical and Laser Science Division of the Los Alamos National Laboratory.

The selection committee, who had the difficult task of choosing one winning paper, consisted of Małgorzata Kujawińska, Jean Bulabois, Freeman Hall, Satoshi Ishihara, and Bruce Steiner, who acted as chair. Richard Hoover's schedule prevented his taking part in the deliberations. This was just as well, perhaps, since the winning paper was part of the August 1991 special section devoted to X-Ray/EUV Optics, of which Richard Hoover was the guest editor.

As readers of this editorial may know, I have a special feeling for the Kingslake award. I helped to get this award started, and it is named for a very special colleague of mine in Rochester for whom I have enormous respect. I had the great honor of receiving the award myself with David B. Kay in 1977 and also the opportunity to serve on the selection committee in 1981.

Dr. Newnam's award-winning paper was not only part of a special section of our journal but also was, as the footnote to the paper states, "a revision of a paper presented at the SPIE conference on X-Ray/EUV Optics in Astronomy, Microscopy, Polarimetry, and Projection Lithography, July 1990, San Diego, California." This fact would count as one point in favor of our current policy regarding the publication of revised proceedings papers.

Let me close by once again congratulating Brian Newnam for his excellent prize-winning contribution to *Optical Engineering*. This paper is a symbol of the quality of our journal and is particularly special to me since it was published during my first year as editor.

Brian J. Thompson
Editor

Rudolf Kingslake Medal and Prize
Past Recipients

1974 Irving R. Abel and B. R. Reynolds
1975 J. M. Burch and C. Forno
1976 Richard E. Swing
1977 David B. Kay and Brian J. Thompson
1978 Norman J. Brown
1979 J. R. Fienup
1980 G. Ferrano and G. Hausler
1981 Robert A. Sprague and William D. Turner
1982 David M. Pepper
1983 James R. Palmer
1984 Gene R. Gindi and Arthur F. Gmitro
1985 Armand R. Tanguay, Jr.
1986 Arthur D. Fisher, Lai-Chang Ling, John N. Lee, and Robert C. Fukuda
1987 Chris P. Kirk
1988 Ares J. Rosakis, Alan T. Zehnder, and Ramaratnam Narasimhan
1989 Pochi Yeh, Arthur Chiou, John Hong, Paul H. Beckwith, Tallis Chang, and Monte Khoshnevisan
1990 Paul R. Prucnal and Philippe A. Perrier

September 1992

Wavelet Transform

Harold H. Szu
U.S. Navy
Naval Surface Warfare Center, Code R44
10901 New Hampshire Ave.
Silver Spring, MD 20903-5000
301/394-3097 • 301/394-3923 FAX

October 1992

Acousto-Optics

Ting-Chung Poon
Virginia Polytechnic Institute and State University
Bradley Department of Electrical Engineering
Optical Image Processing Laboratory
Blacksburg, VA 24061
703/231-4876 • 703/231-3362 FAX

November 1992

Relay Mirror Experiment

Paul W. Kervin
Phillips Laboratory
535 Lipoa Parkway, Suite 200
Kihei, HI 96753
808/874-1542 • 808/874-1640 FAX

December 1992

Automatic Target Recognition

Firooz Sadjadi
Systems and Research Center
Honeywell Inc.
3660 Technology Drive
Minneapolis, MN 55418
612/782-7543 • 612/782-7438 FAX

January 1993

Optical Research in Asia

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Toshimitsu Asakura
Hokkaido University
Research Institute of Applied Electricity
Sapporo, 060 Japan
81-11-716-2111 • 81-11-758-3173 FAX

Yong H. Lee
KAIST Department of Physics
Yusung-Ku, Taejon, Korea
82-42-829-2536 • 82-42-861-1458 FAX

Run W. Wang
Shanghai Institute of Optics and Fine Mechanics
P.O. Box 800-211
Shanghai, 201800 China

March 1993

Optical Fiber Reliability II

Hakan H. Yuce
Bellcore
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Morristown, NJ 07962
201/829-4945 • 201/267-9753 FAX

Charles R. Kurkjian
AT&T Bell Laboratories
600 Mountain Avenue
Murray Hill, NJ 07960-1910
908/582-2378 • 908/582-2783 FAX

April 1993

Emerging Optoelectronic Technologies

Vijai K. Tripathi
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ECE Building 220
Corvallis, Oregon 97331-3211
503/737-3617 • 503/737-1300 FAX
Manuscripts due Sep. 1, 1992

May 1993

Phase Contrast Microscopy

Maksymilian Pluta
Institute of Applied Optics
ul. Kamionkowska 18
03-805 Warszawa, Poland
48 22 18 44 05 or 48 22 18 44 97
48 22 13 32 65 FAX
Manuscripts due Oct. 1, 1992.

June 1993

From Numerical to Symbolic Image Processing: Systems & Applications

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Manuscripts due Oct. 15, 1992.

July 1993

Visual Communication and Image Processing IV

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Manuscripts due Dec. 1, 1992.

August 1993

Electro-Optical Flight Systems

Amar Choudry
Science and Technology Corporation
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Hampton, VA 23666
804/865-1894
Manuscripts due Jan. 1, 1993.

September 1993

Optical Science and Engineering in Canada

C.P. Grover
National Research Council
Institute for National Measurement Standards
Ottawa, Canada K1A OR6
613/993-2098 • 613/952-1394 FAX
Manuscripts due Feb. 1, 1993.

October 1993

Microlithography

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2500 Deer Creek Road
Palo Alto, CA 94304-1392
415/857-5987 • 415/857-6241 FAX
Manuscripts due March 1, 1993.

November 1993

Acquisition, Tracking, and Pointing

Mohammed A. Karim
University of Dayton
Center for Electro-Optics
300 College Park
Dayton, Ohio 45469-0227
513/229-2241 • 513/229-3433
Manuscripts due April 1, 1993.

December 1993

Magnetospheric Imagery and Atmospheric Remote Sensing

Supriya Chakrabarti
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Earth and Planetary Atmospheres Group
Space Sciences Lab
Berkeley, CA 94720
510/642-3524 • 510/643-7629 FAX
Manuscripts due May 1, 1993.

January 1994

Infrared Technology

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Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive
Pasadena, CA 91009-8099
818/354-2313 • 818/393-6105 FAX
Manuscripts due June 1, 1993.

February 1994

Optical Interconnects and Packaging

Sing Lee
University of California/San Diego
E&CE Department
La Jolla, CA 92093-0407
619/534-2413 • 619/534-1225 FAX
Manuscripts due July 1, 1993.

March 1994

High Heat Flux Optical Engineering

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Advanced Photon Source, APS 360
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708/252-3384 • 708/252-3222 FAX
Manuscripts due Aug. 1, 1993.

Optical Engineering in U.K. Industry

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More than four and a half years have passed since the first special issue on this subject graced these pages in January 1988. Now, as then, the editors have not attempted to provide a representative or comprehensive survey of the field, but have merely dipped into the rich fountain of activity and expertise in the United Kingdom. What is apparent from both this issue and its predecessor is the sheer diversity of the work: ranging from the latest in sensor technology to the fundamentals of lighting and from definition of new, basic standards to laser vibrometry.

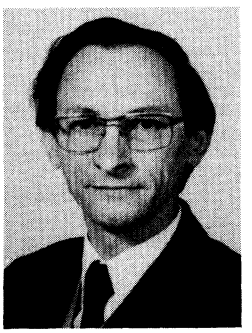
The editors concentrated on papers either from the U.K. industry or from universities working on projects for industry. The reasoning behind this selection was to encourage papers from the usually more reserved industrial researchers, who do not seem to have the same propensity for publication as their academic counterparts.

The differences between this issue and the previous one are also worth noting. In 1988, only two of the papers featured fiber optic technology. In this issue, nearly half of the papers are concerned with applications of optical fibers. This shows the movement of fiber sensors during this period out of the laboratory and into the workplace. This change is also indicative of the confluence of fiber technology and other new, enabling technologies, such as the micromachining of silicon.

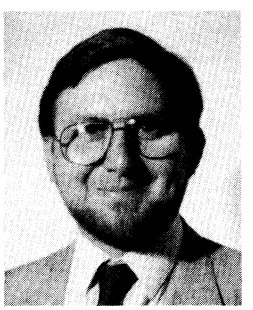
Other changes have also been apparent in the U.K. optical community. During this period, the U.K. Optical Engineering Advisory Panel was formed under the auspices of SPIE. This panel has organized, in conjunction with SIRA Ltd., many successful seminars that have sought to bring new developments in optical engineering to the attention of British industry.

Optical engineering still has some way to go in the United Kingdom before being fully recognized for the comprehensive discipline it has become. Several universities now have opto-electronic or optical engineering sections and departments. The research funding bodies, however, have not moved with the times, and would-be researchers in optical engineering must hunt for financial support among the subcommittees of more traditional disciplines, such as physics, electrical engineering, or mechanical engineering.

We hope that the reader will enjoy this selection of papers, and we thank the authors for their efforts. Several additional papers arrived too late for inclusion in this issue and may be published in subsequent issues of the journal. We also take this opportunity to thank the hard-working and unsung referees, without whose instructive and informed criticism the quality of work would not have been maintained.



Lionel R. Baker graduated in physics from Imperial College, London, and joined Sira Ltd. in 1958. He was a founding member of the Sira Board of Directors and served from 1972 to 1991. He is named in 45 patent applications including a new method of dynamic stress measurement that resulted in two Queen's Awards for Technology and Exports. The author of 75 technical publications, he lectures regularly to international audiences on the industrial applications of optical technology and technology transfer. In addition to the development of instruments for measuring the optical transfer function, he has recently been responsible for producing a new standard for measuring surface damage. Dr. Baker is currently chairman of the British Standards Institution Committee CPM/17 "Fundamental Standards," convener of CEN.TC123/WG1 "Terminology and Test Methods for Lasers," and a member of ISO/TC172. Dr. Baker is a fellow of the Institute of Physics, SPIE, and OSA. He was executive editor of the *Journal of Modern Optics* for 17 years. He recently retired as technical director at Sira and now acts as an international consultant and visiting professor of Brunel University, London.



Richard J. Parker earned a BSc degree in physics from Imperial College, London, in 1975. From 1975 to 1978, he worked on an SERC-funded project to study thermoplastic materials for holography. The work was carried out at Imperial College and the National Physical Laboratory. He joined the Advanced Research Laboratory of Rolls-Royce plc., Derby, United Kingdom, in 1978 and in 1986 was appointed group leader of the Optical Sciences Group. The laboratory is now known as the Rolls-Royce Applied Science Laboratory. Parker is responsible for development of laser-based instrumentation. He has published over 20 papers on the subjects of holography and optical diagnostics for aeroengine research. In 1987 he won the International Gas Turbine Institute's Jim Kamman Award and in 1991 the Royal Aeronautical Society's Ackroyd Stuart Award. His current research interests include holography, laser Doppler vibrometry, laser anemometry, particle image velocimetry, photomechanics, and nanotechnology.