

Editorial

H. J. Caulfield, Editor Optical Engineering

Critical Reviews

A number of readers have asked if *Optical Engineering* welcomes critical review papers. The answer is: "sometimes." Since that answer is less clear than the question, some explanation is in order.

A critical review paper for *Optical Engineering* must meet several criteria in addition to surviving the usual refereeing process. Specifically,

- (1) The topic must be the engineering or applied aspects of some field of optics. The reader should find *useful* information or concepts in the paper.
- (2) The topic must be manageably small. "Geometric Optics" is an unsuitable topic.
- (3) The review must not duplicate other readily available reviews in books or journals. Indeed, the review *must* discuss all previous reviews and show some clearly unique and valuable improvement over them (new material included, new comparisons made, etc.).
- (4) The review must organize, digest, and compare divergent approaches. We particularly welcome reviews which illustrate commonality among fields normally considered independent or reviews which compare various methods (not all of which need be optical) for accomplishing the same tasks. Fairness in comparisons is an absolute requirement. The review must be nonargumentative.
- (5) The author must have some "credentials" which give his review authority. This is not a capitulation to the "star" system. Rather it reflects the editor's belief that, while experts can write useful reviews, writing a review is not a good way to become an expert.
- (6) The critical review must include, but not be restricted to, a thorough, organized listing of the published literature. The word "critical" implies the need for comment and organization in addition to compilation.

Judgments on topic suitability are among my duties as editor. Because a good critical review is very difficult to write, I urge prospective authors to communicate their plans to me early in the process. My approval of a topic does not guarantee acceptance of your paper. It must go through the usual review process to protect both author and reader from errors and to give them some "quality control."

I want to encourage critical reviews meeting these criteria. They are my favorite kind of paper, because good ones help me do my job better. To show my sincerity in this effort, I intend to invite some critical reviews and to give them a prominent place in the journal (including brief author resume because authority is an issue in any review). If you feel a need for a critical review in your field, please contact me with your ideas.

OPTICAL ENGINEERING EDITORIAL SCHEDULE

SEPTEMBER/OCTOBER 1980 Holography

James C. Wyant, Guest Editor George O. Reynolds, Guest Editor

NOVEMBER/DECEMBER 1980

Novel Interferometry George W. Hopkins, Guest Editor 521 Castle Rock Terrace Sunnyvale, CA 94087 (415/493-1212)

Chris L. Koliopoulos, Guest Editor Optical Sciences Center University of Arizona Tucson, AZ 85721 (602/626-3020)

Optical Particle Measurement

James D. Trolinger, Guest Editor Spectrum Development Labs., Inc. 3303 Harbor Blvd., Suite G-3 Costa Mesa, CA 92626 (714/549-8477)

JANUARY/FEBRUARY 1981

Optical Polarizing R. M. A. Azzam, Guest Editor University of New Orleans Electrical Engineering Dept. New Orleans, LA 70122 (504/283-0650)

Atmospheric Optical Communication

Prof. Cardinal Warde, Guest Editor Massachusetts Institute of Technology Dept. of Elec. Engineering & Computer Sci. Room 13-3134 Cambridge, MA 02139 (617/253-6858)

MARCH/APRIL 1981

Optical Assembly & Tolerancing Paul R. Yoder, Jr., Guest Editor The Perkin-Elmer Corporation Norwalk, CT 06856 (203/762-1000)

MAY/JUNE 1981

Optical Data Recording A. Jamberdino, Guest Editor Rome Air Development Center Griffiss Air Force Base Rome, NY 13441 (315/330-4581)

JULY/AUGUST 1981

Application of Optics to Energy Processes Gerald W. Stewart, Guest Editor Aerodyne Research, Inc. Bedford Research Park Bedford, MA 01730 (617/275-9400)

Kent Casleton, Guest Editor Morgantown Energy Technology Center P. O. Box 880 Morgantown, WV 26505 (304/599-7573)

Those wishing to have a manuscript considered for any special issue listed above should correspond directly with that issue's Guest Editor.