Guest Editorial

Optical Fabrication and Testing

Jay M. Eastman
University of Rochester
Laboratory for Laser Energetics
College of Engineering and Applied Science
Rochester, New York 14627

Theodore T. Saito, USAF
L-140, Lawrence Livermore Laboratory
University of California
P. O. Box 808, Livermore, California 94550

Robert Parks
Frank Cooke, Inc.
59 Summer Street
North Brookfield, Massachusetts 01535

Optical fabrication and testing in the United States have been significantly brought together by a series of Optical Fabrication and Testing Workshops in the 1974-1977 time frame. This issue of *Optical Engineering* features optical fabrication and is intended to be another step in the process of bringing the optical fabrication community together. Our goal is to begin to overcome the natural tendency of the industry to withhold details regarding fundamental principles and important techniques. It is our opinion that the optics industry in the United States would benefit if this policy were universally accepted.

The issue contains several papers which present information related to the techniques of generation, polishing, and assembly. Each paper offers information which should be useful to the practicing optician or optical fabrication engineer. In general, we have asked for papers which were written from a practical viewpoint, rather than a research orientation.

Replication and diamond turning are two new techniques which are discussed. These fabrication methods are rapidly developing the capability of producing high quality optical components at low cost. A paper on the production of diffraction gratings is also included and illustrates a science which utilizes many principles common to diamond turning and optical replication. To round out the spectrum of material presented, you will find two papers devoted to the topics of infrared materials and fabrication.

A key issue facing the optics industry is specification. We have asked Mr. Warren Smith to serve as a guest editor to give us his views and insights.   c