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Introduction

This conference is the joint effort of SPIE—The International Society for Optical Engineering and APOMA—The American Precision Optics Manufacturers Association to host a forum and venue for worldwide experts and practitioners to gather, share knowledge, and discuss the future of optical fabrication.

The first Optifab conference was successfully held in May 2003 in Rochester, NY, where exhibitors from Europe, the United States, and Japan showcased machinery and equipment for the optical fabrication community and provided the unique opportunity to observe "on-the-shop-floor" demonstrations. Optifab was purposely chosen to alternate with the semi-annual Optatec exhibition in Frankfurt, Germany to provide an optical manufacturing fabrication experience in North America. Responses from our industry colleagues, as well as those from universities who carry out research in optics manufacturing science, have been overwhelmingly positive.

The technical venue of Optifab 2005 continues to leverage the international participation and expertise in the fabrication, processes, materials and metrology areas. The topics for the digest include a diverse range of new and emerging fabrication related technologies across the globe. Authors were asked to concentrate on novel and revolutionary processes, applications, and commercialization of technology rather than research fundamentals. Overall, we believe you will find the technical digest to be a great value and allow you to see first-hand the efforts of the leading international scientists, engineers, and manufacturers in manufacturing methods.

You will find topics to include MRF, glass molding, electroforming, microlenses, and many more advanced technologies. Technologies including telescope optics, free form surfaces, aspheric manufacturing, and other emerging technologies will be presented. Material and surface characterization and chemistry are well covered, as are metrology and testing. Optifab clearly represents a comprehensive state-of-the-art conference where the very latest in a wide variety of methods in optical manufacturing will be presented and discussed.

We express our sincere thanks to all those who worked directly or indirectly to create the program and attract the attendees for a successful conference.

Robert E. Fischer
Masahide Katsuki
Matthias Pfaff
Kathleen A. Richardson