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Session 1—Optomechanical System Design

Paul R. Yoder, Jr., Consultant in Optical Engineering

Session 2—System Stability Considerations

James B. Breckinridge, Jet Propulsion Laboratory

Session 3—Optomechanical Component and Mechanism Design

Daniel Vukobratovich, Optical Sciences Center/University of Arizona

Session 4—Design of the Optomechanical Interface

Roger A. Paquin, Advanced Materials Consultant

Session 5—Analytical Design Methods

R. Barry Johnson, Center for Applied Optics/University of Alabama in Huntsville

Preface

An SPIE "Critical Review" is always a special event. This one comprises 17 invited papers by well-known scientists and engineers who have made significant contributions to the field of optomechanical design. These papers provide in-depth analysis and review significant aspects of this key optical engineering technology. Prepared in advance for initial distribution at the San Diego '92 Annual Conference, this book includes papers addressing vital issues in the following general categories:

- Optomechanical System Design (4 papers)
- System Stability Considerations (5 papers)
- Optomechanical Component and Mechanism Design (4 papers)
- Design of the Optomechanical Interface (2 papers)
- Analytical Design Methods (2 papers).

I believe that in bringing these speakers together in a concerted effort to summarize technical progress in this broad field and in publishing their papers in a single volume, SPIE has provided a valuable service to the optical instrumentation design community. Those who hear the oral presentations and participate in the discussions that naturally follow will surely benefit from those experiences, while those who read the written versions of the papers included here should find much useful information.

On behalf of the Program Committee, I would like to extend my thanks to all authors/speakers who contributed their expertise to this critical review, and to those who attended the sessions as well as to those who will add this book to their libraries. We hope our collective efforts prove helpful throughout the optomechanical design community.

Paul R. Yoder, Jr.
Consultant in Optical Engineering