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Practical Holography XXI: Materials and Applications

**Roger A. Lessard
Hans I. Bjelkhagen**
Editors

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Introduction

This conference which takes place every year in January is an important international event in the field of practical holography and holographic materials. This year featured many interesting contributions in various fields during two intensive days of oral papers as well as a special poster session. The conference was divided into four main sessions: Recording Materials and Material Evaluation, Techniques and Applications, Display and Color Holography, and Digital, Electronic, and Computer Holography.

Many papers are devoted to conventional and new recording materials. The papers on photopolymer materials are increasing every year. For example, this year there was a paper on organic photoluminescent holograms. An invited paper on photo-thermo-refractive glass for large-aperture HOEs was one of the interesting new recording materials. Another invited paper was demonstrating polarization effects in holographic interferometry. Among applications, a new diffraction grating light guide for LED backlight can be mentioned. More real-time digital holography systems are now able to generate full-color displays. It is also interesting to note that MIT's Media lab continues the important work on holographic video, which started when Stephen Benton was responsible for the holographic R&D program at MIT. He was also the chair of this conference for many years.

The poster papers describe, for example, new materials, lighting systems for holograms, digital holography, and encryption. A new holographic camera system with an extended field of view was described in a poster from University of Arizona.

This year's conference program was lacking art-related papers, which in the past has been an interesting addition to papers dealing with scientific, industrial, and technology topics. Only one paper is included this year and it would be nice to see more art holography papers next year.

I would like to thank the Practical Holography XXI program committee members for their contribution. The session chairmen: Gerald L. Heidt, Jean-Marc R. Fournier, Tung H. Jeong and Christopher W. Slinger are acknowledged for helping with the paper presentations during the four sessions. The co-chair Roger A. Lessard, Université Laval, Canada, was not able to be involved in this year's conference caused by health problems.

I look forward to seeing you in San Jose in January 2008.

Hans I. Bjelkhagen