## PROCEEDINGS OF SPIE

# Practical Holography XXIV: Materials and Applications

Hans I. Bjelkhagen Raymond K. Kostuk Editors

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#### Introduction

The SPIE Practical Holography conference, which takes place every year in January, is an important international event in the field of practical holography and holographic materials. This year marks the twenty-fourth meeting of the Practical Holography conference which is part of the Photonics West event in San Francisco, California. The 2010 conference marks the first time the meeting was held in San Francisco.

The conference provides a venue for all aspects of holography: art, display, metrology, scientific, security, storage, and HOEs. The conference also brings together participants from all over the world including Europe, Australia, Asia, and America. This year's meeting consisted of 24 oral and 15 poster papers. In addition, a holography technical event took place during an evening meeting on new developments in materials and applications. A presentation of the 8<sup>th</sup> International Symposium on Display Holography that took place in July 2009 in China was provided by Hans Bjelkhagen during this event.

This year's conference featured many interesting contributions in various fields given in a very full day of presentations. It was divided into four sessions on four main topics: Holographic Video and LCD, Digital and Computer Generated Holography, Applications and Displays, and Materials and Experimental Techniques.

Some of the highlights of the meeting included presentations on interactive holographic stereograms from MIT, refreshable holographic displays with photorefractive photopolymers from the University of Arizona, and mobile phone color holography from Geola Digital Lab. In addition, the afternoon session had many interesting updates on material development. This work is very important to the continued development of holographic techniques and possible applications.

Every year the number of papers on digital holography systems seems to increase. This year was no exception; it is now possible to generate full-color real-time displays as well as improved quality of electronic holograms.

We would like to thank all the authors and the Practical Holography XXIV program committee members for their contribution. The session chairmen, S. J. Zacharovas and G. L. Heidt, are acknowledged for helping with the paper presentations during the sessions. The Practical Holography conference and the holography technical event provided a good collection of activities for those interested in holography.

We look forward to seeing you in San Francisco in January 2011.

Hans I. Bjelkhagen Raymond K. Kostuk