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10021 05 Diffractive optical elements for multi-dimensional subdiffraction-limit spot generation: design, demonstration, and characterization (Invited Paper) [10021-2]

10021 06 The development of an adaptive optics system and its application to biological microscope (Invited Paper) [10021-3]

10021 09 Chromostereopsis in “virtual reality” adapters with electrically tuneable liquid lens oculars [10021-6]

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10021 0C Geometrical waveguide in see-through head-mounted display: a review (Invited Paper) [10021-9]

SESSION 3 DESIGN AND FABRICATION METHODS

10021 0F Multi-tool design and analysis of an automotive HUD (Invited Paper) [10021-12]

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10021 OL  Optimization of aspheric multifocal contact lens by spline curve (Invited Paper) [10021-18]
10021 OM  Design and verification of a flat-field aberration-corrected concave blaze grating for hyperspectral imaging [10021-19]
10021 ON  Aspheric and free-form surfaces test with non-null sub-aperture stitching [10021-20]
10021 OO  Design of freeform unobscured reflective imaging systems using CI method [10021-21]

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10021 OT  Visual analysis of the computer simulation for both imaging and non-imaging optical systems [10021-26]

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Multifocal intraocular lens to correct presbyopia

Simulation of the BSDF measurement capabilities for various materials with GCMS-4 gonio-spectrophotometer

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Slope error tolerance analysis for candela distribution of total-internal-reflection collimating lens

Simultaneous null test of primary mirror and tertiary mirror in off-axis three-mirror optical system

Characterization on the effect of linear stress birefringence in a total reflection prism (TRP) ring resonator

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Introduction

The official SPIE/COS (the Chinese Optical Society) partnership was inaugurated in 1990 with the signing of a joint partnership agreement. Since that time, more than twenty-five years ago, there have been numerous joint conferences including this most recent Photonics Asia symposium. Photonics Asia represents one of the several recognized periodic events allowing all members of the optical engineering and photonics community to interact and network in a synergistic and beneficial manner. It is a true sign of cooperation and friendship between optical community members which more than satisfies the aspirations envisioned by the original SPIE/COS agreement. As the Optical Design and Testing VII co-chairs, we are pleased to have had the opportunity to assist in the further evolution and development of this continuing enhancement of the optical engineering community.

It is without doubt to call the “Optical Design and Testing VII” conference portion of the SPIE/COS Photonics Asia 2016 symposium a complete success. The conference consisted of six sessions, twenty-nine oral presentations and forty-nine posters. Of the twenty-nine scheduled oral presentations, five were ‘no-shows’ leaving twenty-four papers actually presented over one day and a half. Five ‘no-shows’ is not an unusual number given the international nature of the conference and the travel and schedule complications thereby imposed. Topics covered in the conference covered a broad range including system design, imaging, display, fabrication, freeform optics, illumination and interferometry. Paper quality was generally above average and represented considerable research and development energy. The audience appeared deeply engrossed in all the presentations and certainly appreciated the tremendous time and effort put forth by all the presenters, including those who were not able to be physically present for various reasons.

We wish to thank all the participants in Optical Design and Testing VII for helping to make this conference the success it was. Looking forward to the next Photonics Asia symposium, it is hoped that continual technical and scientific advancement will be available for presentation and that the participants in this meeting will be able to return along with additional contributing optical scientists and engineers to help make the next and future conferences even more successful than this one.

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