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Introduction

This proceedings volume is a collection of papers based on the invited and contributed presentations at the Optical Data Storage (ODS) 2016 conference, which was held on 28 August 2016 at the San Diego Convention Center as part of the SPIE Optics + Photonics 2016.

The ODS had been held as a stand-alone conference from 1973 to 2012. However, because of the decrease in the number of researchers in the field of optical data storage, it has been held as part of larger conferences since 2013. This was the third time for ODS to be held in the SPIE Optics + Photonics.

ODS 2016 was basically a success. Although 2 papers were cancelled before the conference, a total of 14 papers (8 invited papers and 6 contributed papers) were presented orally. The average number of attendees for each session in this year was almost the same as those in the past two years. There were some high-quality presentations about holographic data storage as well as emerging and elemental technologies. It is highly expected that holographic data storage will be put into practical use in the professional archival storage market in the near future, and that emerging and elemental technologies will explore novel applications in which improved function and performance are realized utilizing the features of light, unlike other storage modalities.

We are very happy that a total of 5 papers are contained in this proceedings volume. They represent important and interesting achievements in the current field of optical data storage. We hope that the readers find this proceedings volume stimulating and exciting as well as helpful for their future research and development.

We are planning to have the ODS 2017 as part of SPIE Optics + Photonics 2017, which will be officially announced later. To further activate ODS, we would like to enhance the range of attendees and discussions by incorporating related technologies, inviting researchers in the big data industry, etc. Reconsidering the conference name might also be a good idea.

Finally, we would like to express our sincere gratitude to the committee members, session chairs, all of the presenters and attendees of the ODS 2016, and the SPIE staff for their great contributions.

Ryuichi Katayama
Thomas D. Milster