PROCEEDINGS OF SPIE

Optical Transmission Systems and Equipment for Networking VI

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10–12 September 2007 Boston, Massachusetts, USA

Sponsored and Published by SPIE

Volume 6774

Proceedings of SPIE, 0277-786X, v. 6774

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in Optical Transmission Systems and Equipment for Networking VI, edited by Werner Weiershausen, Benjamin B. Dingel, Achyut Kumar Dutta, Ken-ichi Sato, Proceedings of SPIE Vol. 6774 (SPIE, Bellingham, WA, 2007) Article CID Number.

ISSN 0277-786X ISBN 9780819469342

Published by **SPIE** P.O. Box 10, Bellingham, Washington 98227-0010 USA Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445 SPIE.org

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Printed in the United States of America.

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Introduction

It is our distinct pleasure to welcome you to Optics East 2007 Conference on Optical Transmission Systems and Equipment for Networking VI. This conference provides a cross-section of important activities in the field of optical networks and optical transmission systems. It features progress and significant developments in various aspects of deployable technologies for broadband optical aggregation, metropolitan, and core networks.

The main topics discussed this year are photonic networks and their building blocks, high-speed and broadband transmission, overcoming physical impairments by means of equalization and robust system design, and further advanced WDM technology solutions. Contributions to other ITCom conferences in the symposium complement this conference, especially papers from Broadband Access Communication Technologies II and Active and Passive Optical Components for Communications VII.

This year, besides several path-breaking contributed, invited, and keynote papers, a special invited session entitled 100Gbps Ethernet and Ultra-High Speed Systems has been brought into being within the framework of this conference.

100Gbps Ethernet has become one of the most interest-arousing topics currently discussed in the WDM community. On the one hand, advances in technology allow for new steps in high-speed WDM; on the other hand, telecommunication operators have to carefully study market demands for future 100Gbps Ethernet deployment, and examine the suitability of their fiber infrastructure for high-speed transport. Alternative 100GE transport approaches like serial high-baudrate transmission, multi-level modulation format, or inverse WDM multiplexing schemes are to be discussed.

We expect this important conference to continue as a leading venue in sharing new technical advances and bringing innovative, integrated approaches that address key issues in WDM transmission systems and optical networks.

Finally, we express our strong appreciation to the authors of all the contributed and invited papers, the Technical Program Committee members, the session and workshop supporting professionals, and the SPIE staff who made this conference possible and enriching. The success of this conference is strongly due to them.

Thank you for joining us at the Optical Transmission Systems and Equipment for Networking Conference of SPIE Optics East/ITCom.

Werner Weiershausen Achyut Kumar Dutta Benjamin B. Dingel Ken-Ichi Sato