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Optical Metro Networks and Short-Haul Systems

Werner Weiershausen Benjamin B. Dingel Achyut Kumar Dutta Atul K. Srivastava Editors

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Introduction

It is our distinct pleasure to welcome you to the first Optical Metro Networks and Short-Haul Systems Conference of the Photonics West OPTO 2009 Symposium. Photonics West addresses a highly versatile field of innovations in optics, now extending into optical fiber telecommunications with the merge of a number of ITCom conferences originating from Optics East.

The Optical Metro Networks and Short-Haul Systems Conference, which was formerly part of ITCom, covers various topics spanning from network architectures to optical transmission systems and subsystems. The focus is not on ULH transmission but on metro and short-haul networks, which are of increasing importance as their large-scale network element deployment offers a huge potential for future cost reduction in the domains of capital and operational expenditures and energy efficiency optimization. Although ULH is not the primary focus of this conference and proceedings, a number of important innovative technologies are discussed that many people know from optical long-haul fibre transmission. This is quite consequential as the domains and technologies of short-haul/metro and long haul are growing together more and more these days. Robust fiber transmission and wavelength division multiplexing approaches, new modulation formats and equalizer schemes, as well as other innovations known from the long-haul field will be urgently needed in future metro/short-haul network domains due to today's dramatic increase of bandwidth and bitrate speed demands.

We expect this new conference to continue as a lead venue in sharing new technical advances and bringing innovative integrated approaches that address key issues in WDM transmission systems and optical networks for shorthaul and metro domains.

Finally, we express our strong appreciation to the authors of all the contributed and invited papers, the technical program committee members, the session 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 Metro Networks and Short-Haul Systems Conference of the Photonics West OPTO 2009 Symposium.

Werner Weiershausen Benjamin B. Dingel Achyut Kumar Dutta Atul K. Srivastava