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# PROCEEDINGS OF SPIE

## ***Broadband Access Communication Technologies V***

**Benjamin Dingel  
Raj Jain  
Katsutoshi Tsukamoto**  
*Editors*

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## Introduction

It is our pleasure to welcome all of you in Photonics West 2011 conference on Broadband Access Communication Technologies V. The purpose of this conference is to promote discussions and disseminations of design, development, and performance of various types of broadband access communication technologies.

This year the three optical-communication related conferences, namely; (i) Broadband Access Communication Technologies V, (ii) Optical Metro Networks and Short-Haul Systems III, and (iii) Coherent Optical Communication: Components, Subsystems, and Systems, decided to have integrated programs with multiple joint sessions between them to assemble well-known invited speakers and solicit high quality technical papers coming from Asia, Europe, and North America. These excellent joint sessions are made possible through the cooperation and leadership of all conference chairs involved.

For one, the joint sessions between Broadband Access Communication Technologies V and Optical Metro Networks and Short-Haul Systems III offer comprehensive coverage of various technical aspects of broadband access from the last-mile to short-haul system to metro-wide networks. On the other hand, the joint sessions with Coherent Optical Communication: Components, Subsystems, and Systems introduce the latest developments and advance technologies in optical coherent communication as they slowly penetrate broadband access field. These efforts have resulted in a very strong technical program representing the state of the art in the field.

The Broadband Access Communication conference continues to provide discussions and disseminations for platform technologies such as optical fiber-based, radio-over-fiber-based, photonics-based, copper-based, satellite-based, mobile wireless-based and power-line communications. We have invited a number of well-known speakers to present the current and future trends of these broadband access technologies as well as the economics of pricing in access.

Finally, we acknowledge and appreciate the speakers and authors of all the contributed and invited papers, the technical program committee members, and SPIE staff for all their valuable efforts. The success of this conference is strongly due them.

**Benjamin Dingel**  
**Raj Jain**  
**Katsutoshi Tsukamoto**

