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Introduction

Asia-Pacific Optical Communications (APOC) is the flagship conference of SPIE and one of the world's major conferences in the field of optical communication. APOC2008 took place in Hangzhou, China, October 26–30, 2008 under the technical co-sponsorship of SPIE, Chinese Optical Society (COS), China Institute of Communications (CIC), and the Joint Research Center of Photonics of the Royal Institute of Technology and Zhejiang University.

Nearly six hundred papers were presented throughout the five days in four sub-categories. The 4th sub-category "Network Architectures, Management, and Applications" attracted 195 submissions including 24 invited speeches; among those, 145 papers were selected for presentation and poster at the conference. 22 technical sessions ran concurrently as follows: Broadband Access I, Optical Transport Network, FTTX, WDM Network I, Best Student Paper Session, Optical Network for Broadband Service, WDM-PON, Carrier Ethernet, Optical Grid I, WDM Network II, Metro Network, Dynamic Optical Network, Broadband Access II, Network Survivability I, Future Optical Network, Network Design, Scalable Optical Network, GMPLS/ASON, Optical Grid II, Network Survivability II, Routing and Wavelength Assignment, and Optical Switching and Routing. Furthermore, one poster session was held as well.

The technical program covered a wide spectrum of research topics on optical network architectures, management, and applications. The papers included in this volume were part of the technical conference and subject to review by the conference program committee and the editors. (Some conference presentations may not be included if they were not submitted for publication.) Six graduate students presented their papers in the Best Student Paper Session, and Ms. Jiajia Chen from the Royal Institute of Technology KTH, Sweden won the award with the paper entitled "A novel joint scheduling algorithm for multiple services in 10G EPON."

We wish to acknowledge the hard work of the authors, the reviewers, and SPIE in the preparation of this volume. We wish to thank the general chairs: Lars Thylén, Wei Yang, and Bingkun Zhou, the general technical chairs: Kwok-Wai Cheung, Dominique Chiaroni, and Chinlon Lin, and the conference sponsors and organizers for their efforts to create a great conference and these proceedings.

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