

Editorial for Focus Issue on Enabling Science and Technology for High-Speed Optical Communications

Fiber optics underpins the communications infrastructure for the information society today. Cables consisting of hair-like fibers speed data around the globe in the form of rapid pulses of light. Modern telecom infrastructure facilitating high-speed broadband internet would not be possible without it. Rapid progress of advanced modulation formats, coding, optical amplification, coherent detection, and digital signal processing has made significant impact in the field of optical communications. Transmission speeds beyond 100 Gb/s are being explored. This focus issue Enabling Science and Technology for High-Speed Optical Communications includes comprehensive review articles and original contributions covering the rapid advances and broad scope of these technologies in optical fiber communications. We have classified these papers into four topics: high-speed signal long-haul transmission, optical and electrical signal procession, access system, and passive optical components. It is hoped that this issue will bring the research community's attention to some of the latest development in high-speed optical communications. We have seven invited review papers from internationally renowned experts in the areas. In addition, fourteen original contributions from China are included. Finally, we would like to thank the Executive Editor-in-Chief, Dr. Changhe Zhou, for inviting us to serve as a focus issue editors and Ms. Yanfang Hu for her help in ensuring the timely production of this focus issue.

Feature Editor:

Tingye Li

AT&T, Middletown, NJ 07748, USA

Zisen Zhao

Wuhan Research Institute of Post and Telecommunications, Fiberhome,
Wuhan 430074, China

Jianjun Yu

ZTE USA Inc., 33 wood ave., south, 2FL, Iselin, NJ 08830, USA

ZTE Inc., Beijing 100083, China

Email: jy61@mail.gatech.edu