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Optical Fiber Telecommunications V A B Set Fifth Edition

**Ivan Kaminow, Tingye Li, Alan E.
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Willner, 2010-07-28 Optical Fiber Telecommunications V A B is the fifth in a series that has chronicled the progress in the research and development of lightwave communications since the early 1970s. Written by active authorities from academia and industry, this edition not only brings a fresh look to many essential topics but also focuses on network management and services. Using high bandwidth in a cost-effective manner for the development of customer applications is a central theme. This book is ideal for R D engineers and managers, optical systems implementers, university researchers and students, network operators, and the investment community. Volume A is devoted to components and subsystems including semiconductor lasers, modulators, photodetectors, integrated photonic circuits, photonic crystals, specialty fibers, polarization mode dispersion, electronic signal processing, MEMS, nonlinear optical signal processing, and quantum information technologies. Volume B is devoted to systems and networks including advanced modulation formats, coherent systems, time multiplexed systems, performance monitoring, reconfigurable add-drop multiplexers, Ethernet technologies, broadband access and services, metro networks, long-haul transmission, optical switching, microwave photonics, computer interconnections, and simulation tools. Biographical Sketches: Ivan Kaminow retired from Bell Labs in 1996 after a 42-year career. He conducted seminal studies on electrooptic modulators and materials, Raman scattering in ferroelectrics, integrated optics, semiconductor lasers, DBR ridge waveguide, InGaAsP, and multi-frequency birefringent optical fibers and WDM networks. Later he led research on WDM components, EDFAs, AWGs, and fiber Fabry Perot Filters, and on WDM local and wide area networks. He is a member of the National Academy of Engineering and a recipient of the IEEE OSA John Tyndall OSA Charles Townes and IEEE LEOS Quantum Electronics Awards. Since 2004 he has been Adjunct Professor of Electrical Engineering at the University of California Berkeley. Tingye Li retired from AT T in 1998 after a 41-year career at Bell Labs and AT T Labs. His seminal work on laser resonator modes is considered a classic. Since the late 1960s he and his groups have conducted pioneering studies on lightwave technologies and systems. He led the work on amplified WDM transmission systems and championed their deployment for upgrading network capacity. He is a member of the National Academy of Engineering and a foreign member of the Chinese Academy of Engineering. He is a recipient of the IEEE David Sarnoff Award, IEEE OSA John Tyndall Award, OSA Ives Medal, Quinn Endowment, AT T Science and Technology Medal, and IEEE Photonics Award. Alan Willner has worked at AT T Bell Labs and Bellcore and is Professor of Electrical Engineering at the University of Southern California. He received the NSF Presidential Faculty Fellows Award from the White House, Packard Foundation Fellowship, NSF National Young Investigator Award, Fulbright Foundation Senior Scholar, IEEE LEOS Distinguished Lecturer, and USC University Wide Award for Excellence in Teaching. He is a Fellow of IEEE and OSA and has been President of the IEEE LEOS, Editor in Chief of the IEEE OSA J of Lightwave Technology, Editor in Chief of Optics Letters, Co-Chair of the OSA Science Engineering

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Optical Fiber Telecommunications III Ivan P. Kaminow, Thomas L Koch, 1997 **Optical Fiber Telecommunications VI** Alan E. Wilner, Tingye Li, Ivan P. Kaminow, 2002 **Optical Fiber Telecommunications VA** Tingye Li, Alan E. Willner, Ivan Kaminow, 2008-02-22 Optical Fiber Telecommunications V A B is the fifth in a series that has chronicled the progress in the research and development of lightwave communications since the early 1970s Written by active authorities from academia and industry this edition not only brings a fresh look to many essential topics but also focuses on network management and services Using high bandwidth in a cost effective manner for the development of

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