APPENDIX F
Fiber-Optic Resources

No single book can tell you everything about fiber optics. This list covers sources that may be helpful to readers at various levels. It is far from comprehensive, but should give you a starting point.

Plenty of additional online resources are available, but unfortunately they tend to move about as Web sites are reorganized, so any printed list would be obsolete before the ink was dry. Your best bet is to do Web searches for relevant terms. For example, a search for 10-Gigabit Ethernet standards should quickly lead to the Web site of the 10-Gigabit Ethernet Alliance, the organization that promotes them.

Books

FIBER OPTICS

Vivek Alwayn, *Optical Network Design and Implementation* (Cisco Press, 2004) (telecommunication systems using fibers)

Michael Bass, ed., *Handbook of Optics: Vol. 4 Fiber Optics & Nonlinear Optics* (McGraw-Hill, 2001) (massive, comprehensive handbook)

John A. Buck, *Fundamentals of Optical Fibers* (Wiley InterScience, New York, 1995) (textbook on fibers and their properties)

C. David Chaffee, *Building the Global Fiber Optics Superhighway* (Kluwer Academic, 2001) (recent history of global telecommunications)

Bob Chomycz, *Fiber Optic Installer's Field Manual* (McGraw-Hill, New York, 2000) (for the practicing technician)

Dennis Derickson, *Fiber Optic Test and Measurement* (Prentice Hall, Upper Saddle River, NJ, 1998) (excellent coverage)

David R. Goff, *Fiber Optic Reference Guide: A Practical Guide to the Technology,* 2nd ed. (Focal Press, 1999) (concise reference guide)

Jim Hayes, *Fiber Optics Technician's Manual* (Delmar Publishers, Albany, 1996) (for the practicing technician)

Jeff Hecht, *City of Light: The Story of Fiber Optics* (Oxford University Press, New York, 1999) (history, easy reading)

Gerd Keiser, 3rd ed., *Optical Fiber Communications* (McGraw-Hill, New York, 2000) (recommended if you want more details)

Rajiv Ramaswami and Kumar N. Sivarajan, *Optical Networks, A Practical Perspective* (Morgan Kaufmann, 2002) (fiber-optic telecommunications systems)

TELECOMMUNICATIONS IN GENERAL

John C. Bellamy, *Digital Telephony*, 3rd ed., (Wiley, 2000)

Walter Ciciora, James Farmer, and David Large, *Modern Cable Television Technology: Video, Voice, and Data Communications* (Morgan Kaufmann, San Francisco, 1999) (very comprehensive)

Alan Freedman, *The Computer Glossary* (American Management Association, New York, 2001) (includes many telecommunications terms)

Roger L. Freeman, *Fundamentals of Telecommunications* (Wiley InterScience, New York, 1999 (oriented toward systems, at the engineering level)

Gary M. Miller, *Modern Electronic Communications*, 6th ed. (Prentice Hall, Upper Saddle River, NJ, 1999) (good nuts and bolts introduction)

Laszlo Solymar, *Getting the Message: A History of Communications* (Oxford University Press, 1999) (an entertaining and enjoyable history)

OPTICS, PHOTONICS, AND LASERS

Govind P. Agrawal, ed., *Semiconductor Lasers: Past, Present, and Future* (AIP Press, Woodbury, NY, 1995) (good overview)

Michael Bass, ed., *Handbook of Optics: Vol. 1: Fundamentals, Techniques & Design* and *Vol. 2: Devices, Measurements and Properties* (McGraw-Hill, 1995) (massive, comprehensive handbooks)

J. Warren Blaker and Peter Schaeffer, *Optics: An Introduction for Technicians and Technologists* (Prentice Hall, 2000) (good concise introduction to basic optics)

Emmanuel Desurvire et al., eds., *Erbium-Doped Fiber Amplifiers: Principles and Applications* (Wiley InterScience, 2002) (comprehensive introduction)

Eugene Hecht, *Optics,* 2nd ed. (Addison Wesley, Reading, MA, 1987) (the standard upper-level undergraduate text; no relation)

Jeff Hecht, *Understanding Lasers* (IEEE Press, Piscataway, NJ 1994) (introductory level, but a bit dated on semiconductor lasers)

Francis A. Jenkins and Harvey E. White, *Fundamentals of Optics*, 4th ed. (McGraw-Hill, New York, 1976) (very old, but a good introduction to classical optics)

B. A. E. Saleh and M. C. Teich, *Fundamentals of Photonics* (Wiley InterScience, New York, 1991) (wide-ranging upper-level textbook)

Amnon Yariv, *Optical Electronics in Modern Communications*, 5th ed. (Oxford University Press, New York, 1997) (widely used but very advanced textbook)

Periodicals

INDUSTRY MAGAZINES

Fiberoptic Product News (technology): *www.fpnmag.com*

Laser Focus World (for laser and optoelectronics engineers): *lfw.pennnet.com/home.cfm*

Lightwave (fiber-optic communications and business): *lw.pennnet.com*

OE Magazine (SPIE monthly)

Optics & Photonics News (Optical Society monthly)

Photonics Spectra (optics and photonics): *www.photonics.com*

Telephony (telephone industry and technology): *www.telephonyonline.com*

SCHOLARLY JOURNALS

Bell Labs Technical Journal (free online access at *www.lucent.com/minds/techjournal/*)

Electronics Letters (published by Institution of Electrical Engineers; many cutting-edge fiber-optic papers)

IEEE Communications Magazine (excellent review articles)

IEEE Journal on Selected Areas in Communications (reviews of selected areas)

IEEE Photonics Technology Letters

Journal of Lightwave Technology (published by IEEE and Optical Society of America)

ONLINE ONLY PUBLICATIONS

Fiberoptics Online (*www.fiberopticsonline.com*)

Fibers.org (*www.fibers.org*)

Light Reading (*www.lightreading.com*)

Other Resources

PROFESSIONAL SOCIETIES

The Fiber Optic Association (*www.thefoa.org*)

Institute of Electrical and Electronics Engineers (*www.ieee.org*)

- IEEE Lasers and ElectroOptics Society
- IEEE Communications Society

Optical Society of America (*www.osa.org*)

SPIE-The International Society for Optical Engineering (*www.spie.org*)

MAJOR FIBER OPTICS CONFERENCES

European Conference on Optical Communications (annual, see *www.ecoc-exhibition.com/*)

Optical Fiber Communications Conference (annual in United States, March, see *www.ofcconference.com*)