Appendix C. Milestones

C.1 New Faculty and Staff

**Merry A. Brantley** was appointed as a research specialist in RLE's Sensory Communication Group, effective December 18, 1995. As a licensed and certified audiologist, she has worked at both the Brigham and Women's Hospital and Beth Israel Hospital in Boston. At RLE, Ms. Brantley, a graduate of California State University at Long Beach (BS'85), will participate in laboratory and field studies of prototype hearing aids. She is currently a doctoral candidate at Boston University.

**Andrew R. Brughera** was appointed as a research specialist in RLE's Sensory Communication Group, effective July 1, 1995. A graduate of Syracuse University (BS'86) and Boston University (MS'95), Mr. Brughera will provide electrical engineering and digital signal processing support to the group's hearing research laboratory.

**Dr. Kyeongjae Cho** (PhD'94), a postdoctoral associate in RLE's Surfaces and Interfaces Group, was appointed as a research scientist, effective October 1, 1995. Since joining RLE in 1990 as a research assistant, Dr. Cho's research has involved ab initio calculations on parallel supercomputer platforms. He will be continuing this work to perform realistic simulations of scanning tip microscopy on semiconductor surfaces.

**Dr. Julie E. Greenberg** (SM'89, PhD'94), a visiting scientist in RLE’s Surfaces and Interfaces Group, was appointed as a research scientist, effective January 1, 1996. Dr. Greenberg joined RLE in 1989 as a graduate student and has conducted research on digital signal processing for multimicrophone hearing aids. She will continue to design, develop, and evaluate the microphone arrays for these devices.

**David S. Lum** (SB'94, MEng'95) was appointed as a research engineer in RLE’s Sensory Communication Group, effective August 1, 1995. Since 1993, Mr. Lum has worked on various projects with the Sensory Communication Group as a student. In his current position, he will provide support to investigators using digital signal processing techniques to develop aids for the hearing impaired and the deaf. He will also assist in psychoacoustic evaluations of hearing loss simulations and the use of speech recognition to aid in speechreading techniques.

**Francis G. Taylor** (SB'89) was appointed as a research engineer in RLE’s Sensory Communication Group, effective December 22, 1995. Mr. Taylor was previously a senior software developer for ConnectSoft in Bellevue, Washington. In his current position, he will perform computer system management and participate in the design and evaluation of simulation systems for virtual environment training programs.

**Majid Zandipour** was appointed as a research specialist in RLE's Speech Communication Group, effective February 20, 1996. He is currently a master's degree candidate in applied physics at the University of Massachusetts/Boston. Mr. Zandipour has served as laboratory supervisor in the school's psychology department for the last ten years. At RLE, he will provide engineering and technical support to investigators conducting research in speech motor control.

C.2 Promotions

**Dr. Dennis M. Freeman** (SM/EE'76, PhD'86) was promoted to Assistant Professor of Electrical Engineering, effective September 1, 1995. Professor Freeman joined RLE in 1978 as a research associate in the Auditory Physiology Group and was appointed a research scientist in 1986. His recent investigations have focused on the cochlear mechanisms by which acoustic stimuli are encoded into auditory nerve signals. He and his colleagues have developed microscopic photodetection methods and high-resolution image processing techniques to measure the motions and physical properties of inner ear structures. Since 1987, Professor Freeman has also been a research associate in otolaryngology at the Massachusetts Eye and Ear Infirmary.

**Mark K. Mondol** was appointed as a research engineer in RLE's Quantum-Effect Devices Group, effective February 22, 1996. A graduate of Lansing Community College (AAS'86), Mr. Mondol came to RLE in 1991 as a technician. He will be responsible for operating and maintaining the group's scanning electron-beam lithography system and focused ion-beam system.

**Dr. Reiner Wilhelms-Tricarico** was appointed as a research scientist in RLE's Speech Communication Group, effective September 1, 1995. Dr. Wilhelms-Tricarico joined RLE in 1993 as a research affiliate and postdoctoral associate. His research has focused on the simulation of the tongue's biomechanical behavior. Continuation of his
research will contribute to further understanding of phonological feature correlates and speech motor control. Dr. Wilhelms-Tricarico is a graduate of the University of Gottingen (BS'76, Diplom'81, ScD'87).

C.3 Retirements

**Dr. William M. Siebert** (SB'46, ScD'52),福特教授 of Engineering, announced his retirement in 1995, after serving 45 years at MIT. 43 of those on the faculty. Professor Siebert came to RLE in 1950 as a research assistant. With an interest in network theory, he joined the staffs of RLE's Radar Group and Project Lincoln, the forerunner of Lincoln Laboratory. He was appointed to the MIT faculty in 1952 and became full professor in 1963. In recent work in RLE's Auditory Physiology Group, Professor Siebert has developed mathematical models for peripheral mechanical and neural structures in the auditory system.

C.4 Tenure

**Dr. Srinivas Devadas**, Associate Professor of Electrical Engineering and Computer Science, received tenure on July 1, 1995. Professor Devadas conducts research in the Circuits and Systems Group on the computer-aided design of very large-scale integrated (VLSI) circuits and systems. His work focuses on the synthesis for testability and the formal verification of VLSI circuits, providing circuit and system designers with high-quality circuit design tools.

**Dr. Leslie A. Kolodziejski**, Esther and Harold E. Edgerton Career Development Associate Professor in the Department of Electrical Engineering and Computer Science, received tenure on July 1, 1995. Professor Kolodziejski investigates II-VI and III-V materials in RLE's Materials and Fabrication Group. Since coming to the MIT from the Purdue University faculty in 1988, she has established an important ultrahigh vacuum facility for the epitaxial growth of II-VI and III-V semiconductor materials.

C.5 Awards and Honors

**Dr. Hermann A. Haus**, Institute Professor, was awarded the National Medal of Science by President Clinton on October 18, 1995. The medal, which is the United States' highest scientific honor, was also presented to seven other scientists. Professor Haus was cited for his fundamental and seminal research contributions to the fields of quantum electronics, noise, and ultrafast optics; and for his outstanding service to the engineering profession through teaching. His research in RLE's Optics and Devices Group involves quantum optics. His contributions to the field of laser optics have been applied to long-distance fiber-optic communications as well as laser medicine techniques and instrumentation for eye surgery. Professor Haus is widely recognized for his work on the generation of ultrashort optical pulses and developing the soliton method of signal transmission.

**Dr. Jacqueline N. Hewitt** (PhD'86), Class of 1948 Associate Professor of Physics, was announced the recipient of the 1995-1996 Harold E. Edgerton Award on May 17, 1995. MIT established the award in 1982 to recognize young faculty members for distinction in teaching, research, and service. With her colleagues in RLE's Radio Astronomy Group, she has identified several gravitational lens systems and has detected emissions from low-temperature main-sequence stars using very-long-baseline interferometry. Professor Hewitt received the award at ceremonies held during the American Physical Society meeting in San Jose, California, on March 20, 1995.

**Dr. Daniel Kleppner**, Lester Wolfe Professor of Physics and RLE's associate director, was awarded the 1995 James R. Killian, Jr. Faculty Achievement Award. Professor Kleppner's wide range of work in RLE's Atomic, Molecular, and Optical Physics Group focuses on atom interactions with static electricity, magnetic fields, and radiation.

**Dr. Patrick A. Lee** (BS'66, PhD'70), William and Emma Rogers Professor of Physics, received a 1995 J.S. Guggenheim Fellowship. Professor Lee, a principal investigator in RLE's Quantum-Effect Devices Group, was among 152 artists, scholars, and scientists selected for the award. During his fellowship, he plans to conduct research on a theory for high-temperature superconductors. Professor Lee's other research has included the investigation of physics in small devices, transport through quantum dots, and the quantum Hall effect in confined geometry.