From its founding, one of the goals of the Institute has been to be of service to the optics industry. Providing educational programs relevant to the needs of this industry has remained a central theme. Servicing these needs is problematical to a top-ranked research department for two reasons. First, the faculty must be in close touch with current trends in industry, and second, courses must be taught at a high level on topics that are not currently the subject of academic research. Over the years the Institute has done a pretty good job of meeting these demands with very significant assistance by part-time teaching by practicing engineers from local industries.

In the first decade of the Institute’s existence C. E. K. Mees, the director of the research laboratory at Eastman Kodak, taught a course in photographic processes that was the most popular course offered. Of course, Rudolf Kingslake left the full-time faculty in 1937 to become director of the photographic lens department at Eastman Kodak but continued teaching on a part-time basis his famous course in lens design for another fifty years; he also taught in the summer school until about 1990.

It is not practical to list here all of those who have taught optics courses as part-time faculty, but their names are included in the time-line listings of faculty in the various chapters of this book. There have been some notable contributions from this group. Joseph Altman and

Irwin Loewen talking with Zheng Wu Li (Ph.D. 1989) at an Industrial Associates Meeting.
John Hamilton followed the tradition of Mees in teaching courses on photographic processes for nearly twenty years, from 1969 until the late 1980s. These courses were taken by hundreds of Kodak employees in the part-time M.S. program and by full-time students. A number of noted optics industrial researchers such as David MacAdam, Erich Marchand, and Irwin Loewen joined the part-time faculty after retiring from local industry. MacAdam spent several years working in the Institute teaching colorimetry and working on research and book writing. Marchand taught engineering mathematics and was very active in the University Chess Club.

The lens design laboratory course, Optics 444, has often been taught by part-time faculty. Bob Hopkins taught it for many years after he left the full-time faculty. Presently Julie Bentley from Tropel-Corning is teaching the course to record numbers of students; Dale Buralli of Apollo Optical Systems is teaching the introductory geometrical optics graduate course, Optics 441.

Another group of part-time faculty members who have been important to the teaching program are non-faculty staff members of the University. Many of these are part of the technical staff at the Laboratory for Laser Energetics or the Center for Optics Manufacturing. Most notable among these is Stephen Jacobs, who has served in this capacity since 1978, regularly teaching the fabrication and testing course and a course on liquid crystals. His appointment is properly classified as a secondary appointment as professor of optics so that he also supervises student thesis research. John Marciente and Jim Oliver of the laser lab both are teaching specialty courses.

Faculty members who specialize in optics-related fields are hardly limited to The Institute of Optics. Many of these faculty members in other departments throughout the University hold joint secondary appointments in the Institute. The Institute has always been close to the physics department so there have been many such appointments, particularly in quantum optics which overlaps both departments strongly. Currently Nicholas Bigelow, Joseph H. Eberly, and Emil Wolf from physics hold joint appointments, as do Govind Agrawal, Robert Boyd, and Carlos Stroud in the other direction. David Williams, who is director of the Center for Visual Science in the Department of Brain and Cognitive Sciences, is the latest in a long line from this center to hold joint appointments in optics. Tom Foster from radiology, Philippe Fauchet who is chair of Electrical and Computer Engineering, and Wolf Seka from the Laboratory of Laser Energetics round out this important component of the faculty.

There is one special category exemplified by M. Parker Givens: the emeritus faculty. Parker formally retired from the University in 1981 but continued instructing the teaching lab, Optics 256, until 2003, fifty-five years after he joined the faculty. He was loved and respected by the students for the entire period. Even in the last year students were in awe when he walked over to the balky experiment that they had unsuccessfully toiled over all afternoon—and with one little tweak of a knob he made it work.