

**RESOLUTION ON THE RETIREMENT OF PROFESSOR RONALD
GOLDNER**

**Read by Mohammed Afsar, Department of Electrical and Computer
Engineering
May 18, 2005**

Be it resolved that Professor Ronald Goldner be granted the status of Professor Emeritus in recognition of his long and distinguished service to Science and the University.

Dr. Goldner's contributions to life at Tufts University have been manifold and varied. His scholarship, his enthusiasm for teaching and his dedication to research exemplifies the ideals of his profession.

After serving as an Army officer in the Signal Corps and completing his graduate education at MIT and Purdue, Professor Goldner joined the Electrical Engineering Department in 1964. With his professional interest in material science, his strong support for graduate education and his deep scholarship, he made an immediate impact on our faculty.

Ron has been truly visionary in his approach to his work at Tufts. In all his educational efforts he recognized research and teaching as essentially equal partners. He has consistently been guided by the conviction that education in science and engineering should involve hands-on experiences. He sees engineering providing useful products while standing on a sound grounding in chemistry and physics. With this as his philosophy, he has excelled in developing productive collaborations with colleagues across a range of disciplines.

Realizing the importance of optics to the economy in the Boston area and the lack of a cohesive local academic resource in the discipline he, together with John DeVelis, founded the Tufts Electro-Optics Center in 1984 with the aim of providing graduate level education in this neglected area, and acted as its director in its early days. The unique courses offered by the Center, reflecting Dr. Goldner's belief in hands-on learning, emphasized laboratory work. Drawing on some of the best optics talent in Boston, the Center created a University-Industry resource and the field of optics has benefited greatly from the connections and collaborations made possible by the Center's common meeting ground.

In the early 90's Ron played a significant role in obtaining a multimillion dollar grant for the establishment of Science and Technology Center at 4 Colby St. a model of energy efficient building design. The facility now houses the Departments of Chemical and Biological Engineering and Biomedical Engineering, the Gordon Institute, The Wright Center for Science Education with the Center for Math and Science Teaching, and research space for High Energy Physics and Condensed Matter Physics in addition to Professor Goldner's research.

A practicing engineer, Professor Goldner has consulted for the US government and for more than 25 companies. Ron has also carried out fundamental research in electro-chemistry and electro-optics: work that has led to more than 60 publications and 10 patents. His papers are cited frequently, most notably a 1983 paper in Applied Physics Letters, "High near-infrared reflectivity modulation with polycrystalline electro-chromic WO_3 films", a 1988 paper in Solid State Ionics "Thin-film solid state ionic materials for electro-chromic smart window glass" and a 1983 paper in the Proceedings of SPIE "Electro-chromic materials for controlled radiant energy transfer in Buildings". Recognition of his research is wide spread. It has earned him the position of Fulbright Scholar and Professor in Physics at the Ben Gurion University (1987-88) and a Visiting Professorship in the Department of Materials Science and Engineering at MIT (1995).

Many of his papers are the result of his abiding passion, Solar Energy. His Department colleagues can attest to his ardent promotion of this alternative energy source. On the argument that repetition is important in education, he would remind us continuously at department meetings how neglected this potential for reducing our dependence on fossil fuels is: how enough sunlight falls on the United States to provide an economically viable alternative to non-renewable energy sources. Indeed, it was his advocacy for energy conservation that helped the University in obtaining from the Department of Energy the grant for 4 Colby Street. In 1987 Ron received the Commonwealth of Massachusetts Energy Innovation Award for his work and was featured in the Science Times section of the New York Times.

Recognition must also be given to his teaching. It is characterized by a philosophy he likes to summarize with his 4Ms: Motivate, Make, Measure, Model. Each of his courses were laboratory based or had a significant laboratory component on the theory that students learn best by doing. Alumni and alumnae who completed their studies under his tutelage mention time and time again how strong his influence was and how they appreciated the hands-on experiences he provided. There is no

greater gratification, no higher accolade, to a teacher than to have his students say “You made a difference” and Ron has had that privilege in full measure.

After over forty years at Tufts, Ron now retires to the warmth of a loving family. He and his wife Judy have raised two boys and a daughter, two of them teachers and the other an electro-optics engineer, and are blessed with grandchildren. Ron is deeply committed to the Jewish community on campus and off. He and Judy have generously supported Jewish education, social justice and Israel with their time, energy and resources. In his support of Israel, Ron's voice has been strong, thoughtful, productive and measured, based on his personal experience and time spent in Israel. He has helped students and faculty see the situation in the Middle East in its complexity and his support has been marked by compassion and a commitment to peace. On leaving Tufts, he will continue this important effort. He will also enjoy chamber music events around Boston where he always has been a regular, and he will have the pleasure of listening to his talented wife play with other local musicians.

Submitted by the Department of Electrical Engineering and Computer Engineering

Be it resolved that this resolution be spread on the minutes of the faculty of Arts, Sciences, and Engineering and that a copy be handed to Professor Goldner's family members, as designated.