Henri S. Sack

November 25, 1903 — March 16, 1972

In the death of Professor Henri S. Sack in Ithaca, New York, Cornell University lost a distinguished scientist, an educator of exceptional skill and insight, and an individual of the highest personal integrity. Institutions are built by people and reflect the character of their builders, and his service to Cornell was in the finest tradition.

Professor Sack was born in Davos, Switzerland, and received his education at the Eidgenossische Technische Hochschule in Zurich, receiving a diploma in mathematics and physics in 1925 and a doctorate in physics in 1927. For six years he was head assistant in the Department of Physics at the University of Leipzig in Germany, and then, for seven years, was chef de traveaux in the Department of Physical Chemistry at the University of Brussels. While in Leipzig, he was a research associate of the late Peter J. W. Debye, Nobel laureate in chemistry who later became professor and head of the Chemistry Department at Cornell. Professor Sack came to Cornell in 1940 as a research associate in the College of Engineering. He became an associate professor in 1946 and a full professor in 1949. He was named to the Walter S. Carpenter Jr. Professorship in 1963 and held that post until his death.

The breadth of his early experience resulted in a depth of understanding of the basics of the physical world which allowed him to rise above the details of a current approach and take a leadership role in developing "new" areas of physics and applied science. For example, Professor Sack played a major role in the formation of the Materials Science Center, a highly successful venture in cooperation in research by five autonomous departments. During his tenure as second director of this Center, he solidified the spirit of cooperation which continues to this day.

Professor Sack was equally dedicated to improving the quality of education in his college and field at Cornell. He worked tirelessly on committees and projects for curriculum revision and, in particular, was a major force in forging the Engineering Physics degree program which rapidly attained national recognition as a major step forward in bringing engineering education into tune with the national needs of the profession.

His scientific career spanned a long dynamic era in the evolution of modern physics and to his last day, spent in the research laboratory, he was actively in contact with the forefront of his subject. His earliest contributions were on the physics of dielectric relaxation and he also was one of the first investigators to use ultrasonic techniques to study related molecular mechanisms. During World War II, he turned his inventive experimental talents to a variety of applied problems. From then until the present he was a leader in the use of ultrasonics and dielectric techniques to

study the solid state. Over all this time he constantly incorporated the latest theoretical and experimental methods into his programs.

Through his career, Professor Sack had three principal interests: an intense interest in physics as it developed through the years, a love for helping students to gain such knowledge and to acquire standards of excellence and industry, and an unswerving loyalty to his college and to Cornell.

A man of great modesty and total selflessness, Henri Sack was admired and beloved by the many students who knew him; there were about seventy-five who completed master's or doctoral theses under his direction. Above all, he was dedicated to excellence; this dedication demanded much of his students and sought to instill in them the code of excellence which guided his life. In the words of one student, "He has given us a gift of lasting value."

His colleagues respected Henri for his complete personal integrity in difficult negotiations and the compromises inherent in administrative activity. He was very human, quick to make a joke to relieve tensions, and, when things looked darkest, he would express an optimistic and patient attitude. He had a deep concern for the feelings of others. A widely read man, Henri Sack had a vast knowledge of literature and music and was a member of the University Orchestra for a time. He was a loyal supporter of the humanistic aspect of the Cornell scene, and it was a rare concert or play in which Henri Sack was not seen in the audience.

He was a member of a number of professional organizations, including the American Physical Society (Fellow), the Swiss Physical Society, the American Society for Engineering Education, the American Association of University Professors, and the American Association for the Advancement of Science. He was an active consultant to various industrial laboratories and other organizations on applied physics.

Professor Sack is survived by his wife, Lotti; two daughters, Renee Sack of Cambridge, Massachusetts, and Mrs. Samuel (Claudia) Adams, and a brother, Fritz Sack, of Bern, Switzerland. The Henri Sack Memorial Fund, initiated by his former students, will be used to further the endeavors which he himself long served so well at Cornell.

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