

## MEMORIAL RESOLUTION

### PERLEY ASON ROSS (1883 – 1938)

Perley Ason Ross, Professor of Physics, passed away suddenly on March 13, 1939. He was born at Panacea, Missouri, on April 6, 1883. Entering Stanford in the autumn of 1904, he graduated as a major student in Physics, received the degree of Master of Arts, and in 1911 was awarded the doctorate. He was appointed to an instructorship in Physics at Stanford in 1910, from which appointment he rose to the rank of full professor in 1927. Except for one year spent at Cornell University as an acting professor of physics in 1926-27, he was in continuous residence here as a member of the faculty for twenty-eight years and rendered commendable service both as a teacher and as a scientific research worker.

From the many researches completed by Professor Ross, or even the ten or more well-recognized as of major importance, we may select three for special mention. Of these three, which all resulted from his studies in x-rays, the first was in the field of the scattering of x-rays by matter, where his great insight into the essentials of a problem and his extraordinary skill as an experimenter enabled him to discover a type of scattering in which all parts of an atom cooperate to deflect a single quantum of energy. These same qualities were manifested again in the second of these three researches, in which he developed a completely new method of x-ray spectroscopy, now known as the differential-filter method, which has become widely used in many parts of the world. And finally we mention one of Professor Ross's own uses of this method, namely the studies in polarization of x-rays, by which he discovered the nearly complete polarization at the highest frequencies in the spectrum, which has been of outstanding importance in establishing our present knowledge of the mechanism of x-ray emission. Throughout these researches and all his others, his skill as an experimenter seemed always to come from his quiet patience and great clarity of thought.

His modest and retiring nature led him constantly to shun publicity and in a measure restricted his circle of acquaintances. It is an added tribute to his accomplishments in research that the recognition he received at the hands of his scientific colleagues elsewhere was due so largely to an impersonal appraisal of his work.

His kindly and helpful disposition found expression in many ways in his contacts with his associates on the staff. He had a personal and unfailing interest in their work and was ready at any time unselfishly to turn aside from his own problems to lend a helping hand to others. Perhaps his best work as a teacher was done in his personal contacts with advanced students engaged in work under his guidance in his chosen field. This friendly assistance was a natural expression of a liberal interest in his fellow men, which was extended to generations of Stanford students who have been welcomed into the life of his home. He was respected and admired for the poise and patience and the painstaking attention to detail which were also so characteristic of his experimental work, and for his clarity in exposition and his high professional ideals.

We, the Academic Council, recall with gratitude his notable service to the University, and we wish here to give expression to the sense of loss which we have sustained, and to convey this expression to the family of Professor Ross.

David L. Webster  
Paul Kirkpatrick  
Robert E. Swain, Chairman