## PRESENTATION OF THE ROEBLING MEDAL OF THE MINERALOGICAL SOCIETY OF AMERICA TO HERBERT E. MERWIN

NORMAN L. BOWEN, Geophysical Laboratory, Washington D. C.

## Mr. President, Fellows and members of the Mineralogical Society of America, and guests:

Our Roebling laureate was born at Newton, Kansas. He must have been a very precocious and determined little chap; at least the evidence seems to indicate that, at the age of two, he read Horace Greeley's admonition, "Go West, young man", and accordingly went East, taking his parents with him and settling in New York state. He grew to manhood in the Catskills where interesting geologic surroundings made their impress on an enquiring mind. After several years of teaching in the public schools and on the faculty of the Normal School at Oneonta, he was claimed by Harvard for undergraduate studies and subsequently for graduate studies. There he fell under the influence of William Morris Davis and his first published paper was on Vermont shore lines, but from assistant in physiography he passed to teaching fellow in mineralogy and petrography and in 1909 he published his first paper in mineralogy, a joint paper with Professor Charles Palache on the then new species, alamosite. His early experience in petrography was gained as a member of that unusual group of young men who worked with Professor John E. Wolff in the Crazy Mountains.

It was during this period that he acquired an absorbing interest in light, first manifested in his development of a compound light filter for use in examining the characteristic flames of the alkali metals, later to evolve into his life's work in crystal optics.

With this diverse background Merwin came to the Geophysical Laboratory in 1909 where he has remained ever since. He has been a participant in almost every aspect of the laboratory's investigations in these four decades. In studies of phase equilibrium the identification of phases by optical methods is not only an indispensable aid but a guide and control. He has had a prominent part in the development and extension of these optical methods. Special immersion media of unusually high refraction and again others of low refraction have been prepared and described by him. In 1912 he published, jointly with Larsen, his dispersion method of measuring refractive indices of grains in immersion liquids, a method requiring interpolation between values obtained by matching at more or less remote wave-lengths. In 1917 he published tables facilitating accurate interpolation.



HERBERT EUGENE MERWIN Recipient of the Roebling Medal of the Mineralogical Society of America

## PRESENTATION OF ROEBLING MEDAL

Applying his various methods, he has probably determined the optical properties of more synthetic mineral compounds than any other individual. He has also done a great deal of work on opaque minerals in reflected light, his investigations furnishing the control in studies of the synthesis of sulfides of zinc, cadmium, mercury, iron and copper.

Merwin is a reluctant writer and most frugal of words when he does write. The results of most of his work appear as a paragraph or two in papers of which he is the junior author. Seldom did any of his contributions appear under his sole name. Nevertheless, in spite of his excessively modest and retiring nature, he long since came to be generally recognized as a leading authority on crystal optics. He was, for instance, chosen to write for International Critical Tables the section on Refractivity of Birefracting Crystals.

We, his immediate colleagues, have leaned heavily upon him and know him as an authority on a great many other subjects as well. Whenever two or three of us were gathered together and fell to discussing some problem, if we reached an impasse one was sure to suggest "Ask Merwin." Usually our query had fruitful results.

Merwin is now on the retirement list, but fortunately for us he is still at work every day as usual, and we can still ask Merwin.

Mr. President, it is an honor and a pleasure to present Herbert Eugene Merwin, a past president of the Society, for the Roebling Medal.

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