

Knowing that a single person's efforts in this complex area of research can be diluted or sometimes meaningless, he has shown an unusual capacity for scientific leadership. The participation of his students as full partners in his research and the bringing together of a Japanese-American group effort on the metamorphic rocks in Japan and California have resulted in significant publications of joint research.

The future of mineralogy in the geologic profession cannot be denied when such a versatile young man as this continues his research.

Mr. President, it is with much hope that I present Dr. W. G. Ernst, recipient of The Mineralogical Society of America Award for 1969 on this, our 50th anniversary.

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ACCEPTANCE OF THE MINERALOGICAL SOCIETY OF AMERICA AWARD FOR 1969

W. G. ERNST, *Department of Geology and Institute of Geophysics
and Planetary Physics, University of California,
Los Angeles, Calif. 90024.*

Bob, President Turner, members of the Society and guests:

I am immensely honored by this award and accept it most humbly. However, my pleasure is tempered by the realization that there is a measure of random chance and capriciousness inherent in the process of being selected from a long list of eligible candidates, and by the knowledge that among my contemporaries are many whose intellectual accomplishments far outweigh my own.

Although previous recipients have not touched on pre-award premonitions, I must admit that occasionally—while staggering around in the formidable July heat of the rather aptly named Diablo Range—I have wondered how it might feel to be chosen to receive the M.S.A. Award. In such day-dreams, of course, I always modestly declined the honor, pointing instead to my numerous more worthy scientific colleagues. The only other, and much more recurrent, non-geological theme which I recall being with me during my summers mapping in the Franciscan was the commonly held view that only "Mad dogs and Englishmen go out in the midday sun," which framed my speculation regarding the M.S.A. Award in proper perspective. Needless to say, when surprisingly enough, the honor did indeed come, I fervently and genuinely professed unworthiness, but speedily accepted. So much for day-dreams!

In receiving such awards, recipients characteristically recall the formative contacts enjoyed with favorite professors. In the broad sense, of course, one's teachers assuredly include his fellow students and I certainly recognize my debt for such associations. Particularly, the examples of three of my close friends, Hugh Greenwood, Dave Wones, and Carter Hearn, have revealed to me my own alarming deficiencies with regard to thermodynamics, experimental phase equilibria and field studies. Concerning my more formal education, Dunc Stewart and Eiler Henrickson at Carleton College enthusiastically first exposed me to earth science, Sam Goldich at the University of Minnesota then pushed me into petrologic waters in which I was forced to sink or swim, and still later Joe Boyd and Hans Eugster at the Geophysical Laboratory and the Johns Hopkins University supported my experimental research and alternately stimulated me and left me alone—as needed. Since leaving the eastern “mineralogic womb,” I have profited tremendously from contacts with more westerly, field and theoretically oriented petrologists, among them especially Bob Coleman of the U.S.G.S., Menlo Park, and Akiho Miyashiro and Yotaro Seki from the University of Tokyo. Lastly, I cannot fail to acknowledge interchange of ideas with colleagues and students at U.C.L.A., and continuing support by the University itself. To the institutions, but more particularly to the individuals mentioned as well as many more not specifically named, I owe a very deep debt of gratitude.

My research thus far has been aimed chiefly at elucidating phase relations among sodic and calcic members of the amphibole group, and in applying experimentally and theoretically deduced mineral stabilities to personally investigated field occurrences. Looking to the future, it seems to me that two of the currently important problems facing us require study at grossly contrasting scales. (1) On the one hand, there is much yet to be learned regarding the organization of crystals at the atomic level. For example, of continually increasing interest (and complexity) to both mineralogists and crystallographers is the order-disorder phenomenon. Three-dimensional crystal structure refinements, Mössbauer, and other spectral methods are shedding light on this problem. (2) At a much larger scale, the physical and temporal interrelationships among global tectonics, volcanism, plutonism, and recrystallization are topics of mutual concern for geophysicists, tectonicians, petrologists and mineralogists. Perhaps presumptuously, I hope to make some contributions at both these levels, but time will judge the measure of success.

In closing, I return to my opening tone of humility for the honor today bestowed upon me. Recognizing my undeservedly good fortune, let me share with you the cogent remark of one of my U.S.G.S. friends from



W. Gary Ernst

Washington. Paraphrased, his comment went something like "I'm glad to hear you've received the M.S.A. Award, Ernst. It's heartening confirmation of the fact that, with hard work, anyone can get it." Which, if I may say so, is an extremely fortunate state of affairs. In a real sense, then, this award belongs to the entire, industrious membership of the Society itself. Accordingly, I am delighted for the opportunity to express my appreciation to the M.S.A. Award Committee on behalf of all of us. Thank you.

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MEMORIAL OF BERTRAM THEODORE BUTLER

March 22, 1874–October 5, 1958

DANIEL T. O'CONNELL, *The City College of New York,*
New York, N. Y. 10031.

On Sunday evening, October 5, 1958, Professor Bertram T. Butler, former Head and Chairman of the Geology Department of the City College of New York, died in his home at 186 Crescent Avenue, Leonia, New Jersey. As was his custom, he had left his summer place in Jamaica, Vermont, to spend his winter in Clearwater, Florida. While stopping off for a few days at his home in Leonia, death overtook him at the age of 86.

Professor Butler was born in Nashua, Iowa, March 22, 1872, of French Huguenot ancestry. He survived his wife, Dora Elmer Butler, born April 22, 1871 in Butler, Montana. His only child, a daughter, Ellys, graduated from Mt. Holyoke College with an A.B. and M.A., and later received a Ph.D. in Botany at Columbia University. She is now Mrs. Roger P. Wodehouse and the proud mother of five children.

Professor Butler began his teaching career in a one-room country school in South Dakota. He went on to receive his Ph.B. at Hamline University, St. Paul, Minnesota in 1901. He became a Science Instructor at Montana Wesleyan University, and later Superintendent of Schools of Glendive, Montana. He came east to continue his studies at Columbia University, where he was awarded an A.M. degree in Botany, in 1908. In that year, also, he was appointed Tutor of Botany in the Natural History Department of the College of the City of New York. Later he was assigned to assist the first Professor of Geology, Ivan Sickels.

Upon the retirement of the latter, Professor Butler became Head and later Chairman of the Department of Geology, a position he held from 1924 to 1942.

At the time of his retirement, the General Faculty of the City College