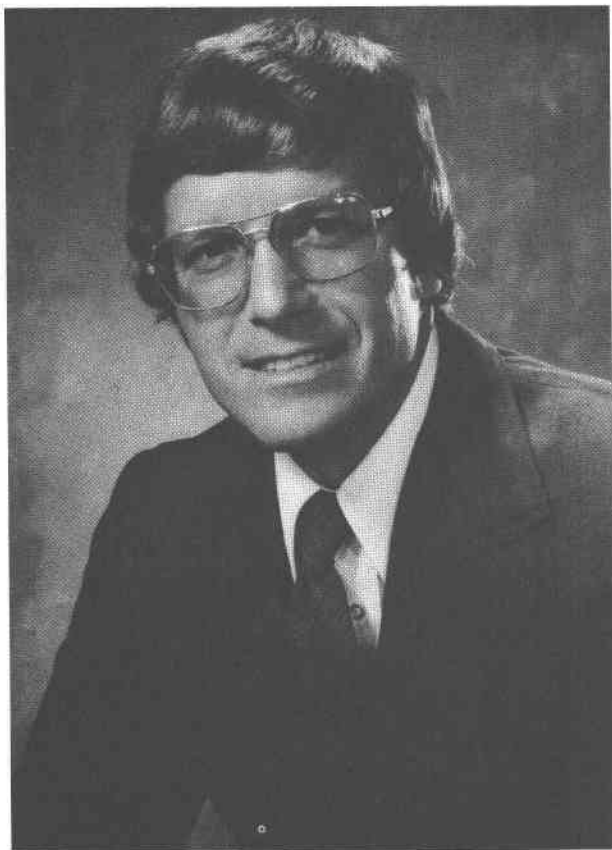


Acceptance of the Mineralogical Society of America Award for 1972

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"All is vanity—a striving after the wind—What does man gain by all the toil at which he toils under the sun?—I have seen the business that God has given to the sons of men to be busy with. He has made everything beautiful in its time; also he has put eternity into man's mind, yet so he cannot find out what God has done from the beginning to the end."

Ecclesiastes



President Yoder, Pete, members and guests of the Society:

I never expected to be on a platform accepting the Mineralogical Society of America Award. Certainly, I have not planned my life nor even steered my professional career with the intent of winning this prized recognition. Nevertheless, let me offer the following recipe for any young man or woman who aspires to receive this award.

To begin, you should arrange to be born and raised in Montana. This will provide you with a lasting awareness and love for that which God has created—our national treasures, as Justice Douglas referred to them. Obtain your undergraduate education in an environment, such as that provided at the Montana School of Mines (now Montana Tech), that will fan the sparks of enthusiasm and develop mental discipline—a primary requisite. The four years that I spent in the Air Force prior to entering college provided me with an appreciation of this privilege.

When the time comes to select a graduate school, be judicious and select the best. As an example, it was my good fortune at this stage of my life to touch down at Penn State. Previously, I had worked as a geological engineer for Zonolite in the Libby, Montana, vermiculite deposits, and Willis Johns (Willis is now chief geologist of the Montana Bureau of Mines and Geology) and I had mapped several quadrangles in contiguous areas in the Precambrian Belt Series in northwestern Montana. Fortunately, Lauren Wright joined the faculty of Penn State at that time. He suggested to me that I study the industrial minerals (vermiculite and abestosform tremolite) in the ultramafic igneous complex at Libby for my M.S. (and later Ph.D.) dissertations. During the course of this work, with Lauren as my advisor, my interests expanded to include igneous petrology. I became particularly interested in the fascinating biotite pyroxenites and biotitite there, and this was the inception of my interest in the role of water in igneous processes—one that to this day plays a significant role in my research. As a graduate student at Penn State, my contacts with Wayne Burnham and Pete Wyllie nurtured this interest. I also benefited from association with fellow graduate students, including

Dave Speidel, Bill Luth, John Carman, Dean Pressnall, and Alf Piwinski.

To return to my recipe, the prudent aspirant, after completing his formal education, would next seek out a position that would afford the opportunity to conduct research with a minimal amount of diversion resulting from other responsibilities. In my case, I moved on to the University of Chicago for 18 months of productive post-doctoral work with Pete Wyllie. It was during this time that we began our high-pressure studies of the role of water in the nature and evolution of the interior of the earth. I am grateful for this association with Pete and also with Bob Newton, from whom I learned a great deal about research at high pressures.

Next I returned to Penn State as a member of the faculty, immersed in the joys of teaching, research, and, later, also administration. It has been a rewarding experience these past five years to be associated with mineralogists and petrologists the likes of Wayne Burnham, Hu Barnes, Charles Thornton, Joe Greig, Derrill Kerrick, Dean Smith, Duff Gold, and Vic Wall, as well as my other colleagues. I have been

fortunate to have outstanding graduate students, beginning with Pete Modreski and followed by Cricket Haygood, George Furst, Bjørn Mysen, Dion Stewart, and post-docs Robin Hill and Jack Allen.

Special recognition is due two men who have the rare talent of being very capable administrators and at the same time, top-notch scientists. Julian Goldsmith at Chicago and Arnulf Muan at Penn State have strived to provide stimulating and fertile environments for research, and many of us have benefited from their efforts.

It must be obvious by now that if you are to plan your life in such a manner, you must find a very special mate with whom you can share these experiences and, most importantly, one who will tolerate these idiosyncrasies and vanities. I am blessed with a good one.

Members of the Society, it is with humility and pride that I accept this honor. I am particularly delighted that the recipients of both of your fine awards on this day are members of that cow college somewhere in central Pennsylvania.

Thank You All.