Presentation of the
O. E. Meinzer Award
to Robert William Stallman

Introduction by Frank Foley

The O. E. Meinzer Award is made each year to the author or authors of a published paper selected as a distinguished contribution to hydrogeology. The third recipient of the award is Robert William Stallman for his paper, *Multiphase Fluids in Porous Media—A Review of Theories Pertinent to Hydrologic Studies*, published by the U.S. Geological Survey in 1964 as Professional Paper 411-E. We regret that Bob is not able to be here to receive the award in person for he is convalescing from surgery. Arthur M. Piper will accept the award for Bob.

Robert William Stallman was born in Jasper, Indiana, June 8, 1924. He graduated from Jasper High School in June 1942. In December 1944, he received a B.S. degree in Civil Engineering from Rose Polytechnic Institute, Terre Haute, Indiana. His tour with the U.S. Geological Survey began January 1945, with a temporary assignment to ground-water studies in Michigan under the direction of Wilber T. Bart. On March 23, 1945, he married Almira Louise Reagin (of Terre Haute, Indiana) in Benton Harbor, Michigan. In September 1945, he was assigned to ground-water studies in Indiana under the direction of F. H. Klaer, Jr. The Stallmans' daughter, Cynthia, was born April 1, 1948, in Terre Haute. In May 1949, the Stallman family moved to Washington, D.C., where Bob was employed by the Ground Water Branch, A. N. Sayre, Chief. Initially he worked on sonic surveys of Baileys Harbor, Lake Michigan, and Chesapeake Bay and on unsaturated flow with H. W. O. Smith, Physicist. Later he worked with William F. Guyton and R. H. Smith in the then existing Hydraulics Section of the Ground Water Branch, and in the Research Section under R. R. Bennett until June 1960. Subjects covered were calculations of ground-water flow, electric analogs of ground-water flow, and flow in unsaturated zone. Professional Paper 411-E was drafted prior to June 1960, as a month research project under the direction of R. R. Bennett.

The period May 1949 to June 1960 was marked by the addition of three youngsters to the Stallman family—Kathleen, on June 6, 1954; Daniel, on September 4, 1957; and Richard, on March 17, 1960, to make a fine family of four.

In June 1960, the family moved to Denver, Colorado, where Bob was employed as a research project chief on unsaturated flow until September 1, 1967. On the latter date he became Regional Research Hydrologist of the Rocky Mountain Region, Water Resources Division, under the direction of T. G. McLaughlin, Regional Hydrologist.

Bob's paper, *Multiphase Fluids in Porous Media*, is not easy reading, at least not for me and I suspect for most geologists. It is an illustration of the kind of research that is
essential to a full understanding of ground-water hydrology. The movement of water in the unsaturated zone has long been neglected, in large part because most of us didn't know how to approach the subject and we have been so busy with the saturated zone. Which of us has not stumbled over the matter of recharge to the saturated zone through that mysterious unsaturated zone. Bob's paper is a major contribution and must stimulate continuing research. Dr. Meinzer would be proud of it and of Bob.

Acceptance by Robert W. Stallman,
Third Recipient of the O. E. Meinzer Award

Communicated by Arthur M. Piper

I am, of course, elated and proud beyond measure that my *Multiphase Flow Through Porous Media*, won the O. E. Meinzer Award. My personal contact with Dr. Meinzer was limited to only a day and a half. That brief contact, reinforced by study of Dr. Meinzer's writings, formed within me the highest regard for Dr. Meinzer's stature as a scientist and humanitarian. Thus it is a special honor for me to receive an award named after him.

In recent years I have felt strongly that the boundary conditions imposed through the unsaturated zone have been grossly ignored. If quantitative descriptions of ground water are to serve adequately the needs for water information, significant boundary conditions must also be quantified. *Multiphase Flow Through Porous Media* represents only a preliminary effort at identifying theory applicable for quantifying the effects of the unsaturated zone upon the availability of ground water. I hope that the recognition so kindly bestowed will lead to increased efforts in the development of geological and engineering techniques for quantifying the role of the unsaturated zone in the management of our water resources.