My professors at Louisiana State University and the University of Wisconsin urged their students to seek membership in the AAPG. It was good advice. Not only has the AAPG provided the best in scientific literature at low cost, but its leaders have maintained a gentle pressure on the membership to recognize and act on the social and professional issues that bear on the science and practice of geology.

For a geologist, the last 40 years have been the best of times. Offshore exploration moved from birth to maturity. The rapid acceptance of ideas on sea-floor spreading and plate tectonics brought an elegant unifying theme to our science. The computer moved geologist, geophysicist, and engineer into an era of mutual understanding. The electron-scanning microscope and Landsat have let us see it all. It has been a marvelous time to be a petroleum geologist.

The practice of petroleum geology is aimed at finding and developing oil and gas for the use and benefit of mankind. Because it is extracted from the earth, it is additive to whatever man has. I would remind you that the extractive industries and the agricultural industries are the only industries that add new material wealth to support a growing world population. All else is processing and trade, a changing of this into that and a swapping about. To be a geologist adding to the basic material wealth of the nations is a vocation of which anyone should be proud. To those of you who think you hear an uncertain trumpet, I say take heart, and stay the course.

Finally, I am grateful to my old friend and citationist, Dick Boebel, for his kind words; to all who have helped me and forgiven my mistakes; and to the membership of the finest body of scientists in the world, the AAPG, for this wonderful honor.

Robey H. Clark



FRANK E. KOTTLOWSKI **Honorary Member** 

Frank E. Kottlowski is a rare geologist indeed. He has all of the attributes of an exceptional scientist and an equal aptitude for administration of the research of a large number of colleagues as director of the New Mexico Bureau of Mines and Mineral Resources. In both endeavors Frank has been eminently successful and has significantly contributed to exploration for and development of mineral resources of New Mexico and the nation.

He was born in 1921 in Indianapolis, the son of a building contractor and housewife. During his formative years, he learned the value of hard work as a surveyor, timekeeper, and carpenter for his father. Upon graduation from high school, he entered Butler University to study accounting and business administra-

In 1942, however, with the war against Germany raging in full fury, he enlisted in the Army Air Corps. After extensive training as an aerial navigator and photographic interpreter, he was assigned to the Eighth Air Force based in England. As with every other task that he has undertaken, Frank served his country with distinction; flying 30 missions over Europe and earning the Air Medal and five clusters. Several times his B-17 suffered extensive flak damage but on each occasion managed to cripple back to its home air base near High Wycombe.

While in the Air Corps, he was closely associated with a photo reconnaissance group whose task it was to identify and study caves and mines in which the Germans had hidden munitions and art treasures. He was invited by geologists of the reconnaissance group to go on field trips during breaks in action. One day while having lunch with them in a sinkhole on a hillside in the Jurassic limestone of England, he resolved that he would like to learn more about the formations of the earth.

After the war, he enrolled in Indiana University and took an exploratory physical geology course. Because the course was fascinating and informative, Frank's interest in geology was further stimulated.

While earning his B.A., M.S., and PhD degrees in geology at Indiana, Frank was particularly influenced by Professors Charles F. Deiss and Eugene Callaghan. Deiss, who was chairman of the Geology Department and state geologist, detected unusual professional promise in Frank and arranged for him to work summers for the Indiana Geological Survey as a field assistant to Callaghan, and as a graduate assistant in the Indiana field camp. Frank's M.S. thesis was on the geology of the Cowne Point fault block in Montana, and his doctoral dissertation was "The Geology and Coal Deposits of the Coal City and Switz City Quadrangles, Southwest Indiana," with Callaghan as his major professor.

Before Frank completed the PhD degree, Callaghan resigned to become director of the New Mexico Bureau of Mines, a decision that was to have profound implications for the course of Frank's career. When Frank completed his degree in 1951, he accepted a position as economic geologist under his former mentor. Shortly before making the trip to New Mexico, he injured his knee seriously enough that there was some question about being able to do fieldwork. Callaghan, obviously completely sold on the ability of his student, insisted that he report for work, despite

the uncertainty.

Frank was on crutches when he and his wife, Florence, arrived in Socorro on a late summer day when the temperature hovered around 107°. While he was somewhat adversely impressed with the heat and dryness of New Mexico, he was charmed by the stark beauty of the Magdalena Mountains, the Rio Grande valley, and the colorful picturesque desert landscape. Little did he realize at the moment that Socorro would be his home for the next 33 years, that the geology of the Land of Enchantment would be one of the great loves of his life, and that the Bureau would be the only place that he would ever work.

In the course of his field studies, Frank has seen most of the important geologic features of New Mexico. It is said by veteran New Mexico geologists, perhaps with only slight exaggeration, that Frank has seen every outcrop in the state and can describe the features of each in detail from memory. Be that as it may,

from the time of an initial tour of the state with Callaghan, he has vigorously investigated New Mexico geology and unquestionably

understands it better than anyone.

Frank has published over 150 significant papers and reports. His most memorable and enjoyable field project was that undertaken in the San Andres Mountains of southern New Mexico with R. H. Flower, M. L. Thompson, and R. W. Foster. Frank was the principal investigator of the project, which was funded by Gulf Oil Corporation, Standard Oil of Texas, and Humble Oil and Refining Company. The field study resulted in the publication, "Stratigraphic Studies of the San Andres Mountains, New Mexico." Frank's AAPG papers have dealt mainly with the petroleum potential of the southwestern United States, upper Paleozoic stratigraphic studies, and stratigraphic nomenclature. He is the author of a textbook, Measuring Stratigraphic Sections. The wide variety of subjects on which he has written, from petroleum and coal to the history of the Rio Grande and industrial minerals, indicates a broad spectrum of interests and an unsurpassed geological background.

Kottlowski has represented the AAPG and the Association of American State Geologists on the American Commission on Stratigraphic Nomenclature and is a past chairman of the Com-

mission.

In the past decade, increasing amounts of his time have been directed toward the study of coal deposits. He is presently chairman of the New Mexico Coal Surface Mining Commission and the State's Mine Safety Advisory Board. In addition, he was elected a director of the New Mexico Mining Association, represents New Mexico on the Energy Resources Council of the Federation of Rocky Mountain States, and is on the Advisory Committee on Minerals and Fuels for the Four Corners Regional Commission. Many of Frank's recent publications have been on the geology of coal—for example, Coal Resources of the Americas with A. T. Cross and A. A. Meyerhoff. He has been a regular contributor to the Keystone Coal Industry Manual.

Frank is chairman of the National Academy of Sciences Committee on Mineral Resources Evaluation and its Committee on Disposal of Excess Spoils. He is president-elect of the Association of American State Geologists, past-president of the New Mexico Section of the American Institute of Professional Geologists, and a Fellow of the Geological Society of America. He has served the GSA on many committees and in a multitude of capac-

ities, particularly in the Coal Geology Division.

As an early member, past-president, and honorary life member of the New Mexico Geological Society, he has steadfastly maintained a keen interest in that society. The symbiotic relationship between the NMGS and the Bureau of Mines has immensely ben-

efited both organizations.

Frank served the AAPG as editor from 1971 to 1975 and was an associate editor from 1968 to 1982. He has been a district representative, and a member of the Computer Coding Committee and the Stratigraphic Correlations Committee. Further, he has served on the Membership and Publications Committees. Frank was honored by the Association with the Distinguished Service Award in 1981.

Despite the formidable responsibilities of the directorship of the New Mexico Bureau of Mines and Mineral Resources since 1974 and many commission and committee offices, Frank somehow finds leisure time to enjoy travel and recreation with his wife and the families of their three daughters, Karen, Janet, and

Certainly, the AAPG, New Mexico, and the country are fortunate to have this extraordinary geological scientist and administrator in our profession.

Citation—For distinguished service to the Association and numerous geological societies, and for significant contributions

to petroleum geology and mineral resources evaluation in New Mexico and the nation.

William E. King

## Response

Honorary membership in AAPG, bestowed by co-workers and friends from our organization, is the high point of my geologic endeavors, and is greatly appreciated. Working in AAPG, 43,000 strong, is a reward in itself. Along with most of us, I have received much more from AAPG committees, comradeship, intellectual stimulation, and professional contacts, than I have given.

Bill King's generous and sparkling comments are appreciated; his cooperation in geologic projects and his friendship are typical of those from many other friends and are the real source of any

accomplishments.

While within a semester of becoming a certified public accountant, Charles Deiss at Indiana University enthralled me into banging on rocks rather than checking balance sheets, although the latter experience later has become useful in directing a state geologic agency. To Deiss' guidance, add the influence of Eugene Callaghan, Paul Proctor, Ralph Esarey, Jessie James Galloway, Charles Wier, and others at Indiana University. The lure of superb geologic exposures in the southwest, as well as the abundant mineral resources of New Mexico, made the position of economic geologist at the New Mexico Bureau of Mines and Mineral Resources (directed by Callaghan) an eagerly accepted opportunity. That was 34 years ago. And the wonders and economic value of Nuevo Mexico's rocks have lead to numerous reports, maps, and books, many in cooperation with my coworkers at NMBM&MR.

As New Mexico ranks fourth in production of natural gas, and seventh in production of oil, doing and recently overseeing projects for the New Mexico state geologic agency obviously have been economically rewarding and geologically stimulating. This has not only been done with our excellent staff, but with research associates such as Ed Beaumont, John Shoemaker, Bill King, Bill Seager, Russ Clemons, Lloyd Pray, and many others, all of

whom should be named.

On the local scene, the stimulus of working with the New Mexico Geological Society on their annual field conferences and spring technical sessions is always rewarding. One of the most enjoyable undertakings was the book on *Measuring Stratigraphic Sections*, published by Holt, Reinhart, and Winston, at the urging and under the editorship of Dick Jahns. Dick's caustic, perceptive editorial comments on the first manuscript draft are treasured and referred to (almost constantly) when there is a tendency to outgrow my hat size.

And where could one link arms with more stimulating professionals than serving AAPG? Frank Conselman, Sherm Wengerd, and Art Meyerhoff conned me into AAPG editorship (1971-75), which extended my acquaintanceship with the truly outstanding members of the petroleum geology profession who serve on the executive committees (and other committees) of AAPG. Art, Gary Howell, and Fred Dix aided the editing and led me to great appreciation for the headquarters staff and the many, many unsung associate editors of AAPG. As for executive committees, no one is as fortunate to have served with such presidents as Sherm Wengerd, Bill Curry, Jim E. Wilson, Dan Busch, and Merrill Haas, with the outstanding other officers Jack Taylor, Sam Ellison, August Goldstein, Duncan McNaughton, John Kilkenny, Ted Bear (our present president), Bruno Hanson, Bill Heroy, Edd Turner, George Grow, George Hardin, Herb Davis, Bob Gutru, and Hugh Frenzel, with brief overlap with Frank Crawford, John Moody, and Robey Clark. Much help was given by previous editors, Sherm Wengerd, John Hazzard, and the unmatchable John Haun, and then always available was the advice and council of AAPG greats such as Michel Halbouty, Ken Crandall, Orlo Childs, Grover Murray, and many others—numbering in the hundreds.

Nothing would have been accomplished without the love, understanding, and support of Florence Kottlowski during the past 39 years. Muchas gracias to AAPG and to my geologic friends and co-workers for this honor.

Frank E. Kottlowski



HARRY A. MILLER, JR. Honorary Member

Harry A. Miller, Jr., was born in Pittsburgh, Pennsylvania, on September 4, 1918. His father was with the Ohio Oil Company, and sometime during Harry's growing-up years the lure of geology and exploration must have appealed more than his father's accounting side of the industry. Harry enrolled at the University of Texas at Austin after graduating from high school in Tulsa, Oklahoma. He spent his college summers working at various jobs in the oil fields and gaining valuable practical experience that would help him later in his professional career. He was awarded a B.S. degree in geology from the University of Texas in 1941.

War clouds were gathering then and soon after graduation he enlisted in the United States Air Force. He became a combat pilot in North Africa and later was an instrument flying instructor and squadron leader. He attained the rank of captain and was discharged in 1945. While stationed at St. Joseph, Missouri, in 1944, he met a vivacious local young lady, Anne Sheridian, whom he persuaded to become Mrs. Harry Miller. They were given a great 38 years together before a fatal illness unfortunately took her away. They were blessed with two children, Harry III and Margaret, both currently living in Austin, Texas, and pursuing their own careers.

Harry joined the Ohio Oil Company, better known as Marathon Oil in later years, as a geologist in Midland, Texas, upon separation from the Air Force in 1945. It is doubtful that he real-

ized it at the time, but he had found a permanent home in Midland, Texas. In 1951 he joined the Hancock Oil Company of California as their Permian basin district geologist. In 1953 he decided to realize his longtime ambition of being an independent and opened an office in Midland as a consulting geologist. He proceeded to develop a highly successful consulting practice there. Since 1975 he has been able to devote more of his time for his own account as an independent petroleum geologist and oil and gas producer. Presently, he continues to be an active participant in the petroleum scene of west Texas and New Mexico.

Despite the busy schedule that he has maintained through the years concerning his chosen vocation, he has also been involved in numerous other professional activities. He became an active member of the Association in 1946 and later became Certified Petroleum Geologist No. 345. He served in the AAPG House of Delegates, from the West Texas Geological Society, 1974-76. He was chairman of the Credentials Committee, House of Delegates, 1976-77.

Harry had the honor of serving as chairman of the House of Delegates, 1977-78. He was on the AAPG Executive Committee, 1977-78, and chairman of the AAPG Foundation Trustee Associates, 1979-80. He served as president of the Division of Professional Affairs, 1982-84, and as a member of AAPG Advisory Council, 1982-84. He has been a member of the AAPG Industry Liaison Committee since 1980. He was a member of the Honors and Awards Committee in 1982 and the Nominating Committee in 1983.

He served as president in 1983 of the Southwest Section of AAPG after being its vice-president in 1982. He was Chairman of the AAPG Committee for oil and gas developments in west Texas and New Mexico for 1950. He also served as a member of this committee from 1979 through 1983.

Harry is a member of the Society of Independent Professional Earth Scientists and served as their secretary-treasurer, 1976-78. He has been a member of the University of Texas Geology Foundation Advisory Council since 1978.

He has strongly supported and given much of his time and efforts to the West Texas Geological Society. He served as their president in 1979 and was vice-president in 1978. He was chairman of the society's Report to Congress Committee in 1977, from which a very effective report and publication resulted. He was one of the authors in the society's 1966 publication West Texas Oil and Gas Fields Symposium. He was given the West Texas Geological Society Dedicated Service Award in 1981. He was especially honored by the society in 1983 when he was made an Honorary Life Member.

In addition to his busy professional life, Harry is an avid outdoorsman, particularly enjoying hunting and fishing trips with his friends. Until recent years he was one of the leading handball participants at the Midland YMCA. His love of ballroom dancing is legendary among those who know him well. He also is an inveterate traveler who frequently pursues his professional and intellectual interests around varied parts of the world. He now has his charming wife, the former Marion Gardiner of New Orleans and Midland, for a companion who shares his many outside interests.

Harry has contributed significantly to his profession for almost 40 years. His accomplishments have been many, some of which have been listed herein. He has carved a permanent niche for himself as an outstanding explorationist in the Permian basin area of west Texas and New Mexico. This Association and the petroleum industry have benefited so very much from the resourcefulness and bountiful energy of this most distinguished geologist.

Citation—To Harry A. Miller, Jr., independent petroleum geologist, for his many years of distinguished service to AAPG and significant geologic contributions to the petroleum industry.

William E. Gipson