JAMES BERNARD MACELWANE (S.J.) (1883-1956)

BY
VICTOR T. ALLEN



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On February 15, 1956, Father Macelwane died of a liver infection after an illness of two months in St. Mary's Hospital, Saint Louis. From the time of his return after serving as chairman of the United States delegation to the International Union of Geodesy and Geophysics in Rome in September, 1954, he was not well, and he attributed this to a tropical virus infection. With his passing the world lost a great scientist; Saint Louis University, an inspiring teacher and administrator; and hundreds of his associates, students, and alumni, a loyal friend.

James B. Macelwane was born near Port Clinton, Ohio, on September 28, 1883. He and his seven brothers and sisters helped with the chores on the farm. His early education was obtained at the local country school to which he walked "when he was not needed at home." At the age of 15 he left school to take a hired man's place in his father's fruit and fishing business. At 18 he was able to resume his education at St. John's College High School in Toledo. Two years later, in 1903, he joined the Jesuit Order, and began a long course of studies in the classics, sciences, and theology, and developed interests that he never outgrew. He obtained his Bachelor of Arts, Master of Arts, and Master of Science degrees at Saint Louis University, and in 1918 was ordained to the Catholic priesthood. In 1912 he began, as an instructor in physics, his 44-year career on the faculty of Saint Louis University.

Father Macelwane studied physics at the direction of his religious superiors. He had not planned to be a scientist, but had selected languages as his chosen field. It was during

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his early years as a teacher of physics that his interest in geology and geophysics was awakened. Several summers spent on field trips in the Far West with Jesuit colleagues enkindled that interest. In 1921 he started a program of graduate study in geology and later joined the faculty of the University of California. In 1923 he received a Ph.D. in physics from that institution and served as assistant professor of geology and director of the seismographic stations.

In 1925 he returned to Saint Louis University to establish the first department of geophysics in the Western Hemisphere. A year later Father Macelwane organized the Jesuit Seismological Association, an American network of seismograph stations with Saint Louis University as the focal point for earthquake data from all over the world. He remained president of this organization for the rest of his life.

Father Macelwane was a pioneer in the use of the seismograph in oil exploration. He served as consultant for companies manufacturing seismographic and geophysical equipment. One of his scientific discoveries led to a system of tracking hurricanes at sea. He is the author of two books, and a list of his numerous scientific papers, since 1911, covers nine typewritten pages.

He received honorary degrees from four universities, a Sc.D. from Saint Norbert's College in 1949, a LL.D. from Washington University in 1953, a Sc.D. from John Carroll University in 1954, and a Sc.D. from Marquette University in 1955. In 1948 he was awarded the William Bowie Medal by the American Geophysical Union, and in 1953 the Mendel Medal by Villanova University. In 1956 he received posthumously the Jackling Lecture Award of the American Institute of Mining and Metallurgical Engineers. In 1954 he was appointed by President Dwight D. Eisenhower to a six-year term as a member of the National Science Board of the National Science Foundation. In the same year he was appointed chairman of the United States delegation to the International Union of Geodesy and Geophysics in Rome. Until his death he was in charge of United States activities in connection with the International Geophysical year.

Father Macelwane served as president of the American Geophysical Union, the Seismological Society, and the Academy of Science of St. Louis, and as vice-president of the American Association for the Advancement of Science, the Missouri Academy of Science, and the Academy of Science of St. Louis. He was a member or fellow of twenty-five scientific organizations: National Academy of Sciences, American Association of Petroleum Geologists, Geological Society of America, Society of Exploration Geophysicists, American Institute of Mining and Metallurgical Engineers, American Physical Society, American Geographical Society, American Meteorological Society, American Institute of Physics, American Society for Testing Materials, American Society of Engineering Education, National Education Association, Society of Rheology, Optical Society of America, Research and Development Board, Catholic Commission on Intellectual and Cultural Affairs, Sigma Xi, and Theta Kappa Phi.

Father Macelwane will be remembered as a scientist of international stature and reputation, and as a friendly, gentle man with simple tastes, a winning smile, and a good sense of humor.

St. Louis, Missouri March 15, 1956 VICTOR T. ALLEN