

spectively, and four \$100 awards will be given for the best essays of 1500 words or less on any of the following subjects: (a) the possibilities of discovering some partial insulator, reflector or absorber of gravity; (b) the possibilities of discovering some alloy, the atoms of which can be agitated or rearranged by gravity tension to throw off heat; and (c) the possibilities of discovering some alloy the temperature of which can be affected by gravity waves. Essays will be accepted from anyone who has received neither a first nor second award in a previous year. Manuscripts must be typewritten on paper 11 x 8½ inches, with two carbon copies, and should reach the office of the president, George M. Rideout, at the above address, before October 15, 1951.

NEW QUARTERLY

PACIFIC JOURNAL OF MATHEMATICS

Publication has been announced of the *Pacific Journal of Mathematics*, under the sponsorship of the following West Coast universities: the University of British Co-

lumbia; the California Institute of Technology; the University of California at Berkeley, Davis, Los Angeles, and Santa Barbara; Oregon State College; the University of Oregon; the University of Southern California; Stanford University; Washington State College; and the University of Washington. The Institute for Numerical Analysis of the National Bureau of Standards is providing clerical assistance and space for the *Journal*, and the American Mathematical Society has agreed to furnish financial aid to the publication during its initial period. Editors are E. F. Beckenbach (UCLA), Herbert Busemann (USC), and R. M. Robinson (UC, Berkeley).

The *Journal* will be devoted to the publication of basic research articles in the various branches of mathematics and is to appear quarterly in March, June, September, and December. A minimum of six hundred pages per yearly volume is planned. Further information may be obtained by writing to the *Pacific Journal of Mathematics*, University of California Press, Berkeley 4, California.



Arnold Sommerfeld.
Photo courtesy of
Paul E. Klopsteg.

Arnold Sommerfeld

Arnold Sommerfeld, the doyen among the physicists in Germany, died in München on April 26, 1951, at the age of eighty-two. He had been knocked down by a car and suffered arm and leg fractures about four weeks earlier. Although he seemed to get over this accident well at first, clotting in the brain set in after about a fortnight and ended fatally.

Sommerfeld held the chair of Theoretical Physics at the University in München from 1905 to 1946 after having previously been Professor of Engineering Mechanics at the Technische Hochschule, Aachen. Besides being a master in the mathematical handling of physi-

cal problems he was an inspiring teacher with a keen eye for detecting outstanding students even in the junior stages of their career. Thus he soon created a school for theoretical physics which became leading in Germany and to which graduates of other universities came from all parts of the world. This began at a time when problems of the propagation of radio waves stood in the fore. But soon his and his pupils' energies were turned to Quantum Theory and the theory of the atom, and a continuous stream of important contributions came from him and his pupils. It is fair to say that the development of atomic physics was immensely speeded up by the research originated by Sommerfeld. His book *Atombau und Spectrallinien* appeared in five editions between 1919 and 1931, each edition thoroughly rewritten according to the progress of this rapidly and radically changing subject. One of Sommerfeld's later important contributions was the theory of the electronic state of metals.

Sommerfeld made two extensive lecturing tours to the United States, in 1922 and 1928, which contributed much to the dissemination of atomic theory in this country. At least ten of Sommerfeld's full-time pupils hold chairs of physics at American universities and many more of the now senior generation of physicists in this country received stimulation and encouragement from him. His six-volume course of theoretical physics, of which two volumes exist to date in an American translation, is a work summing up his teaching of classical physics. Written with remarkable freshness in the last years as a bequest to the young generation it perpetuates much of the fascination of Sommerfeld's lectures and insures that the name of Sommerfeld the teacher will remain as familiar as that of Sommerfeld the scientist.