

4 UCSD faculty members elected to National Academy of Sciences

April 29, 1969

Four faculty members of the University of California, San Diego have been elected to membership in the National Academy of Sciences, one of the highest honors which can be accorded to an American scientist or engineer.

The four new members bring UCSD's membership in the Academy to 31. They are: Dr. George Backus, Professor of Geophysics; Dr. Keith A. Brueckner, Professor of Physics and currently on leave; Dr. Walter Kohn, Professor of Physics; and Dr. S. J. Singer, Professor of Biology.

The new UCSD members were among 50 scientists and engineers from throughout the United States who were elected to membership today (Tuesday, April 29) by the Academy at its 106th annual meeting in Washington, D.C.

One other University of California faculty member, Dr. Andrew Streitwieser Jr., Professor of Chemistry at the Berkeley campus, was also elected.

Dr. Backus, born in 1930, joined the UCSD faculty in 1960. He received a Ph.D. in physics from the University of Chicago in 1956 and the following year joined Princeton University as a physicist. In 1958 he joined the faculty at the Massachusetts Institute of Technology as assistant professor of mathematics.

Dr. Backus' interests include studies of free oscillations of the earth and of the origin and secular variation of the geomagnetic field. He has also conducted research on the effects of diurnal rotation of the propagation of various types of geophysical waves, such as ocean, seismic and electromagnetic waves.

He was the recipient of a Guggenheim Memorial Fellowship in 1963 and is a Fellow of the American Academy of Arts and Sciences.

Dr. Brueckner, born in 1924, joined the UCSD faculty as Professor of Physics and Chairman of the Department in 1959. Three years later, he was named Dean of the School of Science and Engineering (now Revelle College) and subsequently was Dean of Letters and Science and Dean of Graduate Studies. In 1965 he was appointed Director of what is now the Institute for Pure and Applied Physical Sciences.

He received his Ph.D. degree in physics from the University of California, Berkeley and served as a member of the Institute for Advanced Studies, the faculty of Indiana University of Pennsylvania and on the staff of the Brookhaven National Laboratory before coming to UCSD.

Dr. Brueckner is a consultant for various governmental agencies. In 1963 he was awarded the Dannie Heineman prize for mathematical physics.

Dr. Kohn, born in 1923, joined the UCSD faculty as Professor of Physics in 1960. He served as Chairman of the Department of Physics from 1961 to 1963 and as Chairman of the San Diego Division of the Academic Senate and as a member of the Academic Senate Universitywide Assembly and Universitywide Academic Council from 1965 to 1967.

Dr. Kohn received his Ph.D. in theoretical physics from Harvard University in 1948 and served there for the next two years as an instructor. In 1950 he moved to Carnegie Institute of Technology as Professor of Physics. He later conducted research at the Bohr Institute, Copenhagen, the University of Michigan, the University of Pennsylvania and the Imperial College of Science and Technology, London.

His special interest has been in the theory of solids. He was awarded the Oliver E. Buckley Solid State Physics Prize in 1960 and received a Guggenheim Fellowship in 1963.

Dr. Singer joined the UCSD faculty as Professor of Biology in 1961 and served as Chairman of the Department of Biology during the 1964-65 academic year. He received his Ph.D. degree in chemistry at the Brooklyn Polytechnic Institute in 1947 and served as a Postdoctoral. Research Fellow and Senior Research Fellow at California Institute of Technology and Professor of Chemistry at Yale University before coming to UCSD.

In recent years, he has concentrated his research efforts on physical chemical studies of the structure and interaction of proteins, particularly of antibodies and antigens. His international reputation is founded on his early work with Pauling on sickle-cell anemia and, later, his important research on the structure of antibodies and on the biological uses of electron microscopy.

He is a member of Phi Beta Kappa, the American Chemical Society and the American Society of Biological Chemists.