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G E O P H Y S I C A L I N S T I T U T E
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K Y O T O , J A P A N

TO THE MEMORY OF
PROFESSOR EMERITUS MANKICHI HASEGAWA



MANKICHI HASEGAWA
1894-1970

In Memoriam : Professor Mankichi Hasegawa

The death of Professor Mankichi Hasegawa in Kyoto, on July 14, 1970, was an occasion of deep sadness to all who knew him. For more than thirty years Professor Hasegawa devoted himself to education and research in a wide field of geophysics including meteorology, seismology, geomagnetism, earth current, atmospheric electricity, physics of the ionosphere and cosmic rays at the Geophysical Institute of the Faculty of Science, Kyoto University, and also rendered notable services to the development not only of the Institute but also of the Faculty and University, as chairman of the Institute for many years, as dean of the Faculty, and as a member of the University Council.

Professor Hasegawa was born at Makicho, Niigata, on January 2, 1894. He graduated in Physics at Kyoto University in 1921, and became Associate Professor at the Geophysical Institute in 1924. From 1928 through 1930 he visited Germany, Italy and the United States for research and cooperation in the field of geophysics. In 1937 he was promoted to be professor of Geophysics at the same Institute.

The Second International Polar Year was initiated in 1932, and Professor Hasegawa carried out geophysical observations at Aso Observatory with his colleagues and students. Utilizing data obtained at Aso, he found that the pattern of daily geomagnetic variations on quiet days (usually called the Sq field) changed considerably from one day to the next. This finding was further developed by using the world data obtained during the Polar Year, and the results were cited in a famous book "Geomagnetism" by S. Chapman and J. Bartels. This work continues to be referred to by a number of researchers up to the present time.

This period of research (1932-1942) seemed to be most fruitful for Professor Hasegawa in his life as a scholar. He often worked until daylight in cooperation with Dr. Y. Tamura and Dr. M. Ota. The detailed morphology of the Sq field was clarified by him in this period; for instance, day to day variability, seasonal variations, longitudinal inequality, anomalous behavior in the polar and equatorial regions, and so on. All these results were a faithful reflection of important physical processes in space around the Earth, and therefore they excited the interest of young researchers in this field. In 1950 an Academy prize was awarded to Professor Hasegawa for his original research in geomagnetism and outstanding contributions to the geophysical sciences.

In 1947 Professor Hasegawa organized the Society of Terrestrial Magnetism and Electricity of Japan in cooperation with his colleagues, and he was elected President of the Society seven times until 1961. He also devoted much effort to publishing a journal of the Society. The Journal of Geomagnetism and Geoelectricity was thus born in 1949. He retired from the presidency in 1961,

and was nominated as Honorary President and Honorary Member. He made a donation to the Society with which an award, the "Hasegawa Cup", was provided in 1966 for outstanding contributions to the field of geomagnetism, geoelectricity and related sciences.

Professor Hasegawa's career in the national and international scene was also impressive. In Japan, he was a member of the Scientific Research Council from 1937. When the Scientific Council was established in 1949, he was elected to membership of the Council four times until 1960. He was also a member of the Geodetic Council, a member of the Committee on Research Liaison for Earthquake Prediction, chairman of the IGY Committee, and chairman of the Committee on Research Liaison for Geophysics. On the international scene, he was a member of the Japan delegation to the Assemblies of the IUGG from 1951 to 1957, and also a member of the IAGA/IUGG Executive Committee from 1951 to 1957. Professor Hasegawa devoted himself in particular to the International Geophysical Year program, and a number of World Data Centers were founded in countries including Japan. In 1961 an International Conference on Cosmic Rays and the Earth Storm was held in Kyoto, and he played an active part as chairman of the organizing committee.

Professor Hasegawa retired from Kyoto University in 1957. Just after his retirement, he assumed the Presidency of Fukui University in 1958, and then the Presidency of Tokushima University in 1965. During this period he organized a research group for disaster sciences, and served as chief to the advantage of the research. For his contributions to these universities, he was granted the title of Professor Emeritus of Kyoto University in 1957, of Fukui University in 1964, and of Tokushima University in 1969. In 1965 he became a member of the Japan Academy.

Professor Hasegawa always showed great concern for academic freedom, so that his students were never unduly directed, and were able to study in an excellent atmosphere. Another point which he emphasized was unity. His wise saying "Wissenschaft ist Essenschaft" at a dinner party of the Society has long been kept in mind by members of the Society, and is regarded as epitomising the basis of the development of the Society.

We have lost our great leader, Professor Hasegawa. However, we shall never forget his outstanding contribution to the advancement of the geophysical sciences.

Hiroshi Maeda

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