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*Commemoration Issue Dedicated to
Professor Keinosuke Kobayashi
on the Occasion of His Retirement*

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History of Publications

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Jan., 1953 onwards	31 No. 1–	Bulletin of the Institute for Chemical Research (化学研究所報告)	Bi-monthly
Nov., 1966	44 No. 6	Special Issue on the Commemoration of the Fortieth Anniversary (化学研究所創立四十周年記念号)	—
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小林 恵之助 教授

Professor Dr. K. Kobayashi

Emeritus Professor Keinosuke Kobayashi

On the first of April in 1977, Dr. Keinosuke Kobayashi retired, after having completed 42 years of service at Kyoto University. He was granted the title of emeritus professor by the University on the next day.

Dr. Kobayashi was born in Osaka on May 7 in 1913. Graduating from Kyoto University in March, 1935, with his major in zoology, he immediately started his microscopical study on fibers when he joined late Prof. Kita's laboratory in the Institute for Chemical Research, Kyoto University. Joining Prof. Horio's laboratory in 1941, Dr. Kobayashi planned to utilize an electron microscope for the study of micellar structures, and obtained the first successful electron micrographs of thin cross-sections of viscose fibers in 1943. Dr. Kobayashi received a doctoral degree of engineering from Kyoto University for his study on polymer crystals in 1962.

Dr. Kobayashi was appointed a lecturer in June, 1941 and an assistant professor in June, 1945 and he was promoted to a full professor of the Institute in October, 1965, to direct the Laboratory of Polymer Crystals. He has given lectures on polymer crystals since 1965 at the Graduate School of Engineering, and supervised dissertation works of many graduate students. Dr. Kobayashi has been a visiting lecturer at several universities such as Kyushu University, Okayama University, Yamagata University, Fukui University and Tokyo Metropolitan University.


During those 42 years, his research was concentrated mainly in the field of structural and morphological studies of polymers in their solid state. He discovered "folded chain crystals" in polyethylene spherulites independently of Till, Keller and Fischer. Besides, from his boyhood, he cherished the dream of seeing individual molecules and atoms with his own eyes. Having built "HAREM" (High Atomic Resolution Electron Microscope) with 1.4 Å resolution in March, 1974, in cooperation with Prof. Uyeda, Dr. Kobayashi finally obtained an electron micrograph of chlorinated Cu-phthalocyanine molecule, which clearly showed a cloverleaf composed of benzene rings with chlorine atoms attached to them.

Dr. Kobayashi served as President of the Japanese Society of Electron Microscopy for one year since May, 1971. He was awarded prizes from the Society two times, and was recommended for honorary membership of the Society in May, 1977. For eight years since 1966, Dr. Kobayashi also played an important role as a member of the International Advisory Committee of the International Federation of Societies for Electron Microscopy. Dr. Kobayashi visited many foreign countries to attend a variety of international congresses and contributed greatly to the international scientific interchange.

Because of his sincere, thoughtful and warm personality, Dr. Kobayashi wins the respect of all people who come contact with him.

The collection of papers by his colleagues, former and present associates, and students is dedicated to Dr. Kobayashi in honor of his retirement.

March, 1977



Tsunenobu Shigematsu
Director
Institute for Chemical Research
Kyoto University

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