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Professor Takuji YANABU
on the Occasion of his Retirement*

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History of Publications

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柳父琢治教授
Professor Dr. Takuji Yanabu

Professor Emeritus Takuji Yanabu

On the first of April, 1982 Dr. Takuji Yanabu retired, having completed 35 years of service, from the Kyoto University. He was granted the title of Professor Emeritus by the Kyoto University on the following day.

Prof. Yanabu was born in Hiroshima on March 11, 1919. He was graduated from the Department of Physics, Kyoto University in 1942. After he served as a navy technical officer for 3 years until the end of World War II, he became a research associate of the Institute for Chemical Research, Kyoto University in 1947, majoring in experimental nuclear physics under the supervision of the late Professor Bunsaku Arakatsu.

In the Arakatsu Laboratory, he worked on the β -decay of ^{32}P with a cloud chamber and also tried to construct a small betatron. In 1951 he began to construct the 105 cm Kyoto University Cyclotron with colleagues of Professor Kiichi Kimura Laboratory. He mainly devoted himself to the design and construction of the main magnet of the cyclotron. This project took 4 years to be completed with success of proton beam extraction in December 14, 1955.

In July, 1957, he was promoted to an associate professor of the Institute. After completing the radiation shield for the use of the cyclotron, he began to work on the study of experimental nuclear physics with beams from the cyclotron. His first work on this period was the study of (d, α) reaction on ^{16}O , ^{14}N and ^{12}C with 15 MeV deuterons and he received a doctoral degree of science from Kyoto University for this study in 1962.

In due course of this study, he was interested in the cluster structures of light nuclei and continued extensive research works to understand alpha-cluster structures of nuclei with various nuclear reactions including quasi-free alpha scatterings.

In February, 1966, he was appointed a full professor of nuclear reaction at the Institute for Chemical Research of the Kyoto University and directed the Laboratory of Nuclear Reaction. Since then, he made many distinguished studies, especially on few-nucleon reactions as well as nuclear structures in light nuclei and supervised the dissertation works of many graduate students.

He also took the leadership for the reconstruction of the Kyoto University Cyclotron in 1969, finishing it successfully in 1971.

He has served as a member of a number of committees in the University to promote research, especially in the fields of atomic energy and radio isotopes. He gave sincere efforts to develop a new research facility for the general and wide use of particle accelerators in Kyoto University. He has also made much contributions to the foundations and organizations of the joint research institutes for nuclear and high-energy physics (Research Center for Nuclear Physics, Osaka and National Laboratory for High Energy Physics, Tsukuba) which are now commonly utilized by many university researchers in Japan.

His sincere, thoughtful and warm hospitality is respected by friends, colleagues, students and all those who come in contact with him. This collection of papers con-

tributed by his friends, colleagues, and students, is dedicated to Dr. Yanabu in honor of his memorable retirement.

A handwritten signature in black ink, reading "T. Takada". The signature is written in a cursive style with a horizontal line underneath the name.

Toshio Takada
Director
Institute for Chemical Research
Kyoto University

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