

Professor Yasuo Mori on the occasion of his 65th birthday



YASUO MORI, who was born on 24 February 1923 in Tokyo and has been a Tokyoite ever since, celebrates his 65th birthday this month.

Professor Mori attended the University of Tokyo where he received his B.S. degree in Aeronautical Engineering in 1945. He entered the Physico-chemical Research Laboratory and then moved to the Department of Mechanical Engineering of the Tokyo Institute of Technology where he was appointed Associate Professor in 1953. He received his D.Eng. degree for a thesis entitled "Theory of Turbo-expander for Low Pressure Air Separation Plants" from the University of Tokyo in 1956.

From 1959 to 1960, as a research fellow, he studied magnetohydrodynamics with Professor W. R. Sears at the Graduate School of Aerospace Engineering, Cornell University. His early work involved radial gas turbines, flow rate measurements, and heat transfer under a magnetic field.

In May 1961, Doctor Mori was named Full Professor of the Tokyo Institute of Technology and began his research on forced convection heat transfer under an external force field. In 1965, an epoch-making paper entitled "Study on Forced Convective Heat Transfer in Curved Pipes" was published in the *International Journal of Heat and Mass Transfer*, Vol. 18, which was co-authored with Dr W. Nakayama. This paper was selected as one of the best papers of the Japan Society of Mechanical Engineers in 1963. He

then published several papers one after the other on heat transfer enhancement due to the secondary flow caused by various external forces to systematize this problem.

Professor Mori has authored or co-authored about 260 journal and conference papers in the general areas of heat transfer, combustion, two-phase flow, magnetohydrodynamics, and energy conversion systems. His work is well known especially in high-temperature heat exchangers, heat transfer augmentation techniques, plasma and EHD heat transfer, condensation and evaporation mechanics, utilization of geothermal and ocean thermal energies and reduction of NO_x in combustion. He published 13 Japanese books on thermodynamics, heat transfer, energy conversion and flow measurement and co-edited two English books.

He has been consulted on energy problems as a member or chairman of committees on the MHD power generation system, the high temperature heat exchanging system for nuclear steel making, binary cycle geothermal plant, and OTEC system, which have been promoted by the Japan Ministry of International Trade and Industry.

In 1968, he contributed greatly to the establishment of the Department of Physical Engineering at the Tokyo Institute of Technology, serving as the first Chairman from 1968 to 1970 and several times since then. Most of his research at the Tokyo Institute of Technology mattered much to the theses of B.S.,

M.E., and Ph.D. students. Over 200 students have graduated from his laboratory, and he has supervised over 20 doctor theses. His principle of education is to develop the individual talents of the students. This is reflected in the list of his students who are still doing research in the field of thermal engineering: Y. Kurosaki, K. Hijikata, T. Miyauchi and H. Yoshida (Tokyo Institute of Technology), K. Futagami (Ehime University), K. Ohotake, M. Nakagawa and K. Okazaki (Toyohashi University of Technology), Y. Uchida (University of Electro-communications), T. Nagatani (Shizuoka University), H. Maki (Science University of Tokyo), H. Tokuda (National Ship Research Laboratory), T. Tanaka (National Electrotechnical Laboratory), Y. Yamada and A. Yabe (National Mechanical Engineering Laboratory), W. Nakayama and S. Hirasawa (MERL Hitachi Ltd.), and T. Fukada (CRIEPI). Most of these students have moved into leadership positions at first-rate institutions or industrial laboratories.

Professor Mori was appointed as Adjunct Professor at the Institute of Industrial Science, University of Tokyo in 1982 and Professor Emeritus of TIT on 1 April 1983. Since 1983, he has been carrying on his research at the University of Electro-communications, as Professor. He was invited to the University of California, Berkeley, as Springer Distinguished Professor in 1984.

Professor Mori has been a very active member of the JSME. He has promoted the International Cooperation Program in the field of thermal engineering as Chairman of the JSME Board of International Affairs, Vice-President of the JSME, and President of the Heat Transfer Society of Japan. He has also made

his effort for the international heat transfer community as Editor of the *International Journal of Heat and Mass Transfer* since 1973, and became Member of the Honorary Advisory Board in 1986. He has served as a member of the advisory boards of several other journals. He is now Vice-President of the International Center for Heat and Mass Transfer.

His outstanding contributions to the field of heat transfer and energy have not gone unnoticed. He has been awarded four times by the JSME for one of the best papers in 1963, 1973, 1980 and 1984. The 1982 Heat Transfer Memorial Award of the ASME was presented to Professor Mori for his wide contributions to the understanding of heat transfer, his long-time devotion to heat transfer education, and his services to the international heat transfer community, industry and government. In 1982 he won a commendation as distinguished scientist by Tokyo Metropolis. In 1986, Professor Mori was elected as Foreign Associate of the National Academy of Engineering of the United States of America.

Professor Mori has been a devoted husband. He and his wife, Reiko, celebrated their 35th anniversary last November. He has been an avid sportsman, enjoying skiing, tennis and now golf. He is well known as a skillful golfer.

On behalf of Professor Mori's students, his colleagues, and his friends all over the world, we would like to wish him many happy returns and respectfully dedicate this Festschrift in his honor.

K. HIJIKATA
R. ECHIGO
I. TANASAWA