

In Memoriam

Professor Tokuro Mizushina



Professor Tokuro Mizushina died on 24 February 1988.

He attended Kyoto Imperial University where he received his B.Eng. degree in Chemical Engineering in 1942. From 1942 to 1955, as Lecturer and Associate Professor in Chemical Engineering, Kyoto University, he started his academic career. He received the D.Eng. degree in 1953 and then spent one year as a Fulbright Research Fellow at the University of Delaware. He was promoted to Professor of Kyoto University in 1956.

Professor Mizushina served as the Scientific Advisor at the Ministry of Education, Science and Culture in Japan from 1968 to 1971. He also served, from 1972 to 1976, as the Director of the Atomic Research Institute at Kyoto University. He was President of the Heat Transfer Society of Japan in 1974. He retired from Kyoto University in 1983.

Professor Mizushina was a member of the Editorial Advisory Board of the *International Journal of Heat and Mass Transfer* from 1961 to 1986. He also made contributions to the international heat transfer community through the following editorial and organizational activities: editor of *Heat Transfer—Japanese Research* from 1971 to 1983, editor of *Previews of Heat and Mass Transfer* from 1974, associate editor of *Heat Transfer Engineering* from 1978 and member of the Assembly for International Heat Transfer Conference from 1968 to 1986.

Following his initial investigation on the analogy between fluid friction and heat transfer in turbulent tube flow, Professor Mizushina actively conducted experiments on turbulent heat and mass transfer in liquid flows including non-Newtonian fluids, highly viscous liquids and liquid metals. He related the measured heat and mass transfer coefficients to the distributions of eddy diffusivities of momentum, heat and mass. He developed this research into studies on the turbulence structure of pulsating flow, stratified flow and buoyant jets. He received an award from the Society of Chemical Engineers, Japan, in 1986 for his outstanding contribution to the understanding of transport phenomena in liquid flow.

He also made contributions to the applications of heat transfer to the design of equipment such as cooler condensers for gas-vapor mixtures, evaporative coolers, agitated vessels and the apparatus for spray-quenching of reacting gases. He published 159 scientific papers and co-authored many books and handbooks.

His dedication to research and education in heat transfer and his contribution to the international heat transfer society will be remembered forever among the heat transfer scientists over the world.

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