

OBITUARY

FUJIO TACHIBANA

1912–1972

It is reported with deepest regret that Doctor Fujio Tachibana died unexpectedly of apoplexy on 10th June 1972. He had been a Professor at the University of Tokyo and Co-chairman of the Honorary Advisory Board of the International Journal of Heat and Mass Transfer.

In 1912, Professor Tachibana was born in Tokyo, and in 1936, he graduated from the Department of Mechanical Engineering, Faculty of Engineering, Tokyo University. Soon after his graduation, he secured a position in the Aeronautical Research Institute of Tokyo University, starting his career as a researcher through study related to aeroplane-engines. In 1945, he was appointed an Associate Professor of Tokyo University and took partial charge of the Chair of Internal Combustion Engines in the Second Faculty of Engineering. Since 1949, in the Institute of Industrial Science of Tokyo University, he promoted various studies in the field of heat transfer. In 1954, he became a Professor of Tokyo University. In 1962, on the establishment of the Chair of Nuclear Heat Transfer in the Department of Nuclear Engineering, Faculty of Engineering, Tokyo University, he was received into the Department as the Professor in charge of the chair with the earnest support of all members of the Department. For about ten years up to his death, he pursued his work in study and education, and contributed greatly to advancement of nuclear engineering.

Among his activities outside the university, during 1958–1962, Professor Tachibana performed concurrently his work as the Chief Research Member in the Japan Atomic Energy Research Institute, established only a short time ago, and obtained excellent results in his guidance of planning various experimental apparatuses, the promotion of studies and the training of many young researchers. Professor Tachibana has also written excellent textbooks in the fields of heat transfer, energy conversion, nuclear reactor, internal combustion engine etc. Additionally, he was one of the participants who took the initiative and leadership in establishing the Heat Transfer Society of Japan in 1961. The society is a very unique organization dedicated to promoting heat transfer research in Japan. In 1970, he held the post of president of the society. In 1967, Professor Tachibana was appointed Co-chairman of the Honorary Advisory Board of the International Journal of Heat and Mass Transfer.

Technical items which Professor Tachibana researched and studied include nuclear reactors, steam boilers, aeroplane engines, rocket motors, heat exchangers, air-conditioning equipments, heavy electric equipment and many others. Of course, he contributed greatly to the development of technology in the fields previously mentioned, but it should

be specially noted here that substantial contents of all his studies carried on throughout his life concern heat transfer alone. About fifty of his papers are on subjects such as contact thermal resistance, jet heat transfer, separated flow heat transfer, slurry heat transfer, heat transfer of liquid metal, boiling heat transfer (encompassing bubble dynamics, two-phase flow, burnout, film cooling, boiling of slurry, and heat transfer in quenching), condensation heat transfer, transient heat transfer, heat transfer on an extended surface, heat transfer of rod bundles and fins, heat transfer of rotating and vibrating systems and so on.

As may be assumed from listing these study subjects, Professor Tachibana tended toward studies of heat transfer phenomena which contain comparatively complicated processes. This seems to be attributable to Professor Tachibana's philosophy that basic study in close relation with the actual technique is truly valuable. In addition, while Professor Tachibana had a deep affection for clear theoretical analyses, he was a possessor of a truth-loving soul so vigorous and strict that he never allowed its cause to be ignored, even if there should occur a very small difference between the theory and the experiment. This standpoint has often produced a clear idea, which has become the driving force behind the study of Professor Tachibana and produced interesting results.

As everyone who even came into contact with him felt, Professor Tachibana had a gentle noble personality. He not only watched life with his penetrating eyes but also was the possessor of a generous and impartial mind. In many cases, his example unconsciously encouraged and inspired other people's minds to greater efforts. Probably because of this, many of those guided by Professor Tachibana play important roles in the fields concerning heat transfer in universities, institutes and enterprises. In addition to his profound knowledge, Professor Tachibana had an amazingly wide range of intellectual tastes concerning music, poetry, theatrical performances, fine arts etc. He was especially accomplished on the violin. He was enthusiastic for such sports as ping-pong, tennis etc., while, on the other hand, he had more than an amateur's skill at games of 'go' and Japanese chess. Professor Tachibana had a rich sense of humour enhancing the background of his culture and taste, so his lectures and conversations often enthralled his listeners.

Unfortunately the world has lost Professor Tachibana from the field of heat transfer forever, a serious loss to this field and a cause for deep regret to us. Remembering his distinguished achievements during his lifetime, we deeply lament the untimely death of Professor Tachibana.



H.M.