



## In Memoriam— Professor F. Bošnjaković (1902–1993)

PROFESSOR Emeritus Fran Bošnjaković, member of the Honorary Editorial Advisory Board of the *International Journal of Heat and Mass Transfer*, died in Stuttgart, Germany, on 1 October 1993. We have all lost a kind and helpful friend and an outstanding scientist.

He was born in Zagreb, Croatia, studied mechanical engineering at the Technische Hochschule Dresden, Germany, graduated in 1925, received his doctor's degree in 1928 and the Venia Legendi in 1931. Subsequently he became professor for Thermodynamics at the Universities of Belgrade and Zagreb. In 1953, he succeeded Ernst Schmidt at the chair of Applied Thermodynamics in Braunschweig, Germany, and accepted the chair for Thermodynamics of Air- and Space-Propulsion at the University of Stuttgart in 1961, retiring from this position as emeritus in 1968.

Fran Bošnjaković has to be considered as one of the outstanding pioneers in the development of applied thermodynamics. His unusual gift to combine engineering problems with diagrammatic representation led to numerous papers and several books dealing with two-phase mixtures, absorption refrigeration, heat exchangers, combustion and gasification, other chemical reactions, high temperature plasma, and solar collectors. His ideas on bubble growth in nucleate boiling and heat blockage in pipe evaporators provided the foundation of our understanding of these processes.

As early as 1938 he published a paper entitled 'Fight against Irreversibilities' which initiated a series of

investigations in this field and brought in the concept of exergy, making us aware of problems that we have to master today.

Professor Bošnjaković was an excellent teacher. His lectures in the entire field of Applied Thermodynamics and Heat Transfer are an unforgettable experience for all his students. The influence of this teaching can be clearly found in his textbooks *Technische Thermodynamik* which have experienced seven revised and extended editions and been translated into several languages.

After his retirement he continued his scientific activities, devoting efforts to solar collectors, radiation, a photon gas version of the Stefan-Boltzmann Law, and to the question of an upper temperature limit.

His outstanding scientific contributions have been recognized by Honorary Doctor's Degrees from the Universities of Zagreb and Aachen and by numerous awards like the Grashof-Gedenkmünze of the Verein Deutscher Ingenieure as well as the Gold Medal of the Associatione Thermotechnica Italiana and an award from the Institut Français des Combustibles et l'Energie. He was a member of several Academies of Science.

On behalf of his students and friends we offer condolences to his wife and to his two sons. The international community will always remember him for his outstanding scientific and educational achievements and for his philanthropic and modest mind.

H. BEER

E. HAHNE

J. P. HARTNETT