Personal data and merits:

Born Helsinki Jan. 15, 1895, parents: Kaarlo and Serafiina (Isotalo) Virtanen, graduated from Classical Lyceum Viipuri 1913, M.Sc. Univ. of Helsinki 1919, M.D.h.c. Univ. Lund 1936, University studies in Zürich, XX Münster and Stockholm.

Married Lilja Moisio Feb. 29 1920, children Kaarlo Ilnari, Artturi Olavi.

Docent in chemistry at the Univ. of Helsinki 1924-39, professor of biochemistry at the Technical University of Helsinki 1931-39, at the Univ. of Helsinki since 1939. Director of the Biochemical Institute.

Awarded the golden Scheele-medal of the Swedish chemical society in Stockholm 1938, the golden Adelskiöld-medal of the Swedish Academy of Sciences in 1943, the Prize of Honour, Fund of Wihuri 1943, Nobel Prize in Chemistry for 1945.

Member of many scientific societies both in Finland and about e.g. Finnish Chemical Society since 1919, Finnish Academy of Sciences since 1927, Swedish Academy of Agriculture since 1933, British Association for the Advancement of Science since 1935, Finnish Academy of Agriculture since 1939, Royal Scientific Society of Uppsala since 1939, Royal Scientific Academy of Sweden since 1939, Swedish Academy of Engineering Science since 1945, Danish Academy of Engineering since 1947. - Honorary member of Biochemical Society of Stockholm 1943, Finnish Medical Society Duodecim 1945, Finnish Technical Society 1945, Finnish Chemical Society 1946. - Chairman of many Scandinavian scientific congresses and vice president of some world congresses. Representative of Finland at the meeting of the League of Nations Committee on Nutrition in Geneve 1938. - Member of the Editorial Staff of Kar-

jantuote (Dairy Produce) since 1924, Committee on Popular Nutrition 1936-40, State Committee on Production 1940-42, vice chairman of the Consulting Committee on Fishing and chairman of its working section 1941, member of the Committee of Chemical Industry since 1942, expert of the Ministry of Supply since 1942, member of the board and working committee of the Central Association of Chemists since 1943, chairman of the Finnish Academy of Sciences 1944-45.

Over 400 contributions to various scientific journals on different blochemical problems: blochemistry of bacteria, symbiotic nitrogen fixation and related agricultural problems, vitamins, etc.

Author of Cattle Fodder and Human Nutrition, Cambridge 1938,

AIV System as the basis of cattle feeding, Helsinki 1943 (Finnish).

Address: Biochemical Institute, Helsinki K, Kalevank. 56 b. Suomi (Finland).