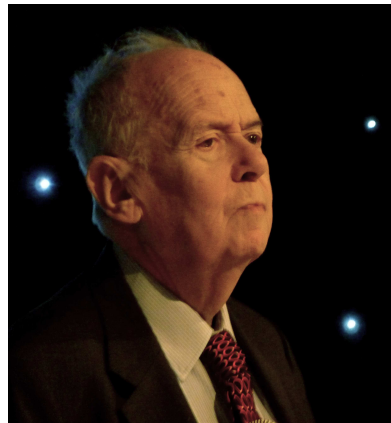


Short Note

NESTORS OF MEASUREMENT SCIENCE AND TECHNOLOGY LUDWIK FINKELSTEIN – THE 80TH ANNIVERSARY

Ludwik Finkelstein was born on December 6th, 1929 in the town of Lwów (Poland) in a wealthy and educated Jewish family. After the outbreak of the Second World War, he and his mother were deported by the Soviet authorities to Siberia, and his father was imprisoned in a labour camp. On the German attack on the Soviet Union in 1941 they were released and his father, who was an officer of the Reserve of the Polish Army, joined the Polish Army Corps headed by General Władysław Anders, formed in the Soviet Union. In 1942, the Corps was transferred from the Soviet Union to the Middle East where it came under British command. After the war, the Finkelstein family were granted asylum in Great Britain and made their home there. Ludwik Finkelstein studied physics in the University of London. He earned the B.Sc. degree in Pure Mathematics, Applied Mathematics and Physics and the B.Sc. degree in Physics from that university



– both in 1951. From 1951 to 1952, he was employed as a physicist in the electronics industry, working on problems related to the manufacture of electronic tubes. In 1952, he joined the scientific staff of the Mining Research Establishment of the National Coal Board working on instrumentation for use in mining. In 1959 he received the M.Sc. degree in Physics from the University of London, and joined the academic staff of City University London (which was at that time The Northampton College of Advanced Technology), where he went on to receive the D.Sc. degree in Measurement and Instrumentation Science and Technology (1989), to become Professor of Measurement and Instrumentation (1970), Dean of the School of Engineering (1983–1993) and Pro-Vice-Chancellor (1991–1994). He retired from full-time employment in 1993, but continues his relationship with City University as Professor Emeritus.

His principal research interests have been since early fifties related to measurement and instrumentation. His main research objective was the development of measurement science and technology as a systematic discipline, including relevant aspects of its theory and significant practical applications. Half a century ago, measurement science was a catalogue of techniques. Ludwik Finkelstein was among the pioneers who treated measurement as an information process and instruments as information machines, applying to their analysis and design the rapidly advancing science of systems and control, and developing a design-orientated approach to instrumentation, based on systems engineering. A notable area of his work has been related to the mathematical modelling of instruments and to the use of the mathematical models in analysis and design. Another important stream of his contributions has been focused on the modelling and identification of biological organisms with applications in medicine. He has an interest in the logical and philosophical foundations of measurement and continues work in that area. His work has been extensively published.

In 1952, responding to a call for scientists to serve as volunteers, Ludwik Finkelstein joined the Civil Defence Corps, and served there (rising to the rank of a senior staff officer) until its disbandment in 1967. He then continued his work in the Home Office scientific service for home defence (as Chief Regional Adviser for Greater London) until this was stood down in 1994.

On his retirement from City University London, Ludwik Finkelstein undertook Hebrew and Jewish studies at Leo Beck College London, where he received the M.A. degree in 1996 and the Ph.D. degree

in 2006; the latter for a thesis on the Rabbinical School of Warsaw, which was the spearhead of Jewish acculturation and integration in Poland.

During the time of his outstanding academic career, Ludwik Finkelstein served in several learned societies and professional organisations active in the field measurement science and technology, *i.a.* he was President of the Institute of Measurement and Control (1980), Vice-President of the International Measurement Confederation IMEKO (1994–1997), Member of the IMEKO General Council (1982–2000), Chairman of the IMEKO Technical Committee on Education and Training (1973–1986), and Editor-in-Chief of *Measurement – Journal of IMEKO* (1982–2000). He received a number of scientific honours, whose exhaustive list would exceed the predefined size of this short note; so, only the most important will be mentioned here. He is a Fellow of the Royal Academy of Engineering and is a Foreign Member of the Russian Academy of Metrology. He received the Distinguished Service Award of IMEKO, the President's Award of the Institute of Measurement and Control for extraordinary services to the Institute, and the Tallantire Award of that Institute for extraordinary commitment and service to the Institute and to its aims and objectives. He has been the recipient of the Hartley Medal for work of outstanding merit in measurement and control. He is an Honorary Doctor of St. Petersburg Technical University, and an Honorary Doctor of City University London. He was appointed an Officer of the Order of the British Empire in 1990. In 2009, his name was given to a bursary fund launched at City University London to support students within the School of Engineering and Mathematical Sciences, and to a new laboratory of electrical engineering at that School.

Ludwik Finkelstein is married to Mirjam Emma (nee Wiener); he has three children (Anthony, Daniel, and Tamara) and 8 grandchildren. He speaks English, Polish (without any Anglo-Saxon accent!), Russian, Modern Hebrew, German and French. His principal leisure interests are "books, conversation and Jewish studies" (as he put it in an interview).

Roman Z. Morawski

r.morawski@ire.pw.edu.pl, +48 22 234 7721