

**PROF. DR. ISTVÁN BARTA**

(1910—1978)



Born in Budapest, 1910, he attended the technical universities of Vienna, Brno and Karlsruhe. After having graduated in electrical engineering from the University of Karlsruhe in 1933, he was granted the degree of Doctor in Electrical Engineering by the University of Karlsruhe in 1934. The subject of his Doctor's Thesis was a treatment of the transient response of microphones. This was the first comprehensive theoretical and experimental analysis of transient phenomena of microphones, still referred to after decades in the relevant literature.

Between 1934 and 1937, Dr. István Barta acted as research engineer as a staff member of the laboratory of the Ericsson Electrical Co. Budapest.

In this period he designed a number of radio receivers marketed under Philips trademark in Hungary, and he also developed the electronic instruments needed for the manufacture and testing of the receivers. As a part of this activity he designed in 1935 a high quality dynamic loudspeaker, incorporating the special feature that the rim of the cone was made of impregnated fabric. It was only three decades later that this solution became wide-spread and generally accepted.

From 1938 to 1948 he was with United Incandescent Lamp Co. (Tungsram), in the television laboratory up to 1940, later he became the head of final inspection and measurement section of radio valves.

In 1939, he set up, aided by his co-workers, an experimental television link in the laboratory of Tungsram using the most modern devices of that period i.e. flying spot scanner and iconoscope.

In 1946, Dr. István Barta participated at the work at the Tungsram laboratory, getting to world fame, having realized one of the first receptions of radar signals reflected by the Moon.

Besides these he designed several electronic instruments for the use in the manufacture and checking of Tungsram radio valves.

From 1948 to 1950 he acted as the technical director of Orion Radio Works. Several well-known Orion radio receivers have been made based on his designs, including the local radio receivers of which about half a million have been produced.

He was a member and soon the head of a team for post-war instrument development within Tungsram organization. It was his outstanding merit to lead the design work of the first family of Hungarian made electronic instruments. This team, temporarily transferred to Orion Works and subsequently detached, was the kernel of which the Works for Electronic Instruments grew into a big industrial undertaking.

He was also one of the founders of the Research Institute for Telecommunications, starting and heading within this Institute the Department for Radio Reception Engineering. Dr. István Barta initiated the specialized education of communication engineers in Hungary. He participated in organizing the State Technical College in 1948/49, the first institution to educate telecommunication engineers. Soon afterwards, he lectured at Technical University, Budapest. At State Technical College he delivered lectures on the subjects: Electron Valves, and Application of Electron Valves, and at Technical University Budapest lectures on Radio Reception Techniques, Television, Electronic Measurements, Pulse Technique and Design of Radio Receivers. In June 1949 he became full professor of this university and the first head of the newly founded Department for Wireless Telecommunications. Based on his outstanding research and industrial practice, he wrote several textbooks. In those days such books were vitally important for the country's economy because of the urgent need of skilled engineers for the fast developing telecommunication industry. His excellent book on "Radio Receivers and Amplifiers" has been published in 1956, and a second edition in 1963.

As early as in the early fifties he emphasized the importance and usefulness of electromechanical filters, initiating and guiding a relevant research program.

He contributed to a great extent to a basic improvement of communication engineering education in 1959, prior to the general reforming of engineering education. He was right in recognizing the increasing importance of technological education in telecommunication engineering, suggesting later to establish the new Department of Electronic Technology.

He was the first man to organize a research team for colour TV in this country, contributing subsequently to the development of the Hungarian colour TV receiver production. In the period from 1957 to 1960 he acted as Dean of the Faculty of Electrical Engineering, and as Vice Rector of Education at this University from 1960 to 1963. Later he was the first director of the Institute of Communication Electronics at Technical University, Budapest, and held this office from January 1st, 1972, up to December 31st, 1974, till his retirement.

In reward of his outstanding scientific achievements in electro-acoustics and television engineering, in 1949 he was elected corresponding member, and in 1976, ordinary member of the Hungarian Academy of Sciences. Since 1968 he was honorary member of the Polish Academy of Sciences. Since its foundation he most actively took part in the work of State Office of Technical Development. For more than two decades, until 1974, he presided and directed the Scientific Society for Telecommunications, thereafter he became the honorary president of the Society.

His outstanding activity gained him several distinctions such as Eminent Worker in 1948, Kossuth Prize in 1957, Eminent Worker of Education in 1959, Golden Grade of the Order of Labour in 1965 and in 1970. Technical University, Budapest acknowledged his merits by granting him the memorial medal in 1974.

His straightforward character and unselfish and cheerful assistance he gave his colleagues won him the respect and appreciation of all of his fellow workers and everybody who ever had contact with him.

The decease of Dr. István Barta is the loss of an outstanding, internationally acknowledged Hungarian authority of technical sciences and higher engineering education. His never failing enthusiasm and friendly, ever helpful personality will be sorely missed by all his friends, colleagues and former students.

Dr. Z. BARÁT