

ERNST VOSS: THE GASTON PLANTÉ MEDALLIST 1989

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The year 1989 marks the 130th anniversary of the invention of a practical lead/acid battery by the French physicist Gaston Planté. In recognition of that singular achievement, the Presidium of the Bulgarian Academy of Sciences has granted a medal to honour the name of Gaston Planté (Fig. 1). An International Committee consisting of eminent scientists from Australia, Bulgaria, The Federal Republic of Germany, Japan, the U.K., the U.S.A., and the U.S.S.R., selected Ernst Voss from VARTA Batterie AG (F.R.G.) to be the first recipient of the Gaston Planté Medal (Fig. 2). The award was made in acknowledgement of the outstanding contributions made by Ernst Voss to the understanding and the development of the science and technology of the lead/acid battery system.



Fig. 1. The Gaston Planté Medal.

Ernst Voss received the degree of 'Diplom-Chemiker' from the University of Hamburg, F.R.G., in 1953. Two years later, he was awarded the degree of Doctor of Natural Science, also from the University of Hamburg. In the same year, he joined the central research laboratory of Accumulatorenfabrik AG (known as VARTA Batterie AG since 1963) at Frankfurt/Main, F.R.G., which at that time was under the directorate of Hans Bode, the well-known author of *Lead-Acid Batteries*.



Fig. 2. Ernst Voss, Gaston Planté Medallist 1989.

For the next nine years, Ernst Voss was engaged in all aspects of research into lead/acid batteries. In 1964, he became manager of the department for product research and development and widened his activities to include studies on nickel/cadmium cells. In 1973, he was appointed manager of the technology department for primary and new systems. This position allowed him to become acquainted with many different types of primary systems including zinc/carbon, alkaline manganese, zinc/silver oxide, and lithium/organic cells. Despite this added responsibility, Ernst Voss still pursued his research and developmental studies on both lead/acid and nickel/cadmium cells.

In 1978, Ernst Voss was given the position of department director. Simultaneously, he received the authorization to represent VARTA Batterie AG in legal matters. During 1976/77, he participated in a research programme on the lithium/iron sulphide molten salt battery at the Argonne National Laboratory, Illinois, U.S.A. After this visit, he established and inaugurated a similar programme at VARTA's research and development laboratories in Kelkheim, F.R.G. This work was continued for many years under his supervision.

Ernst Voss was appointed a director of the research and development centre of VARTA Batterie AG in Kelkheim in 1981. Information, planning, patents, government contracts and contacts with universities came within the orbit of his responsibilities. Since then, he has continued his research on lead/acid, nickel/cadmium and manganese dioxide cells, as well as his developments of organic electrolytes and polymer electrode materials for galvanic systems. In 1985 he was elected to work as an expert on batteries and fuel cells for the Commission of the European Communities, Directorate XII, in Brussels; he is still active in this position.

The scientific efforts of Ernst Voss have been reported in a large number of papers that have been published in various prestigious scientific



Fig. 3. The President of the Bulgarian Academy of Sciences, Academician Blagovest Sendov presents the Gaston Planté Medal and Scroll to Ernst Voss of VARTA Batterie, AG, F.R.G.

journals. He is also the inventor, or a co-inventor, of several patents. His documented work covers a wide variety of topics relating to electrochemical energy storage, but is mostly concerned with understanding the behaviour of lead/acid batteries. He is a general editor of *Progress in Batteries and Solar Cells* and also serves upon the Editorial Board of *Journal of Power Sources*.

Ernst Voss retired from VARTA Batterie AG on September 30, 1988 after 33 years of employment with that company.

The Gaston Planté Medal was presented to Ernst Voss by Academician Blagovest Sendov, the President of the Bulgarian Academy of Sciences, during an official ceremony at LABAT '89 on 1 June, 1989 (Fig. 3).