Charles Volet, Director Emeritus of the Bureau International des Poids et Mesures, died on 5 November 1992 in his ninety-eighth year.

He was of Swiss nationality, born on 31 March 1895 at Vevey in the canton of Vaud. On graduating in physics and mathematics from the University of Lausanne, he worked as assistant to Professor A. Périer until May 1917, when he joined the BIPM. There he spent the remainder of his career: as assistant in 1917, adjoint in 1923, Deputy Director in 1947 and Director from 1 April 1951 to 31 December 1961, when he retired to the French village of Grilly (Ain), near the Swiss border.

From his arrival at the BIPM he worked closely with Charles-Édouard Guillaume in his research on nickel-steel and steel with a high percentage of chromium and carbon. He discovered the properties of an iron-cobalt-chromium alloy, known as Elinvar, very similar to Invar, and studied the metrological properties of different brasses (copper-zinc and copper-zinc-nickel alloys).

He took part in the first periodic verification of national prototypes of the metre, and wrote a comprehensive study on the standard metres of the BIPM. In the field of line scale measurement, he made a substantial contribution to improving the precision of standards comparisons, notably the development of a sophisticated technique for trimming the lines after tracing and the use of reversible microscopes with immersion objectives.

In gravimetry, Charles Volet sought to increase the precision of absolute determinations of gravitational acceleration by methods other than reversible pendulums. In 1946 he proposed a method involving the cine-photography of a ruled scale during free fall in vacuum, and in 1947 the so-called "double fall" method (ascending and descending motion of a body in vacuum). Implemented at the BIPM in 1960 and continually improved, this method enabled g to be measured with an accuracy as yet unsurpassed.

During his career Charles Volet saw the BIPM pass from the era of classical physics to the modern period as its initial activities were gradually extended to cover standards of electricity, photometry and ionizing radiations. He also made an important contribution to the inquiry into the setting up of a practical system of units of measurement, an inquiry which led to the adoption in 1960 of the International System of Units (SI), the modern form of the metric system.
He was fortunate that his period as Director, contrary to that of his predecessor, was quiet and, financially speaking, relatively favourable to the growth of the BIPM. After all, as he wrote to me in 1963, not long after his retirement "In a world where international organizations are proliferating, the oldest among them cannot lag too far behind. Nevertheless it must maintain certain of its traditions and it is up to the old folks to ensure that they are respected”.

In addition to his work at the BIPM, during a difficult period around 1930, Charles Volet turned to astronomy and published a number of studies on the orbits of double stars and on the companion of Sirius.

Despite the distance that separated his place of retirement from the Bureau, he kept up an interest in everything that went on there, in particular the results obtained for the value of \( g \). It is rare in metrology, he wrote in 1970, that "a physical constant should see its precision increased by a factor of 100 in the space of a few years”.

The author of some fifty published works, Charles Volet was Officier de la Légion d’Honneur and decorated with the Polish Order of "Polonia Restituta”.

In his private life he was an excellent violinist, a climbing enthusiast and an unequalled "do-it-yourselfer" who, even during his retirement, built a small sailing boat. As a musician, he played first violin in the "Quatuor des Quatre Charles" (all four were called Charles), a group of friends who held regular musical evenings.

After thirty years of retirement spent at his house in Grilly, which was admirably suited to his tastes and daily revealed to him the magnificent scenery of Lake Léman and the Alps of Haute-Savoie, Charles Volet passed away peacefully, without suffering, as his centenary drew near.

He is remembered by his former colleagues, to whose concerns he was never indifferent, as a Director who kept himself closely in touch with them and was a willing listener to their personal problems. He takes with him the respect, esteem and affection of all those who knew him. May his children, grandchildren and great-grandchildren accept these words of thanks in the memory of a servant of international metrology.

H. MOREAU

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