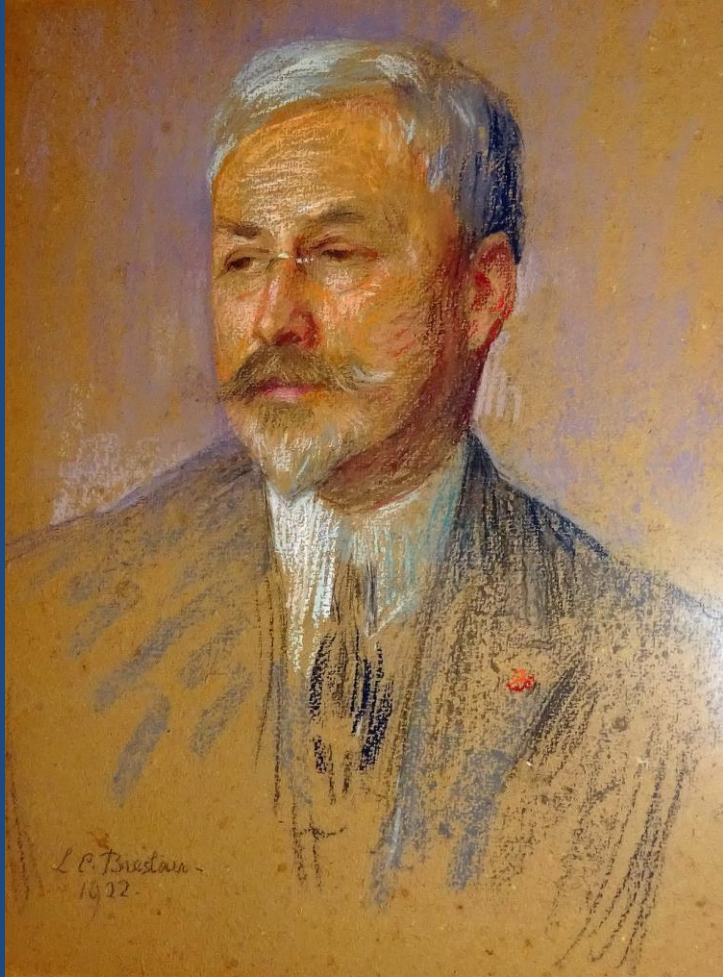


Charles-Édouard Guillaume, from the family perspective



Ladies and Gentlemen,

On behalf of the Fondation Mémoriale Charles-Édouard Guillaume, I first would like to thank Mr Martin J.T. Milton to have accepted, in these troubled times, to organize this symposium in memory of our great-grandfather.

I would also like to emphasise the warm welcome and support given by Mrs Céline Fellag Ariouet as I was greatly impressed by her interest in the life and work of Charles-Édouard Guillaume.

Charles-Édouard married Émilie-Marie Anne Taufflieb in 1888 and they had three children, all born in Saint-Cloud:

- André-Charles, born in 1891, became a doctor renowned for his work on the nervous system,
- Madeleine, born in 1892, married a Breton, Louis Omnès, whose family lived in Brest... so far from Fleurier!
- Maurice, born in 1895, became a graduate of the Polytechnikum in Zurich and had a successful career as engineer in the petroleum industry.

Only Madeleine had children of her own, however they had French nationality. Her five children, helped by their partners, produced 21 grandchildren... and I will stop here! There is no doubt that Guillaume's lineage is well guaranteed.

Charles-Édouard Guillaume, from the family perspective



Madeleine, “Bonne Maman” to those of us who knew her, was a woman with strong personality; she was the custodian of her father's memory to all of us. I am convinced that she would have liked to participate in his work. Since the death of her husband, she stayed longer and longer in Fleurier. Shortly before her death in October 1977, she had planned to regain her Swiss citizenship. As there were no Swiss descendants carrying the Guillaume name, Charles-Édouard's three children decided in 1962 to establish a memorial foundation under Swiss law, the ‘Fondation Mémoriale Charles-Édouard Guillaume’.

This foundation is aimed at preserving Charles-Édouard Guillaume's memory, as well as his wife's and children's memory.

Therefore, the house of Charles-Édouard's birth in Fleurier became the seat of the foundation. This house was built in the middle of the 17th century and I don't know precisely when the Guillaume family became established there but we know they lived in it at the end of the 18th century and that they had developed a watchmaking business, the proof being that workbenches are still in the attic.

Improvements to the comfort of the house were carried out over time; for example, the big ceramic stoves that are still in the house were replaced by heaters fuelled by a boiler which was located in the former laundry room and whose considerable size probably enabled the heating of a small passenger vessel!

In the inhabited part of the house, you still feel out of time and it is permeated with Charles-Édouard's presence through his portraits and photographs, his publications and letters.

Charles-Édouard Guillaume, from the family perspective

We were, and are still, impressed by this man, by his poise and his intense eyes and, when we were young, by the sheer number of decorations he received! Grand Officer of the French Legion of Honour! Nine times Commander of several orders! Who amongst us could dream about becoming Commander of the Order of the double dragon of China, or Commander of Orders of Saint Anne and Saint Stanislas of Russia, Officer of the Orders of the Rising Sun and of the Sacred Treasure of Japan.

Despite our wish to preserve Charles-Édouard's beloved environment we had to make a painful decision and remove the 150-year old ash tree on the south-facing lawn. It became more and more fragile and increasingly violent wind events made it dangerous. Charles-Édouard had seen it growing up.

The foundation, by maintaining the building and modernizing some parts of it while respecting the historical character of the site, reached one of its objectives: to keep alive the family's place of memories. The BIPM ensured that we 'keep alive' the other very important place of memories, that is the place where we are gathered today.

However, information collected within the family lead us to believe that the memory of Charles-Édouard's scientific life and its work should be at the core of a new communication with a new perspective.

Of course, the discovery of invar and elinvar is widely known within the family but, considering that the Guillaume family is now in the fifth and very soon the sixth generation since Charles-Édouard, the importance and impact of his work tends to fade from the family's memory.

At a time when we can instantly be geopositioned, measure time with extreme accuracy and carry out immediate precise metric measurements with lasers, it is difficult to look back a hundred years.

None of us went sailing using a marine clock from the 19th century and a sextant as the only means of positioning.

Charles-Édouard Guillaume, from the family perspective



Our watches, even if they are not “connected”, are robust and reliable. I remember the advice given by a great-grandmother that used to say that you should not put your watch on marble since it could change its settings or stop it because it was a cold surface.

Since the time of Charles-Édouard, physics has made huge progress in understanding the atomic and subatomic properties and in modelling what we thought was the universe.

It is weird to think that two successive Nobel laureates, Guillaume in 1920 and Einstein in 1921, worked on time and space.

Today, we are all limited human beings that consciously live, and will do for a long time, in Guillaume’s linear space and constant time, even if we understand that, at other levels, our universe evolves in a space-time that is much more complex. This clearly illustrates an aspect of Guillaume’s research that was focused on physics that could be applied at the human level.

Many people have difficulties in understanding the importance of physical measurements, their accuracy and reliability, in the processes of fundamental and applied research.

Charles-Édouard Guillaume, from the family perspective

During a family discussion, we came to talk about invar and elinvar and the reaction of one of us was “and he received the Nobel prize for that?”

Of course, the discovery and the understanding of galactic black holes is a priori more impressive, but would it have been possible without measurements of high precision and reliability?

When Charles-Édouard Guillaume died in 1938, his children had it written on his notification of death: « *Il a fait sa tâche* » (he did his work/performed his duties). This sentence, so simple and touching, well captures the work of this man who set concrete objectives, developed methods to reach them and tirelessly worked until achieving success.

I believe that, in order to fully fulfil its role in regard to his memory, the foundation shall now prepare Charles-Édouard Guillaume’s descendants, as far as possible, for them to communicate about his life and work. I am therefore very pleased to attend the presentations of this symposium and wholeheartedly thank all of those who worked to make this event a success.

Thank you all.

Jean Louis Dillard

Memorial Foundation Charles-Édouard Guillaume

17 October 2020