

## CASTILLE Armand

Born: June 27, 1898 – Sint-Niklaas

Died: April 27, 1973 – Heverlee

Armand is the second son of the agricultural engineer Jean Louis Alphonse Castille, managing director of the municipal slaughterhouse where a wing of the living quarters houses a laboratory. The family name probably goes back to Spanish settlers from Castille, in the 17<sup>th</sup> century or earlier.

### A young professor

After his secondary studies (1915), he cannot start his university studies because the German occupant has closed down the University of Leuven. In October 1919, after crash training as a BA, he is appointed assistant to professor Louis Michiels, who has succeeded Charles Blas (1839-1919) as professor of analytical chemistry at the Faculty of Sciences. In 1921 Armand graduates as pharmacist and next year as a Ph.D. *summa cum laude*. The following year, he becomes a student at the laboratory of physical chemistry of Professor Victor Henri at the Eidgenössische Technische Hochschule in Zurich. In 1923 he is appointed assistant of Victor Henri. When Professor Gustave Bruylants (1850-1925) receives his emeritus status, only two professors remain for the tuition of the pharmacists: Fernand Ranwez (1866-1925) and Louis Michiels (1886-1936). The dean of the University of Leuven Mgr. Ladeuze (1870-1940) asks Castille to return to Leuven to assist both professors, first as a lecturer of analytical chemistry (in Flemish) and next as professor. His academic career starts on August 20, 1923.

After the unexpected demise of professor Ranwez, Armand is entrusted with his teaching, except for the practical pharmacy because he never had any practical experience as a pharmacist. The new task proves too heavy and the lectures of analytical chemistry are given to Paul Putzeys (1897-1983). The academic career of Castille will evolve according to the needs and legal obligations.

### Scientist

To obtain his Ph.D. in Sciences (July 1922) he confers with his mentor professor L. Michiels to treat a phytochemical subject: the determination of the structure of *aristolachic acid* and concludes that it is the same molecule that Pohl (1892) called *aristolochine*.

After his return from Zurich, he specializes in ultraviolet spectroscopy, a technique he has familiarized himself with during his stay with Victor Henri. He investigates on his own or in cooperation with Pierre Bruylants (1885-1950) biochemical samples (tropane alkaloids), aromatic compounds, acids, amides, unsaturated aliphatic nitriles.

His research also concerns ergosterol and its derivatives after photochemical activation (ergocalciferol or vitamin D<sub>2</sub>), alkylthiobarbiturates (honored by the Royal Academy for Medicine of Belgium in 1931), vegetable and animal oils and fats (isatic acid), the molecular structure of natural products (pyrethrolacton, pyrethrosin, pyrethrol, ...). All this and much more lead to the publication of many articles.

He often designs and builds the instruments he needs for his research: an ozonizer, accessories for his spectrograph, apparatus for the determination of the index of hydrogenation of the anti-rachitic activity of vitamin D, etc.

He contributes to the field of bromatology and toxicology. In 1930 he is a member of the Higher Health Council in the 4<sup>th</sup> department of Food Hygiene. Because of his forensic expertise, his outspoken sense of responsibility and discretion, he is often consulted by the judicial authorities. He becomes dean of the Faculty of Medicine in 1944.

He is a member of a number of organizations: the Permanent State Food Committee, the National Council of Pharmacists, the scientific committee of the governmental anti-doping commission, the

Institute for the Agricultural Development of Belgian Congo. He is the representative for Belgium in a number of international congresses (a.o. between 1964 and 1970 he is vice-president of the commission of the European Pharmacopeia). In 1953 he starts a 5-year career as guest professor at the Faculté de Pharmacie in Paris, where he is made doctor honoris causa in 1958, followed by the same honor in Madrid in 1968.

### **The Architect**

When taking up his professorship in 1923, he realizes that the old buildings of the “Rega Institute” do not fulfill any more the criteria of the modern lecture halls and laboratories. He demands to have new buildings and is almost obliged in 1930 to present an ultimatum to obtain the construction which finally starts in the Van Evenstraat in 1931 at the cost of 3.291.407 BEF. The official inauguration takes place on June 24, 1934. When Castille is in charge of the institute, the number of students grows from 43 to 149 from 1934 till 1968.

In October 1950 the pharmacist Albert Couvreur bequeaths his extensive collection of jugs, mortars, instruments and books to the Pharmaceutical Institute, where unfortunately there is insufficient room for the exhibits. Professor Castille decides to build a large conference room above the 2 auditoria. Since 1956 the “Couvreur Collection” could be seen in the “Couvreurzaal”. Actually the exhibition is permanently on view at the UCL and the new department of pharmacy is part of the new campus of medicine (Gasthuisberg).

Castille obtains his emeritus status in 1968 and is honored on March 16, 1969 in the presence of 400 students. During a few years the “Castille Prize” was paid for by the proceeds of this celebration.

Paul Balduck- May 2009 – Eng. Transl. Yves De Cock