

STAS, Jean Servais

Born: Leuven, 1813

Died: St. Gillis (Brussels), 1891

Stas graduates as a physician at the University of Leuven and is appointed to the department of chemistry, where he builds a balance accurate to one milligram. From the roots of an apple tree he extracts phlorizin, at the time a medication for diabetes. This discovery leads to the cooperation with the French chemist André Dumas at the Ecole Polytechnique in Paris, where he determines the precise atomic mass of oxygen, nitrogen, chlorine, silver, lead, sulfur, potassium and sodium. Establishing that the atomic mass of chlorine is 35.5, Stas runs counter to the current opinion of William Prout and his follower André Dumas, who maintain that every atomic mass is a multiple of 1, the atomic mass of hydrogen. He leaves Paris and in 1841 is appointed professor of chemistry at the Royal Military Academy in Brussels till 1865, when he retires because of a health problem.

Besides his precise determination of the atomic mass of a number of elements (resulting in being attributed the Davy-medal by the British Royal Society), Stas is also a toxicologist whose name remains linked to the detection of nicotine in dead tissue during a sensational murder trial.