Gay-Lussac, Joseph Louis  
1778 - 1850

DEGREE: MA  
DATE: 1800  
PLACE: Paris

TEACHER/RESEARCH ADVISOR: Berthollet

co-discovered Charles's Law relating temperature to the volume of gases; discovered boron and established elemental nature of iodine and sulfur (both with Thenard); analyzed sugar; showed that fluoride was a constituent of bones; discovered law of combining volumes and originator of volumetric analysis; showed that one volume of oxygen reacts with two volumes of hydrogen to give water, and established similar relationships for NH$_3$ + HCl, N$_2$ + O$_2$, and N$_2$ + 3H$_2$; developed assay of Ag$^+$ by titration with chloride; studied chemistry of cyanogen and determined its composition; showed that "prussic acid" was HCN; first prepared ethyl iodide, hydrogen fluoride, organic amides, and the peroxides of Na and K; coined the name racemic acid; held world record for manned balloon flight (7019 meters) and pioneered measurement of temperature, pressure, humidity, and magnetic field strength as a function of height.

15. Mangin, A. *Savants Illustres de la France*; Ducrocq: 1865; p401-413.