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Charles Frédéric Kuhlmann: A key figure in the golden age period of chemical industry in northern France

Charles Frédéric Kuhlmann was a distinguished professor, curious and energetic researcher scientist, and versatile industrialist, with a remarkable technical ingenuity and commercial ability. He was the creator of the chemical engineering educational program at Lille and supported the development of “École centrale de Lille”, in the “Nord” French Department. Kuhlmann traces a path of light for the development of chemical industry at Lille. Kuhlmann has earned his place in the history of science, particularly in the history of catalysis, as one of the earliest pioneers in the manufacturing of sulfuric and nitric acids. He was the first to use a platinum catalyst to oxidize ammonia to nitric acid. The studies surrounding the discovery for which he is best remembered today, which is the manufacture of nitric acid by catalytic oxidation of ammonia, reflect this diversity of interests. As a public figure, he played a prominent part in his region and was a valued administrator in the Chamber of Commerce and other bodies. He placed the rigor of business and work in the foreground. To work effectively, he found it necessary to lead a harmonious and balanced life. Kuhlmann was an important member of the French Academy of Sciences. The celebration of the 350th anniversary of the French Academy of Science in 2016 provides the opportunity to remember the central life and work of Kuhlmann, a universal scientist and ubiquitous chemist with an industrial heritage.

1. First steps in life, childhood overshadowed, early successes

He was born on 22 May 1803 into a large family at Colmar, Alsace. 1803 was also the birth year of the chemist Liebig, the founder of organic chemistry, of the physicist Doppler, who discovered the “Doppler” effect, and of the French composer Berlioz. Georges Christian Kuhlmann, Kuhlmann’s father, a geometer-geographer, and his mother,

Marie Salomé Hochstetter (Kuhlmann), had 10 children. Charles Frédéric was the sixth child in this wonderful family. In 1811, his father passed away when he was only 8 y old. His childhood was overshadowed by the death of his father, an event that marked his life and prepared him for life. His uncle took care of his education. Kuhlmann studied at the Royal College of Nancy and undertook scientific studies in chemistry at the University of Strasbourg. In the Alsace region, the dye industry was prosperous, and Kuhlmann was attracted to this area. At 17 years of age, he wished to deepen his knowledge on dyeing in Paris, at Vauquelin’s Laboratory, where he worked for 3 years.

He was family oriented; he married Roman Woussen in 1831, who gave him six children, and remained close with his brothers and his children.

2. From the source to the river...

The beginning of higher education in chemistry in Lille was in 1823, well before the creation of the Faculty of Sciences in 1854. Indeed, the Lille municipality, which established in 1817, with its own resources, a professed physics course by Delezenne, decided to open a chemistry course. This course was supported by the Society of Science, Agriculture and Arts in Lille. To ensure a high-quality chemistry course, the municipality of Lille asked Vauquelin, who was a member of the Institute and chemistry professor at the Museum and the Faculty of Medicine of Paris, to propose a candidate for this program. This request was made through Delezenne, a friend of Vauquelin. The illustrious chemist Vauquelin selected Kuhlmann for this course, who was noted for his work in the dye industry, from 3 years in his laboratory. Kuhlmann decided to continue his intellectual life in chemistry pursuing a teaching career and held the proposed chair at Lille. In June 1824, as a professor of chemistry at Lille, he began to give lectures to an audience

of many industrial and young scientists and students. He was 21 years old, and his course was a success with up to 300 listeners. Kuhlmann offered his students the research work that he applied to his own industry. Chemistry was a firmly anchored tradition since the beginning of Lille. Kuhlmann held the Chair of chemistry for 30 years until 1854, when the Faculty of Sciences (whose first dean was the famous chemist Louis Pasteur) was created by an imperial decree on 22 August. The creation of the Faculty of Sciences certainly strengthened already established Kuhlmann's orientation. It provided a broader institutional framework and more resources to the local scientific–industrial enterprise. In this context, Kuhlmann decided to devote himself entirely to the industry and changed his focus to industrial research and management. Therefore, it is not surprising that the developed branch was applied chemistry, particularly because this discipline remained notably close to industrial demands during the 19th century. Science education from a series of local initiatives was growing and significantly affected the local industry, which helped to guide research. Kuhlmann maintained relations with the new Faculty of Sciences through Lamy and Pasteur.

3. Dawn of an industrial age in the north region of France

As a prestigious professor of chemistry since 1824, he became a contact for the industrials of the “Nord” French Department. In 1825, he founded a company to manufacture sulfuric acid, which was used to bleach textile fibers and eventually replaced the Leblanc process, which produced soda ash to bleach textile fibers. The products were sold to textile manufacturers in the region. Without industrial apprenticeship and no other guide than his inventive and essentially practical mind, he resolutely set to work. However, in the final step, he was advised by the Saint-Gobain Company for the project's establishment and installed a plant in Loos-les-Lille (1825). The first factory was thus established in Loos (north of France), and the production of acid began in May 1826 (this year, 2016, is the 190th anniversary). He was one of the first to produce sulfuric acid using the contact process (1833) and used the catalysts in industrial chemistry, particularly in the manufacture of nitric acid from ammonia in the presence of platinum catalysts in 1838 (the reaction will later be used in the Ostwald process). Notably quickly, other products were manufactured in addition to sulfuric acid, including sodium sulfate, hydrochloric acid, nitric acid, chlorine, and subsequently, fertilizers, and dyes. Kuhlmann pioneered the use of hydrochloric acid in his company to attack bones and develop superphosphate fertilizers, which were marketed to the regional beet producers. The Lille region produced sugar beets, and the outlet of these fertilizers was quickly found. Twenty years later, in addition to the plant in Loos, those of La Madeleine-les-Lille, Amiens, and Saint-André were created. Business experiments on the production of saltpeter led him to give a theory on nitrification. He showed that ammonia produced by the decomposition of organic bodies formed nitric acid; then, pushing his studies further in this direction, he examined the most favorable

conditions for the absorption of nitrogen by plants and could illuminate one of the most important issues of agronomy. In another view, the nitrification of the walls led to mortar consolidation conditions and silicification of limestone for construction. The art of construction derived great benefit from his work. These studies also inspired notably ingenious insights into the formation of mineral and rock species, their disintegration, and crystal production. Geologists could draw from his many good ideas. Sixty notes and memoirs that he published quickly attracted the attention of the scientific world. Regarding the regional economic heritage and chemical industry, he played an important role in the development of activity domains such as canals and railway lines, canal improvement, realization of structures, among other domains. Kuhlmann and his son were among the founders of “Settlement Kuhlmann”, one of the major French industrial chemical groups in the 19th and 20th centuries, which later merged to form the industrial group “Pechiney–Ugine–Kuhlmann”. The mission of its enterprises was defined in its bylaws, “foster and advance the industry and the research for industry.” Kuhlmann was a great visionary who planned the creation of the rail tunnel that linked the southeastern United Kingdom and northern France, the Channel Tunnel, before President Francois Mitterrand (1916–1996), who designed the project, was born.

4. *Beati possidentes...*

The scientific work of Kuhlmann included 50 patents and 70 papers and memoirs. These included 22 reports to the *Academy of Sciences*, 22 papers, and some public speeches at the Lille Science Society, and nine publications to *Annales de chimie physique*. These publications were spread out between 1823 and 1874, with an incredible diversity in subject matter, ranging from the simple method of laboratory analysis to the statement of a theory, complete fertilizer studies, studies on construction materials, inlays in boilers, industrial hygiene in factories, vacuum applications, chemical science, technology, and agriculture, to name a few. He received respect as a scientific researcher, teacher, and academic.

During his life, he held many honorary positions that enabled him to acquire scientific and industrial prominence. He was a corresponding member of the Academy of Sciences in 1847 and the director of currency in Lille in 1853. He obtained the Legion of Honor at 36, and he was promoted to the rank of officer at 51 and of commander at 64. He was President of the Society of Science, Agriculture and Arts in Lille and a member of the Supervisory Board of the School of Industrial Arts and Mining. He contributed to the founding of the Industrial Society of northern France and supported the creation of the “Institut industriel du Nord”, now the “École centrale de Lille”. As the owner and founder of Kuhlmann institutions, he continued his industrial journey and became president of the Chamber of Commerce of Lille. Kuhlmann has been the president of the Lille Chamber of Commerce for 24 years and the general counselor of the Northern Department, representing the canton of Lille Northeast. He was the largest shareholder of the Lille discount counter in 1848 and of the “Crédit du

Nord” bank in 1866. At the end of his life, he was appointed president of the French Association for the Advancement of Science.

In 1883, on 27 January, he passed away in Lille. What city could feed the talent of Kuhlmann better than Lille, where his genius as an industrial entrepreneur, researcher, and professor was appreciated by a society that loved *innovative work in industry and science*? In Lille, he wrote one of the most beautiful and prosperous industrial, academic, and scientific works that France had ever experienced. To Kuhlmann, what dominates life in its work is the intimate alliance of science and industry to the benefit of one and the other.

References

- [1] J.G. Smith, *Platin. Met. Rev.* 32 (1988) 84.
- [2] A. Thépot, *Revue du Nord*. 67 (1985) 527.
- [3] J.-E. Léger, *Une grande entreprise dans la chimie française : Kuhlmann*, Editions Debresse, Paris, 1988.
- [4] Contributions à l'histoire de la faculté des sciences de Lille de 1854 à 1970, Histoire de la faculté des sciences de Lille et de l'université Lille-1, Tome 1, Sciences et Technologies, Association de solidarité des Anciens, université Lille-1, 1997.
- [5] M. Lenglen, Frédéric Kuhlmann, agronome, *L'Industrie chimique*, Paris, 1942.
- [6] F.W.J. McCosh, Boussingault: chemist and agriculturist, Reidel, 1984, p. 133.
- [7] D. McDonald, L.B. Hunt, *A history of platinum and its allied metals*, Johnson Matthey, London, 1982, p. 394.
- [8] J.G. Smith, *The origins and early development of the heavy chemical industry in France*, Clarendon Press, Oxford, UK, 1979, p. 63.
- [9] J.B.A. Dumas, C. r. hebdomadaire des séances Acad. Sci. Paris 92 (1881) 347.
- [10] A.L. Lavoisier, *Œuvres*, vol. 5, Imprimerie nationale, Paris, 1892, p. 468.
- [11] A.C. Longchamp, *Ann. Chim. Phys.* 33 (1826) 5.
- [12] Y. Lamy, Frédéric Kuhlmann 1803–1881, Alpha Copy, Lyon.
- [13] A house history, in: Cent ans d'industrie chimique : les Établissements Kuhlmann, 1825–1925, Établissements Kuhlmann, Paris, 1926. In 1966 the firm has merged with Ugine to become Ugine-Kuhlmann S.A.
- [14] M. Béaud, et al., *Une multinationale française*, Le Seuil, 1975.

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May

MAY	MEMBERS OF THE FRENCH ACADEMY OF SCIENCES
1	Le Prestre de Vauban, Sébastien (1 May 1633–30 March 1707), French engineer. Allemand, Zacharie Jacques Théodore (1 May 1762–2 March 1826), sea of French Empire. Girou de Buzareingues, Louis François Charles (1 May 1773–25 July 1856), French agronomist. Hubert, Jean-Baptiste (1 May 1781–22 September 1845), French engineer. Williamson, Alexander William (1 May 1824–6 May 1904), English chemist. Chardonnet, Louis Marie Hilaire Bernigaud de (1 May 1839–11 March 1924), French engineer and scientist. Ramón y Cajal, Santiago (1 May 1852–17 October 1934), Spanish neuroscientist and Nobel laureate (1906). Tilho, Jean Auguste Marie (1 May 1875–8 April 1956), French explorer of Africa. Teilhard de Chardin, Pierre Marie Joseph (1 May 1881–10 April 1955), French philosopher. Fortet, Robert Marie (1 May 1912–4 July 1998), French scientist. Lax, Peter (1 May 1926), Hungarian-American mathematician.
2	Ménard de La Groye, François Jean-Baptiste (2 May 1775–30 September 1827), French geologist. Magnus, Heinrich Gustav (2 May 1802–4 April 1870), German scientist. Vago, Constantin (2 May 1921–6 February 2012), French biologist of Hungarian origin. Lions, Jacques-Louis (2 May 1928–17 May 2001), French mathematician. Benabid, Alim-Louis (2 May 1942), French neurosurgeon.
3	Welter, Jean-Joseph (3 May 1763–6 July 1852), French chemist. Lamouroux, Jean Vincent Félix (3 May 1779–26 March 1825), French biologist. Metchnikoff, Élie (3 May 1845–15 July 1916), Russian zoologist. Volterra, Vito (3 May 1860–11 October 1940), Italian physicist and mathematician. Hackspill, Louis Jean Henri (3 May 1880–8 October 1963), French scientist. Orcel, Jean François (3 May 1896–27 March 1978), French medical doctor. Kastler, Alfred Henri Frédéric (3 May 1902–7 January 1984), French physicist and Nobel Prize (1966). Gallais, Fernand (3 May 1908–18 February 2002), French chemist. Lions, Jacques-Louis (3 May 1928–17 May 2001), French mathematician.
4	Gollet, Jean-Alexis de (4 May 1664–5 January 1741), French scientist. Chéseaux, Jean-Philippe de Loys de (4 May 1718–30 November 1751), Swiss astronomer. Borda, Jean Charles de (4 May 1733–19 February 1799), French mathematician and physicist. Pelletan, Philippe-Jean (4 May 1747–26 September 1829), French surgeon. Thenard, Louis Jacques (4 May 1777–21 June 1857), French chemist. Despretz, César Mansuète (4 May 1791–15 March 1863), French chemist, physicist, and biologist. Huxley, Thomas Henry (4 May 1825–29 June 1895), English biologist. Michel, Louis Gabriel (4 May 1923–30 December 1999), French physicist. Tarkowski, Andrzej Krzysztof (4 May 1933), Polish embryologist.
5	Richthofen, Ferdinand Paul Wilhelm von (5 May 1833–6 October 1905), German scientist and geographer. Fuchs, Immanuel Lazarus (5 May 1833–26 April 1902), German mathematician.

Dauvillier, Alexandre Henri Georges (5 May 1892–23 September 1979), French scientist.
Thé, Guy Claudin de (5 May 1930–7 August 2014), French biologist.

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- 6** **Home, Everard** (6 May 1756–31 August 1832), British surgeon.
Hachette, Jean Nicolas Pierre (6 May 1769–16 January 1834), French mathematician.
Zambaco, Démétrius Alexandre (6 May 1832–27 November 1913), French medical doctor.
Grignard, François Auguste Victor (6 May 1871–12 December 1935), French chemist and Nobel laureate (1912).
Bowie, William (6 May 1872–28 August 1940), American engineer.
Sitter, Willem de (6 May 1872–20 November 1934), Dutch mathematician.
Weil, André (6 May 1906–6 August 1998), French-American mathematician.
Chatelain, Pierre Henri (6 May 1907–5 September 1982), French scientist.
Aubin, Thierry Émilien Flavien (6 May 1942–21 March 2009), French mathematician.
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- 7** **Van Swieten, Gerard** (7 May 1700–18 June 1772), Dutch-Austrian physician.
Clairaut, Alexis-Claude (7 May 1713–17 May 1765), French mathematician and intellectual.
Sage, Baltazar Georges (7 May 1740–9 September 1824), French chemist
Beaufort, Francis (7 May 1774–13 December 1857), Irish hydrographer.
Moquin-Tandon, Christian Horace Bénédicte Alfred (7 May 1804–15 April 1863), French botanist.
Dainty, Jack (7 May 1919–29 May 2009), British physicist.
Danchin, Antoine (7 May 1944), French biologist.
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- 8** **Trionfetti, Giovanni-Battista** (8 May 1656–1708), Italian botanist.
Gayon, Leonard Ulysse (8 May 1845–11 April 1929), French biochemist.
Guillaud, Charles Louis (8 May 1900–1 January 1982), French engineer.
Lwoff, André Michel (8 May 1902–30 September 1994), French biologist.
Deslongchamps, Pierre (8 May 1938), Canadian chemist.
Sautet, Philippe (8 May 1961), French chemist.
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- 9** **Pecquet, Jean** (9 May 1622–February 1674), French anatomist.
Péluse, Gaspard Monge de (9 May 1746–28 July 1818), French mathematician.
Cassini, Alexandre Henri Gabriel de (9 May 1781–16 April 1832), French botanist.
Davidson, George (9 May 1825–2 December 1911), American engineer of English origin.
Teffé, Antonio Luiz von Hoonholtz, baron de (9 May 1837–7 February 1931), Brazilian geographer.
Perrier, Jean Octave Edmond (9 May 1844–31 July 1921), French anatomist.
Ancona, Umberto d' (9 May 1846–24 August 1964), Italian biologist.
Ephrussi, Boris (9 May 1901–2 May 1979), Russo-French geneticist.
Mayall, Nicholas Ulrich (9 May 1906–5 January 1993), American astronomer.
Eigen, Manfred (9 May 1927), German biophysicist and Nobel laureate (1967).
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- 10** **Séchéelles, Jean Moreau de** (10 May 1690–31 December 1760), French politician.
Boucher, Pierre-Joseph (10 May 1715–22 June 1793), French medical doctor.
Berryat, Charles Jean Jacques (10 May 1718–16 January 1754), French medical doctor.
Dambourney, Louis Alexandre (10 May 1722–2 June 1795), French botanist.
Monge, Gaspard de Péluse (10 May 1746–28 July 1818), French mathematician.
Lullin de Chateauxvieux, Jacob Frédéric (10 May 1772–24 September 1841), Swiss agronomist.
Fresnel, Augustin Jean (10 May 1788–14 July 1827), French physicist.
Braun, Alexander (10 May 1805–29 March 1877), German botanist.
Boissier, Pierre Edmond (10 May 1810–25 September 1885), Swiss botanist
Raoult, François Marie (10 May 1830–1 April 1901), French chemist.
Stodola, Aurel (10 May 1859–25 December 1942), Slovak engineer.
Ravaz, Étienne Louis (10 May 1863–8 May 1937), French botanist.
Teodoresco, Emmanuel Constantin (10 May 1866–25 April 1949), Romanian botanist.
Pecker, Jean-Claude (10 May 1923), French astronomer.
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- 11** **Fagon, Guy-Crescent** (11 May 1638–11 March 1718), French medical doctor and botanist.
Camper, Petrus (11 May 1722–7 April 1789), Dutch biologist.
Callisen, Heinrich (11 May 1740–5 February 1824),
Blumenbach, Johann Friedrich (11 May 1752–22 January 1840), German biologist.
Coste, Jacques Marie Cyprien Victor (11 May 1807–19 September 1873), French naturalist.
Potier, Alfred (11 May 1840–8 May 1905), French engineer and physicist.
Filhol, Antoine Pierre Henri (11 May 1843–28 April 1902), French zoologist.
Schlesinger, Frank (11 May 1871–10 July 1943), American astronomer.
Kármán, Theodore von (11 May 1881–7 May 1963), Hungarian-American mathematician.
Roubault, Marcel Edouard (11 May 1905–17 April 1974), French geologist.
Seibold, Eugen (11 May 1918–23 October 2013), German biologist.
-
- 12** **Isnard, Antoine-Tristan Danty d'** (12 May 1663–15 May 1743), French botanist.
Gambart, Jean Félix Adolphe (12 May 1800–23 July 1836), French astronomer.
Liebig, Justus von (12 May 1803–18 April 1873), German scientist.
Hind, John Russel (12 May 1823–23 December 1895), English astronomer.
Sparre, Magnus Louis Marie de (12 May 1849–27 February 1933), French mathematician.
Sauvageau, Camille-François (12 May 1861–5 August 1936), French botanist.
Corsin, Pierre-Marie (12 May 1904–25 April 1983), French botanist.
Lavollay, Jean Albert Henri (12 May 1907–19 August 1998), French chemist.
Bensoussan, Alain (12 May 1940), French mathematician.

Labeyrie, Antoine (12 May 1943), French astronomer.
Dehaene, Stanislas (12 May 1965), French psychologist.

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- 13** **Linné, Carl von** (13 May 1707–10 January 1778), Swedish scientist.
Clairaut, Alexis Claude (13 May 1713–17 May 1765), French mathematician.
Dangos, Jean-Auguste (13 May 1744–23 September 1833), French physicist and astronomer.
Carnot, Lazare Nicolas Marguerite (13 May 1753–12 August 1823), French scientist.
Delage, Marie Yves (13 May 1854–7 October 1920), French zoologist.
Ikeno, Seitiro (13 May 1866–4 October 1943), Japanese botanist.
Poirier, Jean-Paul (13 May 1935), French physicist.
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- 14** **Bernard, Jean-Baptiste** (14 May 1702–2 August 1781), French medical doctor.
Thaer, Albrecht Daniel (14 May 1752–26 October 1828), German agronomist.
Plantamour, Émile (14 May 1815–7 September 1882), Swiss astronomer.
Tchebychev, Pafnoutiy Lvovitch (14 May 1821–26 November 1894), Russian mathematician.
Lipschitz, Rudolph Otto Sigismund (14 May 1832–7 October 1903), German mathematician.
Duclaux, Jacques Eugène (14 May 1887–13 July 1978), French physicist and biologist.
Kampé de Férié, Marie Joseph (14 May 1893–6 April 1982), French scientist.
Auger, Pierre Victor (14 May 1899–24 December 1993), French physicist.
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- 15** **Vauban, Sébastien Le Prestre de** (15 May 1633–30 March 1707), French engineer.
Hell, Maximilian (15 May 1720–14 April 1792), Hungarian astronomer.
Buniva, Michele Francesco (15 May 1761–26 October 1834), Italian medical doctor and naturalist.
Fournet, Joseph-Jean Baptiste Xavier (15 May 1801–8 January 1869), French geologist and metallurgist.
Lacaze-Duthiers, Félix Joseph Henri de (15 May 1821–21 July 1901), French biologist and zoologist.
 Lankester, Edwin Ray (15 May 1847–15 August 1929), British zoologist.
Curie, Pierre (15 May 1859–19 April 1906), French physicist and Nobel laureate (1903).
Bigot, Alexandre Pierre Désiré (15 May 1863–20 April 1953), French geologist.
Poivilliers, Georges Jean (15 May 1892–9 March 1968), French geographer.
Oudin, Jacques Henri Léon Marie Joseph (15 May 1908–15 October 1985), French medical doctor.
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- 16** **Flaugergues, Pierre Gilles Antoine Honoré Joseph** (16 May 1755–26 November 1830), French scientist.
Vauquelin, Nicolas-Louis (16 May 1763–14 November 1829), French chemist.
David, Roger (16 May 1911–10 January 2012), French physiologist
Denisse, Jean-François (16 May 1915–17 November 2014), French astronomer.
Katchalski-Katzir, Ephraïm (16 May 1916–30 May 2009), Israeli scientist.
Pound, Robert (16 May 1919–12 April 2010), American physicist.
Roux, Didier (16 May 1955), French chemist.
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- 17** **Jenner, Edward** (17 May 1749–26 January 1823), English medical doctor and scientist.
Pissis, Pierre Joseph Aimé (17 May 1812–20 January 1889), French geologist and geographer.
Bouley, Henry Marie (17 May 1814–30 November 1885), French veterinary.
Lockyer, Joseph Norman (17 May 1836–16 August 1920), English scientist.
Bertrand, Gabriel Émile (17 May 1867–20 June 1962), French chemist.
Assenmacher, Ivan (17 May 1927–21 April 2010), French physiologist.
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- 18** **Bernoulli, Jean II** (18 May 1710–17 July 1790), Swiss mathematician.
Boscovich, Roger Joseph (18 May 1711–13 February 1787), Ragusan astronomer and scientist.
Burdin, Claude (18 May 1788–11 November 1873), French engineer.
Velpeau, Alfred Armand Louis Marie (18 May 1795–24 August 1867), French surgeon.
Hofmeister, Friedrich Wilhelm (18 May 1824–12 January 1877), German botanist and biologist.
Went, Frits Warmolt (18 May 1903–1 May 1990), Dutch biologist.
Felici, Noël (18 May 1916–25 August 2010), French physicist.
Durand-Delga, Michel (18 May 1923–19 August 2012), French geologist.
Kovalevsky, Jean (18 May 1929), French astronomer.
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- 19** **Scarpa, Antonio** (19 May 1752–31 October 1832), Italian anatomist.
Pagnoul, Cécilien Aimé Joseph (19 May 1822–28 September 1912), French chemist.
Bonaparte, Roland (19 May 1858–14 April 1924), French botanist.
Daly, Reginald Aldworth (19 May 1871–19 September 1957), Canadian geologist.
Pérez, Charles (19 May 1873–22 September 1952), French zoologist.
Houdremont, Édouard Hyacinthe Henri (19 May 1896–10 June 1958), German metallurgist.
Perutz, Max (19 May 1914–6 February 2002), Austrian-British molecular biologist and Nobel laureate (1962).
Kalman, Rudolf Emil (19 May 1930), Hungarian-American mathematician.
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- 20** **Ageymi, Jean** (20 May 1724–1785), Syrian-Austrian scientist.
Milly, Nicolas-Christian de Thy de (20 May 1728–19 September 1784), French intellectual.
Zirke, Ferdinand (20 May 1838–11 June 1912), German geologist and petrographer.
Cabrera, Blas Juan José Secundino (20 May 1878–1 August 1945), Spanish physicist.
Mondor, Henri Jean Justin (20 May 1885–6 April 1962), French medical doctor and surgeon.
Zeilinger, Anton (20 May 1945), Austrian physicist.
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- 21** **Molières, Joseph Privat de** (21 May 1676–12 May 1742), French physicist.
Des Landes, Pierre de Launay (21 May 1722–16 January 1804), French mathematician.
Coriolis, Gustave Gaspard (21 May 1792–19 September 1843), French mathematician.
Riggenbach, Nicolas (21 May 1817–25 July 1899), Swiss engineer.
Phillips, Édouard (21 May 1821–14 December 1889), French scientist.
Goursat, Édouard Jean-Baptiste (21 May 1858–25 November 1936), French mathematician.
Pallmann, Hans Adolf (21 May 1903–13 October 1965), Swiss agronomist.

- Sakharov, Andreï Dimitrievitch** (21 May 1921–14 December 1989), Russian nuclear physicist and Nobel laureate for Peace (1975).
Borel, Armand (21 May 1923–11 August 2003), Swiss mathematician.
Leblond, Jean-Baptiste (21 May 1957), French scientist.
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- 22** **Gonnessiat, François** (22 May 1856–17 October 1934), French astronomer.
Portier, Paul Jules (22 May 1866–26 January 1962), French biologist.
Kuhlmann, Charles Frédéric (22 May 1903–27 January 1881), French chemist.
Jaupart, Claude (22 May 1953), French geophysicist.
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- 23** **Hunter, William** (23 May 1718–30 March 1783), Scottish physicist.
Desgenettes, René Nicolas Dufriche (23 May 1762–3 February 1837), French medical doctor.
Thuret, Gustave-Adolphe (23 May 1817–11 May 1875), French botanist.
Fournier, François Ernest (23 May 1842–6 November 1934), French diplomat.
Jolibois, Médard Pierre (23 May 1884–18 February 1954), French chemist.
Brien, Paul Louis Philippe (24 May 1894–19 February 1975), Belgian biologist.
Prager, William (23 May 1903–16 March 1980), German mathematician.
Truhaut, René Charles (23 May 1909–10 May 1994), French toxicologist.
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- 24** **Tronchin, Théodore** (24 May 1709–30 November 1781), Swiss medical doctor.
Bonaparte, Charles Lucien Jules Laurent (24 May 1803–29 July 1857), French biologist.
Nordmann, Alexander de (24 May 1803–25 June 1866), Finnish biologist.
Rouch, Jules Alfred Pierre (24 May 1884–10 March 1973), French naval officer.
Millot, Georges Emile Félix Germain (24 May 1917–9 September 1991), French geologist.
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- 25** **Borda, Jacques François de** (25 May 1718–4 January 1804), French magistrate.
Gosse, Henri Albert (25 May 1753–1 February 1816), Swiss pharmacist.
Brandt, Johann Friedrich (25 May 1802–3 July 189), German naturalist.
Longet, François Achille (25 May 1811–20 April 1871), French anatomist.
Clos, Dominique (25 May 1821–19 August 1908), French medical doctor and botanist.
Liapounoff, Alexandre (25 May 1857–21 October 1918), Russian physicist and mathematician.
Zeeman, Pieter (25 May 1865–9 October 1943), Dutch physicist and Nobel laureate (1902).
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- 26** **Moivre, Abraham de** (26 May 1667–27 November 1754), French mathematician.
Vaillant, Sébastien (26 May 1669–20 May 1722), French botanist.
Baux, Pierre (26 May 1708–28 October 1790), French medical doctor
Tisserand, Louis Eugène (26 May 1830–31 October 1925), French agronomist.
Schloesing, Alphonse Théophile (26 May 1856–9 July 1930), French chemist.
Bastien, Paul Gaston (26 May 1907–26 April 1982), French engineer.
Bernard, Jean (26 May 1907–17 April 2006), French medical doctor.
-
- 27** **Valz, Jean Élie Benjamin** (27 May 1787–22 February 1867), French astronomer.
Donders, Frans Cornelius (27 May 1818–24 March 1889), Dutch ophthalmologist.
Portmann, Adolf (27 May 1897–28 June 1982), Swiss zoologist.
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- 28** **Bouchu, Étienne Jean** (28 May 1714–16 September 1773), French steelmaker.
Gillet de Laumont, François Pierre Nicolas (28 May 1747–1 June 1834), French mineralogist.
Agassiz, Jean Louis Rodolph (28 May 1807–14 December 1873), Swiss biologist.
Paulian, Renaud (28 May 1913–16 August 2003), French naturalist.
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- 29** **Pitot, Henri** (29 May 1695–27 December 1771), French engineer.
Daubenton, Louis Jean-Marie (29 May 1716–1 January 1800), French botanist.
Braconnot, Henry (29 May 1780–13 January 1855), French chemist.
Bussy, Antoine Alexandre Brutus (29 May 1794–1 February 1882), French chemist.
Anatole Bouquet de La Grye, Jean Jacques (29 May 1827–22 December 1909), French engineer.
Gylden, Johan August Hugo (29 May 1841–9 November 1896), Finland-Swedish astronomer.
Bruce, David (29 May 1855–27 November 1931), British biologist.
Maire, René Charles Joseph Ernest (29 May 1878–24 November 1949), French botanist.
Yoccoz, Jean-Christophe (29 May 1957), French mathematician and Fields medal winner (1994).
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- 30** **Bonfa, Jean** (30 May 1638–5 December 1724), French scientist.
Pierre I, Le Grand (30 May 1672–28 January 1725), Tsardom of Russia.
Schaeffer, Jacob Christian (30 May 1718–5 January 1790), German botanist.
Naumann, Karl Friedrich (30 May 1797–26 November 1873), German mineralogist.
Jamin, Jules Célestin (30 May 1818–12 February 1886), French physicist.
Watts, Philip (30 May 1846–15 March 1926), British architect.
Mousseron, Max Jean (30 May 1902–1 March 1988), French chemist.
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- 31** **Caligny, Anatole François Hué de** (31 May 1811–24 March 1892), French scientist.
Durocher, Joseph Marie Élisabeth (31 May 1817–3 December 1860), French geologist.
Jamin, Jules Célestin (31 May 1818–12 February 1886), French physicist.
Mosso, Angelo (31 May 1846–24 November 1910), Italian medical doctor.
Contensou, Pierre Louis (31 May 1914–15 September 1987), French engineer.
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