

Interdisciplinary Chemistry

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Chemistry started when the ancient Egyptians used chemicals such as natron, oils, waxes, and perfumes to mummify the dead, and clays, granite, and limestone to build houses and monuments, and gold to make ornaments. Then appeared the alchemists who wanted to transmute base metals like copper and lead into gold. They did not achieve their aim but created a wealth of information on materials and methods.

In the Middle Ages, the iatrochemists used chemicals in treating the sick which led to chemistry being a part of the medical faculties in universities for a long time when universities were founded. Georgius Agricola (1494-1555) who wrote many metallurgy and mining books was a medical doctor who studied medicine at University of Bologna in Italy. It was at that time that assaying for gold became important to determine the content of the precious metal in its ores. This is marked by the publication of the book on assaying by Lasarus Erker (1530-1593) which is considered as the beginning of analytical chemistry.



Georgius Agricola
(1494-1555)



Christlieb Ehregott Gellert
(1713-1795)

When Schools of Mines were founded in the 18th century, chemistry became part of metallurgy. Christlieb Ehregott Gellert (1713-1795) was the first Professor of Metallurgical Chemistry at Freiberg Mining School when it was founded in Saxony in 1765. His successor Wilhelm Lampadius (1772-1842) separated this course into two: Metallurgy and Chemistry.

Around the middle and the second half of the 18th century many important chemical discoveries and phenomena were being uncovered. The death blow came to the phlogiston theory by Antoine Lavoisier (1743-1794) who was at the Arsenal in Paris at that time about 1785 and the development of systematic chemistry was starting.



Wilhelm Lampadius
(1772-1842)



Johann Wolfgang Goethe (1749-1832)

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Received: August 09, 2016; **Accepted:** August 22, 2016; **Published:** August 25, 2016

Changes were being made in the universities of Europe to cope with this advance in chemistry. Recognizing this, Carl August, Duke of Saxony-Weimar, with the collaboration of his Privy Councillor Johann Wolfgang Goethe (1749-1832), established a professorship in chemistry at the University of Jena in 1789. The first man to hold this chair was Johann F. Gottling (1753-1809).

Now chemistry is a diversified subject that extends over many disciplines: organic, inorganic, physical, analytical, etc. The *Interdisciplinary Journal of Chemistry* contributes to this noble effort.

Suggested readings

1. Cluskey J E (1951) Goethe and Chemistry. *J. Chem. Educ* 28: 536.
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3. Habashi F (1998) Gellert's Metallurgic Chymistry, Métallurgie Extractive Québec
4. Habashi F (2003) Schools of Mines. The Beginnings of Mining and Metallurgical Education.
5. Habashi F (1994) Georgius Agricola and His Time. *Bull. Can. Inst. Min. & Met* 87: 82-88