

A letter from the village of Lavoisier in Algeria



Hey,
the town name Lavoisier, does it have something to do with **Antoine Lavoisier**?

For those who don't know Antoine Lavoisier, he was a French chemist and had a number of other professions. Born in 1743 and died in 1794; thus lived through the very turbulent times of the French Revolution (1789-1799); and fell victim to it, but more on that later. Lavoisier is considered the father of modern chemistry. He has become famous for a number of achievements:

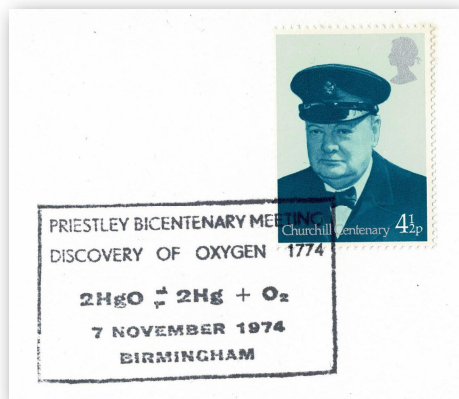


1. he helped introduce the metric system:

Napoleon introduced it in Europe: first in France in 1799; reintroduced in the Netherlands in 1816. In Japan, the meter was adopted in 1921.



2. He recognized the role of oxygen (O₂) in combustion:



Air is composed of oxygen, among other constituents. Pure oxygen can be formed during the decomposition of mercury oxide (HgO). Conversely, oxygen reacts with mercury to form the oxide; a type of combustion. (This is not for a home experiment, the mercury components are all toxic. So: don't try this at home!).

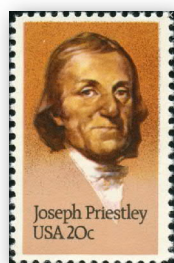
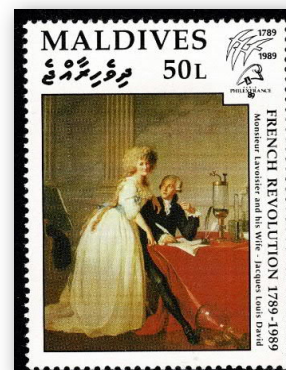
3. Lavoisier discovered the following law: metals react with oxygen to form their oxides. Lavoisier was able to formulate the "Law of Conservation of

Mass" (also called Lavoisier's Law) based on these reactions and his usual very accurate measurements.

In chemical reactions, the mass remains constant in a closed system. In other words: In a closed system, the total mass of the reactants in a chemical reaction is equal to the total mass of the reaction products.

Note: Lavoisier's law does not apply to nuclear reactions (key words: Einstein and $E = mc^2$)!

Lavoisier investigated this further and also found that living organisms also perform a kind of combustion: they take in oxygen and give off carbonic acid (= carbon dioxide). Very bluntly: breathing is thus combustion, our lungs a combustion engine.

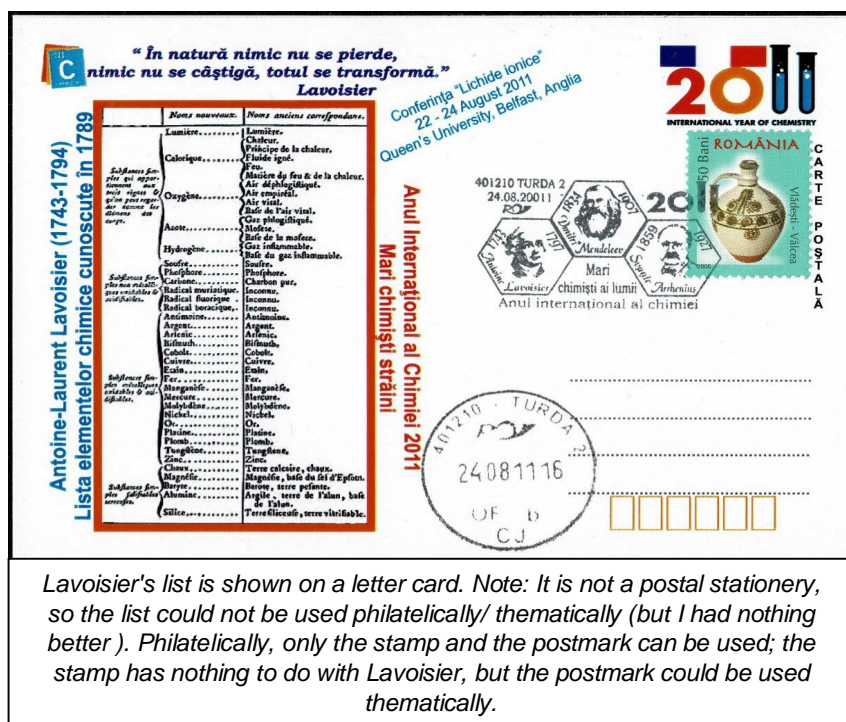


Lavoisier corresponded intensively with many scholars in Europe and sometimes they even conducted experiments together. His wife Marie-Anne Pierrette Paulze, helped him a lot in all his work. She could read many languages, including English; she translated the texts for him. Lavoisier consulted extensively with Priestley, an Englishman, and also conducted experiments with him.

Joseph Priestley
USA 20c

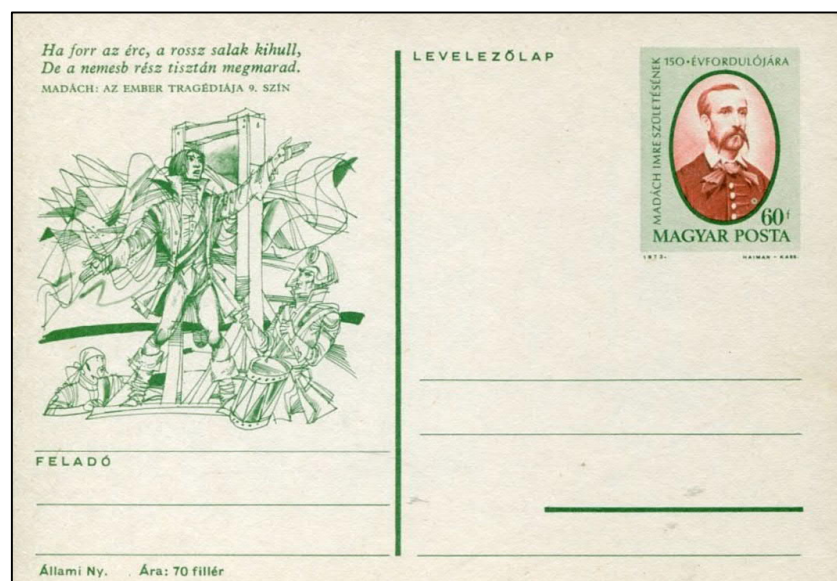
Until that time, "chemistry" did not exist in the modern sense; there was "alchemy". Besides all kinds of elements (pure substances) like iron, gold or sulfur, alchemy also knew compound substances (according to today's knowledge these are mixtures), like baryte, alum or air.

Lavoisier was the first to try to introduce a little more systematics, by a clearer distinction between pure substances and mixtures. Pure substances could not be further subdivided, separated or split. He started to make a list of these substances and hoped to find a regularity in it. But many foreign



substances are mentioned in his list, making it difficult to find a connection. But he had started the discussion. Some 70 years later it would lead to the periodic table of elements by D. Mendeliev.

The demise of Lavoisier



In 1973, a Hungarian postal stationery is published for the poet Imre Madách (1823-1864). His magnum opus was the poem Az ember tragédiája (Tragedy of Man). A series of 15 letter cards was printed with scenes from his poem. Pictured here is a scene from the ninth act with a guillotine! Philatelic representations of a guillotine are rare...

As mentioned earlier, Lavoisier also held other offices. He was a tax collector (ferme générale) under King Louis XIV. These people were thought to be exploiters during the French Revolution. Lavoisier had to collect tobacco taxes from 1782. It was advantageous for tobacco merchants and smugglers to mix tobacco with ash and also to moisten it with water. Lavoisier had developed means to prove this, for example by adding acids. But in the meantime, he had also noticed that tobacco moistened with a certain amount of water yielded significantly better - tastier - tobacco. All his supplies were treated with moisture (addition of 6.3 percent water by volume) and thus improved.

This became one of the charges against him when it came to the trial of

him during the French Revolution, at the end of which he was sentenced to death by guillotine. This, however, is another story.

Explanation to the letter from the town Lavoisier:

But now back to the letter listed at the beginning. The use of village names in thematic philately is not easy and bound by rules. The village of Lavoisier was founded in 1895 west of the city of Setif in the Algerian province of the same name. The village name explicitly refers to the chemist Antoine Lavoisier! There is postal activity in Lavoisier from 1905. The letter was sent by registered mail to Vichy, France, on September 24, 1962. Arrival postmark on the back is September 27, 1962, with a provisional inscription label with Lavoisier pasted on the front. Algeria gained independence from France on July 5, 1962. It is



noteworthy that French stamps were still in use. The French stamps were overprinted with "EA" (État Algérien) and sometimes had bars over "Republique Française". But this did not happen here: there are only thin bars through "Republique Française" and with "EA" written by hand - so a provisional issue (see picture, adapted by Jacques Spijkerman).