

Alchemy symbols in Faraday 143

[Petr Vanýsek, 13-Sep-03]

The visitor to the lecture room 143 in the Faraday Hall will notice the large square boards with symbols on them. To some, these may look just like artful decorations, but in fact, they are alchemy symbols. This room is used for instruction of many chemistry classes so this choice is fitting.

However, none of the courses offered teaches the history of alchemy and the instructors themselves probably do not know the symbols, as in modern science they are not used anymore.

On occasion I had a student who approached me and asked about the meaning of the symbols for which I did not have the knowledge to answer. Finally, in the fall 2003 I did some research and finally found the meaning of the ten displayed symbols. What still needs to be researched is how these symbols were selected and chosen as decorations, as this apparently happened many years ago. Clearly, whoever was involved in the original design would know the meaning of the symbols. But this part of search still needs to be done.

The Alchemy symbols were used in the 17th and into the 18th century with some symbols still surviving into the 19th, 20th and even 21st century modern era.

One symbol, a circle with a dot in the middle (\odot), is used in astronomy for the Sun. In chemistry it is still used in laboratory books as a hand written symbol for solution. The reason why we do not see it more often is simply the fact that we type more and more often our notes and it is faster to type soln., that to insert the symbol \odot .

The alchemy symbols were used for basic matter important to alchemist. Some exist for elements, but remember that at the time the symbols were used the modern day concept of elements did not exist. Some symbols existed for materials prepared by the activity of people, such as, most notably for its importance to alchemy, glass. Some symbols, although not shown in this example, were used to describe a process, such as dissolution or distillation. Some of the symbols were used in alchemy to mean a material and in astronomy for a celestial object. For example, the symbol for tin stood also for the planet Jupiter and less glamorously, the symbol for the metal mercury stood also for the planet Mercury.

Symbols were somewhat unified, but there definitely existed variations in the shape and sometimes two different symbols had the same meaning. This is illustrated by the two different symbols for lead.

The authors of the displayed woodcut symbols took also some liberty with the design. For example the symbol for sulfur appears to have a simple cross,

lines meeting at ninety degrees under the triangle, rather than the sloping



chevron lines.

And for mercury the upper two lines in the classroom rendition do not repeat in literature. Instead a smooth arc, almost a semicircle, is used:

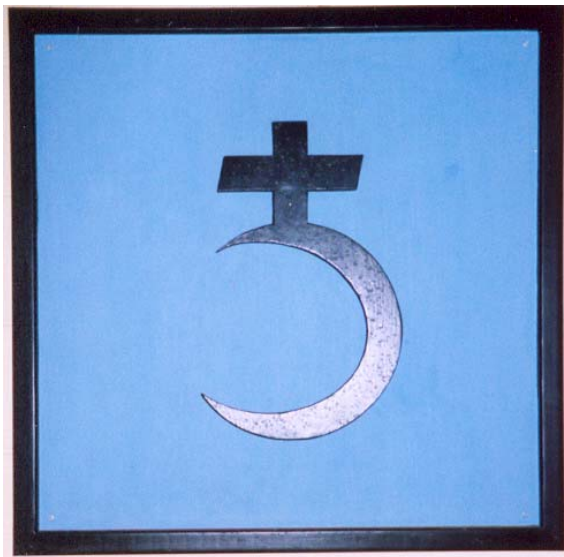


The background colors, used in Faraday 143 seem to have no significance; they are probably chosen, symmetrically on opposite sides, for decorative purposes.

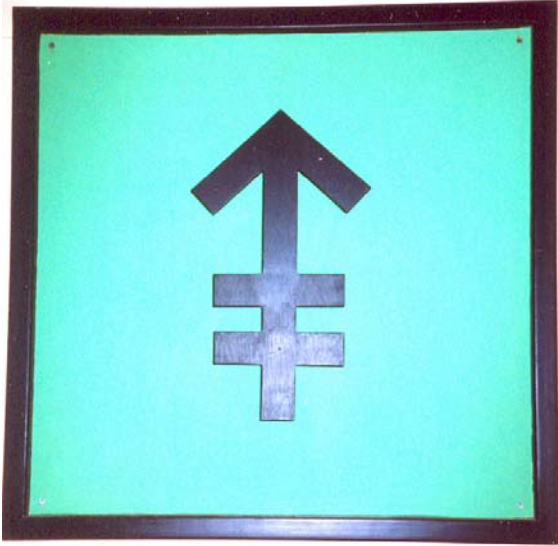
The following are larger pictures of the symbols, listed in the order in which they are placed on the wall. The left column shows the symbols on the south (left, from the instructor vantage point) wall, starting on the top and going down, to the front of the classroom. The right column shows the symbols on the north wall, starting from the top.



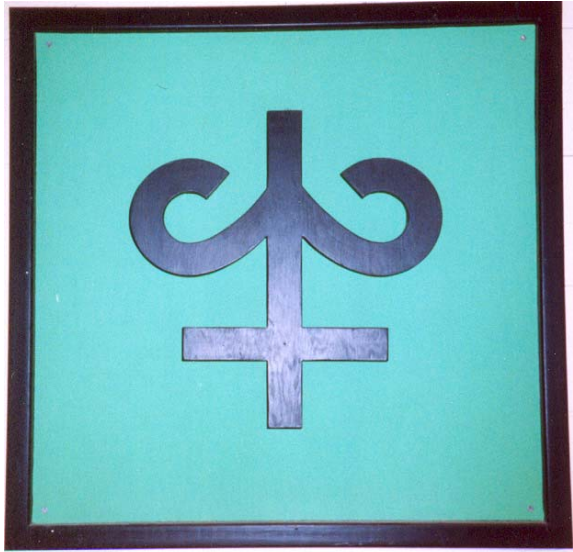
Lead, version 1



Lead, version 2



Iron



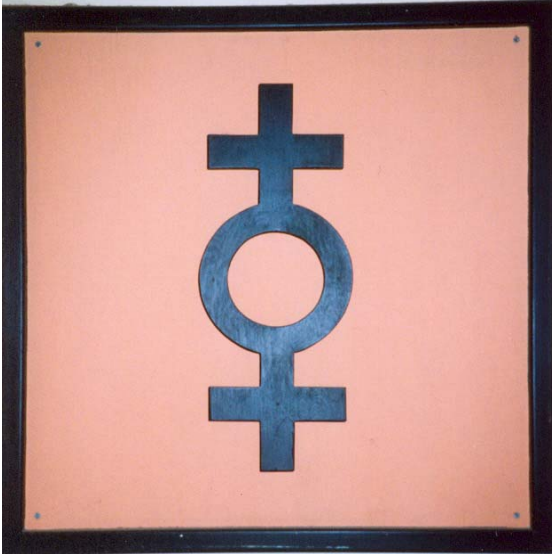
Arsenic



Glass



Tin



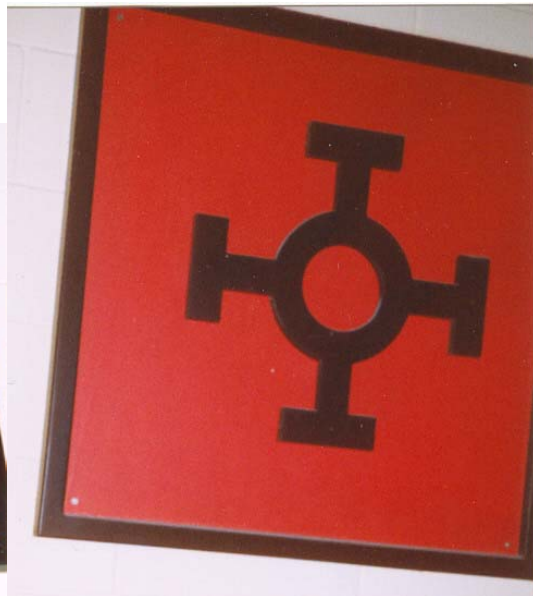
Hematite



Mercury



Sulfur



Wax or Olive oil