

# THE ALCHEMIST'S LABORATORY

*Dennis Hauck, FRC, PhD*

The fire burns steadily in the athanor, the cylindrical brick furnace at the center of the alchemist's laboratory. Midway up the athanor, two glowing holes gaze out into the darkened room, while occasional puffs of falling ash drift from a wider opening below. On top sits a huge glass retort, its single opening stopped with clay; and inside the glass, a heavy mass of dark green mud folds about itself in slow, swirling currents.

The writhing blob represents months of hard work pulverizing, roasting, dissolving, and breaking down materials thought to contain a mysterious essence known as the First Matter. It could be found in nature in caves and crevices, locked in certain ores, or even deep within the human body. Some said it had an affinity for discarded or rejected materials, and many medieval alchemists believed it could be obtained from feces and urine.

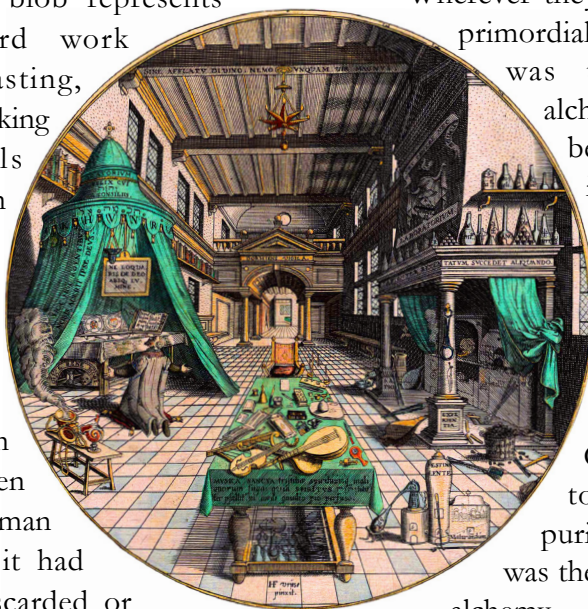
In 1669, German alchemist Hennig Brandt (shown on the following page) announced he had discovered the First Matter after distilling over 1,300 gallons (5,000 liters) of urine. After months of accumulating urine, he boiled it down to a thick syrup, which he distilled into a red oil. After adding the oil back into the blackened material that remained, he heated the mixture intensely for sixteen hours. Suddenly, it began emitting an eerie green light. He poured it into cold water,

where it solidified into a glowing white powder.

Alchemists throughout Europe began experimenting with urine, convinced they had found the First Matter and could use it to make the fabled Philosopher's Stone. However, what Brandt had actually discovered was phosphorus. Named from the Greek word for "light bearing," it fit the alchemists' expectations for the First Matter perfectly.

Wherever they could find it, this primordial, chaotic substance was the goal of all alchemists. It was their belief that, once they isolated enough First Matter, they could purify it and produce the Philosopher's Stone, which could perfect anything. Of course, just how to accumulate and purify the First Matter was the greatest mystery in alchemy.

Back in the laboratory, we turn our attention away from the blazing furnace. Along the wall to the right, we see two shelves stretching the length of the room. The upper shelf holds the carcasses of assorted frogs, birds, snakes, rabbits, and rats, while less identifiable creatures peer out from preservative-filled jars. Hanging from the ceiling is a preserved crocodile and some large dried fish. Alchemists believe the life force is like a subtle stuff that can be separated from living things and used to impart health to others, or even give life to inanimate objects. Many famous alchemists claim to have created





*Alchemist Hennig Brandt in a 1795 painting by Joseph Wright, depicting Brandt's discovery of the chemical element phosphorus.*

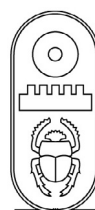
little beings (called *homunculi*) by infusing the life force into flasks of chemical compounds.

On the lower shelf along the same wall are assorted vials, bottles, crocks, and burlap bags holding various powders and liquids – each one marked with a unique name or symbol. Linger too long in this area, and your senses will be overcome by a foul odor similar to a mixture of rotten eggs and vinegar. It comes from the large beaker of Oil of Vitriol, a form of sulfuric acid. Another biting odor emanates from the Salt of Ammonia, which was first made from camel dung in ancient Egypt. By the Middle Ages, alchemists were distilling it from urine or extracting it from hartshorn (ammonium bicarbonate).

Other chemicals on this shelf are the Green Lion (iron sulfate), Liquor of the Soul (a solution of ammonia, lime, and sulfur), Powder of the Sun (sulfur with antimony and mercuric oxide), and white Natron (sodium carbonate). All the chemicals used by alchemists had both material and spiritual properties.

Beneath the two long shelves is a narrow workbench piled with odd-looking utensils, tongs, ladles, pincers, and leather bellows. At the center of the bench, next to a small herb press, a balancing scale seesaws aimlessly, caught in a passing draft of air. Meanwhile, in the dark space underneath the table, an iron cauldron full of decomposing organic matter gurgles suspiciously. This disgusting tub is known as the “digester,” in which materials rot and break down in an operation called putrefaction.

Against the opposite wall, two sturdy bookcases are stuffed with stained papers, manuscripts, and leather-bound books. Between the bookcases, an empty chair sits next to a broad wooden desk. On the cluttered desktop is a large notebook with a quill-pen waiting patiently in its inkwell. The pages are covered in a frenzied hash of words and numbers, bizarre diagrams, eerie creatures, and mythological figures intended to capture the alchemist's inner experiences during his experiments.





*Alchemist's Workshop in the Rosicrucian Alchemy Exhibit in San Jose, California.*

On the back wall, a bewildering array of glass vessels are supported on wooden pegs. Odd-shaped flasks, beakers, cylinders, and retorts of all sizes spread across the entire wall. Alchemists design their vessels for both practical and esoteric uses, and they believe the shape of a vessel affects the concentration of the ethereal substances with which they work.

The womb-shaped retort isolates living essences by heating. The Vase of Hermes (or aludel) is a pear-shaped glass open at both ends used in sublimation. The Pelican is a distilling vessel with two side arms that create a circulatory mixture of vapors. Other names for specific vessels were the Philosopher's Egg, Skull Cap (or Brain Pan), Angel Tube, Spirit Holder, Moon Vessel, Mother of the Stone, Matrix Vase, Cup of Babylon, and the Tomb of the Dead.

In the corner, an array of coiled copper tubing zigzags upward from a large gourd-shaped clay vessel on the floor. Known as a "serpent condenser," the giant air-cooled apparatus is used for distilling the foul-smelling solution poured off from the digester. Distilling purifies even the foulest liquid and concentrates the strength of its essences. The process is used to produce alcoholic spirits, essential oils, herbal extracts, tonics, tinctures, and elixirs.

Isolated in the opposite corner of the room, a large gray curtain hangs from the ceiling. Draped around a small altar, this tent or tabernacle forms a private meditation space called the Oratorium. As much work is done within the Oratorium as is carried out in the laboratory. Alchemists spend many hours in solitary contemplation, attempting to purify and focus their minds. Their motto is *Ora et Labora* ("pray and work").

Hidden somewhere near the Oratorium is the alchemist's incubator. This insulated, copper-clad wooden box – kept warm by the fermenting matter within – is where the alchemist directs his thoughts and visualizations. During fermentation, the First Matter is most open to the influence of the alchemist, who tries to enter a symbiotic relationship with the matter at hand and suffer with it through its transformations. If anyone other than the alchemist touches or even looks at the incubator, all is lost.

At this stage, the work is easily corrupted by impure thoughts. To alchemists, consciousness is a force of nature that can be purified and focused through meditation and then used like a fire to transform things. It is the one essential ingredient you will never find listed in the alchemist's recipes.