

Table of alchemical equipment and operations by Athanasius Kircher

This systematic table of alchemical operations and apparatus is found in Athanasius Kircher, *Mundus Subterraneus...* Amsterdam, 1665. Tomus II., page 260.

Chymia is engaged about :-

Equipment

Place

Furnaces

OPEN

Proving

Bellows

COVERED

Simple

Calcining

Cementing

Reverberating

Dissolving

Ascending

by the dry way

in a flask

in a sand bath

by the wet way

in a water bath

Descending

Compound

Athanor

With auxiliary furnaces

Vessels

HEATED

made from special materials

Glass

Phials

Circulating vessels

Pelicans

Double pelicans

Philosophers Egg

Mineral

Metal

Subtiliation

in flasks

in boiling vessels

Fusion

Moulds

Casting cones

Earthenware
made only of earthenware
for fusion
Ash cupels
Crucibles
not for fusion
cementation box
containing another vessel
sand bath
muffle furnace
made from any materials
Superior alembic
closed alembic for cooking
alembic with a beak
Inferior alembic
Cucurbites
Retorts

NOT HEATED
for storing
Receptacles
Dishes
for transferring
Funnels
Separating funnels

Instruments

Instruments for use in the fire

Always necessary
thin items
gridiron
iron rod or poker
thick item
shovel

optional
wooden
dyoptra (for protecting the eyes against the fire)
metallic
iron plate
Mortar

Sources of heat

Natural rays of the Sun
Artificial
simple
for digesting
Athamor
Dung-bath
for separating
gently
Ash-bath
fiercely

indirect
Sand-bath
Bath of iron filings
directly
Coal fire
flames
mixed bath
of sea water
of dew

Operations

Solution

Calcination

Corrosion
by vapours
by immersion
in the wet way
by Amalgamation
by Precipitation
in the dry way
by Cementatio
by Commixtion

Ignition
by Combustion
by Reverberation
by Incineration
by Vitrification

Dissolution

SUBTILIATION

by operations of short duration

by Elevation
in the dry way
Sublimation
in the wet way
directly
in an Alembic
in a bladder
obliquely
through a side Retort
by Descension
by heat
by cold
Deliquium
Filtration

by operations of long duration

Exaltation
by Circulation
by Ablution
Digestion

by Putrefaction
by Imbibition
by Cohobation
by Coration
by Extraction

LIQUEFACTION

simple
proving
through Cineritium (ashes)
through Antimony

Coagulation

by cold
by heating