

Dates of important chemical events of 50, 100, 150 ... years ago from 2000

Pharmaceutical Chemistry

4000 years ago

2000 BC

- At the time of *King Gudea* of South-Mesopotamia medicines are included in the housekeeping
- The Egyptian Queen *Mentuhotep* uses alabaster barrels for keeping medicines

3500 years ago

1500 BC

- In the Indian *Rig-Veda* described panacea "Soma" perhaps is the milk juice of *asclepias Syriaca*

3000 years ago

1000 BC

- *Ayur-Veda of Susruta* contains a list with toxins and antitoxins, a *Materia medica* with 760 medicines and numerous regulations

2750 years ago

750 BC

- The *Romans* borrow pharmaceuticals from the Greeks

2700 years ago

700 BC

- In *Babylon* gardens are laid out with therapeutic plants

2400 years ago

400 BC

- *Ktesias of Persia* is the founder of the Knidos school of physicians which promotes the use of medicines with a strong taking effect

1950 years ago

50

- *Dioscorides* edits his "De Materia Medica", many doctors' orders, using 600 plants and chemicals as lead acetate, limestone water, copper sulphate, zinc oxide, realgar, indigo and antimony sulphide. He describes a distillation apparatus, a bain-marie and an apparatus to dry and to bleach oil

1500 years ago

500

- In the Bower-manuscript descriptions are given of plant medicines, as aconitum, aloë, benzoë, galanga, sugar and minerals as borax, saltpetre, potash, salts of heavy metals and mercury compounds

1000 years ago

1000

- *Jahja Ben Masarwaffi*, named Mesue the Youngerst edits his "Grabaddin medicamentorum compositorum" in which he describes dry distillation of gogat oils

1300 years ago

700

- In *Baghdad* there is a separation between the professions of physicians and pharmacists

1150 years ago

850

- *Rhazes* describes the preparation of alcohol and mercury salve

950 years ago

1050

- In *Italy* there is a manufactory of alcohol (aqua ardens seu vitae)

850 years ago

1150

- *Nicolaus of Salerno* edits a dispensatorium with 150 medicinal formulas with the description of the medicinal power and their instruction for use, named antidotarium. He describes as the first one the narcotical working of the "sleep fungus". This book can be considered as the first European pharmacopoeia
- *Platearius of Salerno* edits "Liber de simplici medicina" with 300 medicinal plants

450 years ago

1550

- *Thomas Candi* brings star aniseed from the Philippines to Europe

500 years ago

1500

- In the "*Frankfurter Apothekerordnung*" the first regulations are given for tests of drugs and the storage of poisons

400 years ago

1600

- *Olivier de Serres* prepares dextrose from honey
- Pharmacists prepare many new medicines

350 years ago

1650

- *François de la Boë Sylvius* uses potassium chloride (Sylvin, sal digestivum) as medicinal

300 years ago

1700

- *Georg Ernst Stahl* commends for medical application the musk smelling water milfoil (yarrow)
- *Johann Conrad Dippel* prepares oleum animale foetidum from bones

250 years ago

1750

- *Johann Gabriel Mentz* uses as the first one phosphorus as a medicine, e.g. as titillation remedy

150 years ago

1850

- *Max Pettenkofer* prepares big quantities of "Liebig's beef extract"

100 years ago

1900

- *R F Pschorr and E Vongerichten* study morphine and codeine and demonstrate in both alkaloids and phenanthrene centre
- *Carl Neuberg* prepares crystalline ureapentose and identifies this compound as r-arabinose
- *Schimmel & Co* in Leipzig introduce in the market artificial attar of roses