

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

Inorganic Chemistry

(see also General Chemistry)

3500 years ago

1500 BC

- Natural inorganic pigments, such as cinnabar and ferric oxide are prepared

1250 years ago

750

- The Arabic alchemist Geber (*Dschabir*) describes for the first time crystallisation and filtration for purification of chemicals, as alums. He prepares sulphuric acid by distillation of alums and nitric acid by heating of a mixture of saltpetre, copper sulphate and alum. He discovers a mixture of both of these acids to be a solvent of gold. He also prepares sal ammoniac from urine and sodium chloride. Further he knows and processes many other chemicals and elements as mercury, gold, silver, lead, tin, copper, arsenic, sulphur, mercury oxide and borax

750 years ago

1250

- *Albertus Magnus* prepares green vitriol (ferrous sulphate)
- *Roger Bacon* describes the property of nitrates to explode with combustibles

500 years ago

1500

- Discovery of antimony ores in *Hungary*

450 years ago

1550

- *Bernard Palissy* points out that soluble salts are good as fertiliser
- *Georg Agricola* finishes his "De natura fossilium" the first systematic description of minerals
- *Blasius of Villafranca* discovers for the first time that chemicals, as saltpetre, dissolved in water, cools the solution down

350 years ago

1650

- *Johann Rudolph Glauber* describes in his "Furni novi philosophici oder Beschreibung einer Neu-erfundenen Distillir-Kunst" (Amsterdam, 5 volumes) preparation of a big number of chemicals a.o. sal mirabile Glauberi (Na_2SO_4). He also knows reactions of salt formation from acids and metals or bases and discovers relations between metals in reaction with different acids

300 years ago

1700

- *Johann Künckel von Löwenstern* compares in his "Laboratorium Chymicum" for the first time ammonia with the caustic solutions of sodium and potassium

250 years ago

1750

- *Andreas Sigismund Marggraf* demonstrates plaster to exist out of lime (calcium oxide) and sulphuric acid

200 years ago

1800

- *Martin Heinrich Klaproth* discovers potassium to be an element of several minerals. He proposes the names "Kali" (potassium) and "Natrium" (sodium)
- *Richard Knight* in London prepares from platinum spongy the plate form, which later is used to make reaction retorts
- *Alexander-Cristofle de Moussin-Paschkin* obtains by a mere fluke chromium alum by glowing chromium ore with saltpetre and treating with nitric and sulphuric acids
- *William Cruikshank* prepares caustic soda (sodium hydroxide) by electrolysis of a solution of cooking salt (sodium chloride)
- *William Henry* demonstrates hydrogen in the vapour of hydrochloric acid
- *Edward Charles Howard* prepares mercury fulminate from mercury, nitric acid and alcohol

150 years ago

1850

- *Edmond Frémy* researches the compounds which are created by treating cobalt salts with ammonia, the so-called cobaltamines

100 years ago

1900

- *Heinrich Precht* prepares potassium carbonate from potassium chloride and magnesium carbonate
- *Marc Paquier* prepares artificial ruby and sapphire from chromium oxide and kaolin

50 years ago

1950

- *Christopher Kelk Ingold, E D Hughes and R I Gillespie* research cryoscopic measures in nitric acid
- *C K Ingold, E D Hughes and D R Goddard* prepare crystalline nitronium salts e.g. $(\text{NO}_2^+)(\text{ClO}_4^-)$, $(\text{NO}_2^+)(\text{HS}_2\text{O}_4^-)$, and $(\text{NO}_2^+)_2(\text{S}_2\text{O}_4^{2-})$
- *C K Ingold, D J Millen and J D S Goulden* study the Ramanspectra of solid and solved nitronium salts

- *E Wiberg* and *R Bauer* prepare magnesium hydride a.o. by thermal decomposition of magnesium-diethyl in high vacuum at 175°C
- *O Schmiz Dumont* studies complex chemical reactions in liquid ammonia
- *F Hein* edits his "Chemische Koordinationslehre"