

BASIC CHEMICALS – part. 1 (35H).

Program :

1. The elements
 - 1.1. The structure
 - 1.2. The atomic mass
 - 1.3. The breakwater
 - 1.4. The electronic organization of atoms
2. The periodic table
 - 2.1. The classification of the elements
 - 2.2. Atomic rays
 - 2.3. The formation of ions
3. The links
 - 3.1. The Lewis model
 - 3.2. The wave model of the atom
4. The molecule
 - 4.1. The geometry of covalent buildings
 - 4.2. Electrical and magnetic properties of molecules
 - 4.3. Low energy interactions
5. The chemical reaction
 - 5.1. Reactivity-structure relationship
 - 5.2. Reaction speed
 - 5.3. The reaction mechanism
 - 5.4. Chemical equilibrium
 - 5.5. The state of equilibrium
 - 5.6. Shifting the equilibrium
6. Acid-base reactions (pH, titration, etc.)
 - 6.1. Definitions
 - 6.2. Strength of acids/bases
 - 6.3. The acid-base balance
7. The fundamental states of matter
 - 7.1. Liquids
 - 7.2. Gas
 - 7.3. Solids
8. Introduction to thermochemistry
9. Analytical techniques