

Toxicology literally means the science of poison (toxicon = poison, logos = knowledge). Toxicology is the branch of science that studies the negative effects of xenobiotics (all foreign chemicals, including drugs) on living organisms.

Areas of interest in toxicology: sources of poisons, their physical, chemical and biological properties, isolation, qualitative and quantitative analysis, toxic effects (acute, subacute, subchronic, chronic), toxicokinetics (routes of entry, absorption, distribution, metabolism and excretion), special toxicological effects (carcinogenesis, mutagenesis, teratogenesis), immunotoxic effects, systemic toxicology, treatment principles and antidotes in acute poisoning, toxicological risk assessment for the safe use of chemical substances, doping control in sports, drug toxicity, substance abuse and addiction, drug safety and pharmacovigilance, metals, organic solvents, food additives, pesticides, phytotoxins, mushroom poisoning, poisons of animal origin and poisons formed in the air constitute the research subjects.

Toxicology, a multidisciplinary branch of science, is divided into different sub-branches due to the diversity of toxic effects of chemical substances: forensic toxicology, disaster toxicology, analytical toxicology, biochemical toxicology, environmental toxicology and ecotoxicology, behavioral toxicology, regulatory toxicology, economic toxicology, industrial/occupational toxicology, pharmaceutical toxicology, phytotoxicology, food toxicology, ray toxicology, accidental toxicology, clinical toxicology, molecular and cellular toxicology, pesticide toxicology. We can list them as aquatic toxicology, descriptive toxicology, toxicology and veterinary toxicology.