CHM 490 Automation in Analytical Science (2 Units)

Department of Chemistry

Covenant University
1. CHM490
1.1. CHM 490 Automation in Analytical Science (2 Units)

Expert systems: library programs which describe the analysis procedure (treatment of sample, separation methods and detection methods) of chemical compounds. Laboratory automation: centralized versus decentralized strategy, role of the central computer and the P.C., information processing and communication, Analysis automation: sampling, treatment of sample and detection, continuous analysis systems, GC automation and HPLC automation, data processing and control, applications, Optimization methods: experimental planning, mathematical models, calculation methods, application of 'central composite method' to ion chromatography.