The aim of this thesis has been design, construction and application of a flow-through nephelometric detection cell based on photodiode as a sensor and a laser source.
The developed device has been tested and its function has been proven on the determination of sulphate by flow injection analysis with nephelometric detection after precipitation by barium chloride. The results achieved were comparable with those obtained by spectrometric detection. Furthermore, the device has been successfully applied to the determination of promethazine based on formation of its insoluble ion associate with bromophenol blue.