Diploma work abstract

Title: Chemiluminiscence determination of thioridazine, promethazine and levomepromazine

using flow injection analysis

Author: Gabriela Kolouchová

Department: Department of analytic chemistry

Leader of diploma work: RNDr. Jana Dolejšová CSc.

Abstract: In my diploma work I found out, if FIA method (flowing injection analysis) with chemiluminiscence detection using KMnO₄ as oxidizer in media of sulphuric acid can be used for direct determination of phenothiazin derivates. Then I used this method for determination of thioridazine in preparation Thioridazin [®] 25 mg, tbl. obd. and promethazine in preparation Prothazin [®] 25 mg, tbl. obd.. In the end I determined content of medicament using comparative pharmacopoeial method according to ČL 2002. I statistically evaluated the results of both determinations using Moore and Student t-test. I found out, that the difference between pharmacopoeial methods ČL 2002 and FIA method with chemiluminiscence detection isn't statistically significant. Both methods are comparable and chemiluminiscence determination of thioridazine in preparation Thioridazin [®] 25 mg, tbl. obd. and promathazine in preparation Prothazin [®] 25 mg, tbl. obd. can be applied in practice.