

# Sistema de flujo continuo no segmentado con detección polarográfica para la determinación de ranitidina en formas farmacéuticas y orina

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In this work we developed a method by flow injection analysis for the determination of ranitidine in pharmaceutical forms and urine, using a polarographic flow through cell as detection system which has been designed recently in our laboratory. The method is based on the reduction of the group nitro of the drug to the hydroxylamine derivative by applying a potential of  $-1.40\text{ V}$  vs mercury pool electrode. It was found a determination range of  $2.38 \times 10^{-5}$  -  $1.0 \times 10^{-3}$  M ranitidine, with a detection limit of  $7.15 \times 10^{-6}$  M. The relative standard deviation ( $n = 11$ ) for a concentration level of  $1.0 \times 10^{-4}$  M was 2.1%, which is comparable with the obtained, by the manual methodology. The accuracy of the method was evaluated by comparison of the results with those obtained by d.c. polarography and UV spectrophotometry and the results were quite comparable.