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## **RADIOMETRIC METHOD FOR THE STUDY OF THE STEELS CORROSION**

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### **Abstract**

A radiometric method based on the  $\beta$ -rays absorption for the investigation of corrosion reactions of some steels in different experimental conditions was proposed. During the corrosion process it was observed that the intensity of the  $\beta$ -rays which penetrated the iron ions layers in solution decreases, while the concentration of these ions which pass into aggressive medium increases due to the anodic dissolution of the steel sample. A more exact kinetic parameter is proposed herein, namely the global rate constant, to characterize the corrosion process.

*Key words:*  $\beta$ -rays absorption, corrosion, kinetics, steel

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