



Electrochemistry and the periodic table: from beginnings to present-day electrochemistry of important elements

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Topic: Old Elements, New Technologies: how to improve the quality of life

Abstract:

Electrochemistry played an extremely important role in the systematization of the chemical elements and the development of the periodic table, for example the series of chemical reactivity and Faraday's laws of electrolysis. The oxidation and reduction properties of the elements and of their compounds underlie most of their behaviour. Present-day applications from metal extraction to energy sources and chemical sensors will be illustrated. The way in which modern electrochemistry was able to develop in an effective way via predictions of electrochemical properties from the periodic table will be discussed.