

Preface

This is the first monograph in a series devoted to electrochemistry. Although the market is rich in books and series on electrochemical themes, it is surprising that a number of serious topics are not available. With the series “Monographs in Electrochemistry” an attempt will be made to fill these gaps. I am very thankful to the publishing house of Springer for agreeing to publish these books, and for the great freedom given to me in choosing the topics and the most competent authors, and generally for the fantastic cooperation with the publisher. I am especially thankful to Mr. Peter W. Enders.

Square-wave voltammetry is a technique that is readily available to anyone applying modern electrochemical measuring systems. Its use can be beneficial in analytical applications as well as in fundamental studies of electrode mechanisms. Upon first glance, it seems that the analytical application of square-wave voltammetry is rather simple and does not afford a deep knowledge of the background, however, this is certainly not the case. For an optimal exploitation of the potential of square-wave voltammetry, it is essential to know how the signal is generated and how its properties depend on the kinetics and thermodynamics of the electrode processes. For a detailed analysis of electrode mechanisms, this is indispensable, of course, in any case. I am very happy that three leading experts in the field of square-wave voltammetry have agreed to write the present monograph, which in fact is the first complete book on that technique ever published in English. All three authors have a long and distinguished publishing record in electroanalysis, and especially in the theory and application of square-wave voltammetry. I hope that this monograph will make it much easier for potential users in research, industrial, and environmental laboratories, etc., to apply square-wave voltammetry for their benefit.

Fritz Scholz

– Editor of the series “*Monographs in Electrochemistry*” –

Square-Wave Voltammetry

Theory and Application

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