

Preface

The electrodialysis process principles are well known for over 70 years, but the large-scale industrial applications were only possible after the development of the multi-cell stack design and the production of efficient and stable ion-exchange membranes. Although the largest application of electrodialysis, the desalination of brackish water, has been around the world before reverse osmosis, the other applications like the treatment of certain industrial wastewaters have only recently been explored.

This book is an integrated presentation of electrodialysis with the first chapters covering in a very comprehensive manner the transport principles, the control parameters and membrane materials and characterization, and the last six chapters covering applications of treatment of wastewaters in industries that are water intensive users like oil refineries, leather, and metallurgy.

The book is an outstanding contribution to the advancement of the application of electrodialysis as a large-scale technology for the treatment of industrial waste waters.

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Novel Approaches

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