

Proceedings of the Indian National Science Academy

Vol. 48, Part A, No. 5

September 1982

CONTENTS

Page

Electrochemistry

Influence of Anions on the Mechanism of Anodic Dissolution of, and Cathodic Reduction of Oxygen on Copper and Brass—A Rotating Ring Disc Study K. Balakrishnan and V. K. Venkatesan	423
Potentiokinetic Studies on Corrosion Inhibitors S. N. Pandey, S. K. Roy, Kanhaya Singh and K. N. Pandey	425
Fractional Number of Electrons Transfer Phenomenon in the Kinetics of Electrode Reactions B. M. Grafov	437
Solvated Electron in Polar Organic Liquids A. V. Vannikov and E. I. Mal'tsev	443
Contributions to Theoretical Electrochemistry S. K. Rangarajan	455
Influence of Radioactive Species in the Study of Aqueous Electrochemical Systems N. Subramanyan, K. Ramakrishnaiah, S. Venkatakrishna Iyer and V. Kapali	457
Suppression of Polarographic Maxima A. Muthusamy and J. Sundararajan	476
Changing Current Compensation in AC and DC Polarography S. R. Rajagopalan	477
A New Current Expression for Selective Ion Permeation Across Membranes S. V. Talekar, D. C. Mikulecky and C. M. Gary-Bobo	479
Impedance of Elementary Electrochemical Act A. V. Gorodysky	480
Research and Developmental Activities in the Fields of Fused Salt Electrolysis and Electrothermal Products at Central Electrochemical Research Institute, Karaikudi (A Review) V. Aravamuthan	487
Transport Properties of Molten Hydrated Salts R. C. Sharma and H. C. Gaur	497
Temperature and Concentration-Dependence of Transport Behaviour of Glass Forming Melts Nurul Islam	505
Some Contributions from CECRI in the Field of Electrometallurgy (Aqueous) R. Srinivasan	506
Electrochemical Reduction of Tl^+ from Molten $Ca(NO_3)_2 \cdot 4H_2O$ at 60 °C C. Nanjundiah and R. Narayan	511
Chromate Conversion Coating on Zinc Plating S. Krishnamurthy	525
Influence of Addition Agents in Sulphuric Acid Anodising Bath Using Alternating Current B. A. Shenoi, V. Balasubramanian and S. John	527
Voltammetric Techniques for Analytical Applicability and Metal Plating Industries J. N. Gaur	528

Published by the Executive Secretary, Indian National Science Academy, 1, Bahadur Shah Zafar Marg, New Delhi-110 002, and printed by him at the Kapoor Art Press, A38/3, Mayapuri Industrial Area, New Delhi-110 064.

Editor : Professor S. K. Trehan