

## CONTENTS

### PROCEEDINGS NEW TRENDS IN ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY (EIS) AND ELECTROCHEMICAL NOISE ANALYSIS (ENA)

Z - HIT – A Simple Relation Between Impedance Modulus and Phase Angle Providing a New Way to the Validation of Electrochemical Impedance Spectra.....	1
W. Ehm, R. Kaus, C. A. Schiller and W. Strunz	
Electrochemical Impedance: The Double Layer Capacitance as a Probe of the Origin of the Time Constants .....	11
R. Antaño-López, M. Keddám and H. Takenouti	
Contribution to the Impedance Data Analysis of Mass-Transfer Controlled Electrochemical Systems.....	23
L. Pauwels, W. Simons, A. Hubin, J. Schoukens and R. Pintelon	
Characterization of Waterborne Protective Coatings by EIS and LEIS .....	39
C. Le Pen, N. Pebere and C. Lacabanne	
Influence of the Thermal Transition on the Evaluation of Water-Uptake in Surface Polymer Film by EIS Method .....	50
S. Duval, Y. Chamberlin, M. Glotin, M. Keddám, F. Ropital and H. Takenouti	
Comparative Behavior of Zinc Phosphates and Calcium Exchanged Silica Paints .....	60
L. W. Vasconcelos, A. L. Maia, I. C. P. Margarit, O. R. Mattos, F. L. Fragata, P. de Lima Neto, B. M. Teixeira and J. L. C. dos Santos	
Validation of QCM Corrosion Sensors through Electrochemical Impedance and Electroacoustic Admittance Analysis.....	71
H. Ehaoun, C. Gabrielli, F. Minouflet-Laurent, M. Keddám and H. Perrot	
Effect of Elastic Stresses on the Conductivity of Passive Films .....	82
V. Vignal, R. Oltra, L. Gosmain, M. Verneau, and L. Coudreuse	
Scanning Photo-Induced Impedance Microscopy .....	91
S. Krause, H. Talabani, M. Xu, W. Moritz, and J. Griffiths	
Corrosion Control Using Regenerative Biofilms (CCURB) on Aluminum 2024 and Brass in Different Media .....	99
F. Mansfeld, C. H. Hsu, D. Örnek, T. K. Wood, and B. C. Syrett	
Study of the Hydrogen Permeation Process Using the Classical Method and Impedance Technique.....	119
E. M. Cardoso, O. R. Mattos, C. J. B. M. Joia and L. A. C. J. Garcia	
Characteristic of Rust on Carbon Steel in a Wet/Dry Environment Containing Chloride Ions .....	131
T. Nishimura, H. Katayama, K. Noda, and T. Kodama	

	<u>Page Number</u>
Application of Electrochemical Impedance Spectroscopy to Characterize the Time-Dependent Corrosion of Steel in Simulated Soil Environments .....	140
K. E. Jeffers and M. E. Orazem	
New Non-Membrane Ion – Selective Electrode Sensor.....	158
T. Knutz ,T. Boehme and C. Green	
Electrochemical Impedance Spectroscopy (EIS) and Electrochemical Noise Analysis (ENA) for Active and Passive Systems in Chloride Media .....	165
F. Mansfeld, Z. Sun, C. H. Hsu and A. Nagiub	
Influence of Asymmetry in the Working Electrodes on Noise Resistance Measurements.....	188
A. Bautista, U. Bertocci, and F. Huet	
Partition of Current Fluctuations in Noise Resistance Measurements .....	206
A. Aballe and F. Huet	
Study of Single Fluctuations in Electrochemical Noise Signals .....	221
A. Legat and M. Leban	
EN Transient Analysis Through Wavelets .....	230
A. Aballe, M. Bethencourt, F. J. Botana, M. Marcos and R. M. Osuna	
Potentiostatic Measurements of Electrochemical Noise .....	241
V. Jovancicevic, S. Ramachandran, G. Tipton and E. Atherton	
Electrochemical Noise Parameters for the Identification of Localized Corrosion .....	247
R. A. Cottis, G. Bagley, A. A. Alawadhi, H. Al-Mazeedi and P. J. Laycock	
Crevice Corrosion of Stainless Steels: Electrochemical Noise Analysis at Rest Potential.....	259
G. Berthome and B. Baroux	
Author Index.....	265
Subject Index.....	267