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LIST OF ABBREVIATIONS

GDP	Gross Domestic Product
EIS	Electrochemical Impedance Spectroscopy
PANI	Polyaniline
RT	Room Temperature
XPS	X-Ray Photoelectron Spectroscopy
LM	Leucoemeraldine
PNA	Pernigraniline
PANI-EB	Polyaniline Emeraldine Base
PANI-ES	Polyaniline Emeraldine Salt
Pth	Polythiopene
Ppy	Polypyrrole
DGEBA	Diglycidyl Ether Bisphenol A
m-XDA	M-xylydiamine
DSC	Differential Scanning Calorimetry
TGA	Thermal Gravimetric Analysis
FTIR	Fourier Transform Infrared
VOCs	Volatile Organic Compounds
HAPs	Hazardous Air Pollutants
CNS	Central Nervous System
CPs	Conducting Polymers
SEM	Scanning Electron Microscope
NaCl	Sodium Chloride
SAM	Scanning Acoustic Microscopy

LIST OF NOMENCLATURE

β	Tafel Constant
C_c	Coating Capacitance
C_{coat}	The Capacitance of the Polymer Coating
C_{dl}	Double Layer Resistance
C_p	Heat Capacity
D	The Diffusion Coefficient
E_n	Equivalent Weight
i_{corr}	Impedance Measurement
M_∞	The Equilibrium Water Uptake at Saturation
M_t	Water Content at Any Given Time
p	Degree of Cure
R_a	Surface Roughness
R_{ct}	Charge Transfer Resistance
R_p	Polarization Resistance
R_{pore}	The Resistance to Charge Transport Through Pores
R_p	Coating Resistance
R_s	The Uncompensated Solution Resistance
R_z	Surface Roughness Depth
T_g	Glass Transition Temperature
W_t	Sample Weight at the time of Measurement
W_o	Initial Sample Weight.
σ	Sigma Bond
π	Pi-Bond