

Errata

p. iv: The acknowledgements should have also mentioned:

Dr. Eric Donovan from the University of Calgary Physics department for having the patience to listen to my incomplete understanding of electric field and lead me to the crucial keyword “Laplace” equation. Doug Phillips from the University of Calgary Math Science department for showing me how to use various visualization software, most notably AVS express, and introducing me to high power computing using MACI.

p. 107: The text preceding equation (4-11) should read:

Simulations were performed for measurements carried out using the Solartron 1255 FRA. For this instrument, the minimum number of wave-cycles to be measured per point is adjustable. However, there is a minimum measurement time of ca. 0.45 s required per point, even if the measurement frequency is high enough that measuring the preset number of wave-cycles, N , would take less than 0.45 s. Thus the time corresponding each EIS data point, n , can be expressed as:

$$t_{n+1} = \begin{cases} N(1/\omega) \geq 0.45s : t_n + N(1/\omega) \\ N(1/\omega) < 0.45s : t_n + 0.45s \end{cases} \quad (4-1)$$

p. 248: Reference 187 should better read:

Boukamp, B.A. *Solid State Ionics*, 20 (1986) 31-44