

## Corrigendum

R. BARNARD, J. HOLLOWAY, C. F. RANDELL, F. L. TYE,

Studies concerning the growth of cadmium dendrites. III. Theoretical treatment, *J. Appl. Electrochem.* 14 (1984) 187.

It is regretted that there is an error in the derivation of Equation 35 on page 193. The correct derivation starting at Equation 29 on page 192 is as follows:

$$i_t = Z + \int_{t_{\min}}^t [2h(w+d)i_L + wdi_{tip}]N_0K_0 dt \quad (29)$$

where  $Z$  is the substrate current and  $t_{\min}$  is the time at current minimum. With  $h$  given by Equation 15 and  $i_{tip}$  given by Equation 16, Equation 29 becomes

$$i_t = Z + \int_{t_{\min}}^t \left[ 2(w+d)i_L + \frac{wdnFK_1}{V} \right] h_0 \exp(K_1t)N_0K_0 dt \quad (30)$$

or in abbreviated form

$$i_t = Z + \int_{t_{\min}}^t Q \exp(K_1t) dt \quad (31)$$

where  $Q = N_0K_0[2(w+d)i_L + (wdnFK_1/V)]h_0$ . On integration Equation 31 gives

$$i_t = \int_{t_{\min}}^t \left[ \frac{Q}{K_1} \exp(K_1t) \right] dt + Z \quad (32)$$

$Z$  can be evaluated as follows:

At  $t_{\min}$  the total current is  $i_{\min}$

$$i_{\min} = \left[ \frac{Q}{K_1} \exp(K_1t_{\min}) \right] + Z \quad (33)$$

so that

$$Z = i_{\min} - \left[ \frac{Q}{K_1} \exp(K_1t_{\min}) \right] \quad (34)$$

and Equation 32 becomes

$$i_t = \int_{t_{\min}}^t \left[ \frac{Q}{K_1} \exp(K_1t) \right] dt + i_{\min} - \left[ \frac{Q}{K_1} \exp(K_1t_{\min}) \right] \quad (35)$$

It should be noted that  $Z$  is not a constant of integration as erroneously stated in the article.