

## 23 List of Equations

$V_h = x_1 + x_2^2 t_0$	Equation 1.....25
$V_h = kx \ln(v_1/v_2)$	Equation 2 ....25
$x_2 = \sqrt{(4kt \ln(v_1/v_2) + x_1^2)}$	Equation 3.....27
$V_h = 4kt \ln v_1/v_2 - x_2^2 + x_1^2 t(x_1 - x_2)$	Equation 4.....27
$V_c = a + bV_h + cV_h^2$	Equation 5.....28
$V_c = bV_h + cV_h^2 + dV_h^3$	Equation 6.....28
$V_s = V_c \rho_b (c_w + m_c c_s) \rho_s c_s$	Equation 7.....29
$k = K_g w \rho c$	Equation 8.....96
$K_g w = K_s m_c \rho_b \rho_s + K_w (1 - m_c \rho_b \rho_s)$	Equation 9.....96
$K_w = 0.04182 (21.0 - 20.0 F_v)$	Equation 10...96
$F_v = 1 - \rho_b 0.6536 + m_c 1000$	Equation 11...96
$c = (w_d c_w + c_s w_f - w_d w_f)$	Equation 12...96
$V = \pi * r^2 * h$	Equation 13..97
Volume of Object (L) = Weight of Object in Air (kg) – Weight of Object in Water (kg)	Equation 14..98
Volume of Object (cm <sup>3</sup> ) = Weight of Object in Air (g) – Weight of Object in Water (g)	Equation 15..98
$d = C\pi$	Equation 16..105