Поправка Хиншельвуда.

$$dw(\varepsilon)=\left(\frac{1}{\pi kT}\right)^{\frac{1}{2}}\exp\left(-\frac{\varepsilon}{kT}\right)\varepsilon^{-\frac{1}{2}}d\varepsilon \qquad (1)$$

$$dw(\varepsilon_1)dw(\varepsilon_2)=\left(\frac{1}{\pi kT}\right)\exp\left(-\frac{\varepsilon_1}{kT}\right)\varepsilon_1^{-\frac{1}{2}}\exp\left(-\frac{\varepsilon_2}{kT}\right)\varepsilon_2^{-\frac{1}{2}}d\varepsilon_1 d\varepsilon_2 \qquad (2)$$

$$\varepsilon_1+\varepsilon_2=\varepsilon \qquad (3)$$

$$dw(\varepsilon_1)dw(\varepsilon)=\left(\frac{1}{\pi kT}\right)\exp\left(-\frac{\varepsilon_1}{kT}\right)\varepsilon_1^{-\frac{1}{2}}\exp\left(-\frac{\varepsilon-\varepsilon_1}{kT}\right)\left(\varepsilon-\varepsilon_1\right)^{-\frac{1}{2}}d\varepsilon_1 d\varepsilon$$

(4)

$$dw(\varepsilon)=\left(\frac{1}{\pi kT}\right)\exp\left(-\frac{\varepsilon}{kT}\right)\left(\int_0^{\varepsilon}\varepsilon_1^{-\frac{1}{2}}\left(\varepsilon-\varepsilon_1\right)^{-\frac{1}{2}}\,d\varepsilon_1\right)d\varepsilon \qquad (5)$$

$$\int_0^{\varepsilon}\varepsilon_1^{-\frac{1}{2}}\left(\varepsilon-\varepsilon_1\right)^{-\frac{1}{2}}\,d\varepsilon_1=\pi$$

$$dw(\varepsilon)=\left(\frac{1}{kT}\right)\exp\left(-\frac{\varepsilon}{kT}\right)d\varepsilon \qquad (6)$$

$$w(\varepsilon\geq\varepsilon_K)=\int_{\varepsilon_K}^{\infty}\left(\frac{1}{kT}\right)\exp\left(-\frac{\varepsilon}{kT}\right)d\varepsilon=-\exp\left(-\frac{\varepsilon}{kT}\right)\Bigg|_{\varepsilon_K}^{\infty}=-0+\exp\left(-\frac{\varepsilon_K}{kT}\right)=$$

$$=\exp\left(-\frac{\varepsilon_K}{kT}\right)$$

(7)

$$dw(\varepsilon)=\left(\frac{1}{\pi kT}\right)^{\frac{S}{2}}\exp\left(-\frac{\varepsilon}{kT}\right)\times$$

$$\left(\int_0^{\varepsilon}.....\int_0^{\varepsilon}\varepsilon_1^{-\frac{1}{2}}\varepsilon_2^{-\frac{1}{2}}...\varepsilon_{S-1}^{-\frac{1}{2}}\left(\varepsilon-\varepsilon_1...-\varepsilon_{S-1}\right)^{-\frac{1}{2}}\ d\varepsilon_1 d\varepsilon_2..d\varepsilon_{S-1}\right)d\varepsilon \tag{8}$$

$$w(\varepsilon\geq\varepsilon_K)=\int_{\varepsilon_K}^{\infty}\left(\frac{1}{\pi kT}\right)^{\frac{S}{2}}\exp\left(-\frac{\varepsilon}{kT}\right)d\varepsilon\times$$

$$\left(\int_0^{\varepsilon}.....\int_0^{\varepsilon}\varepsilon_1^{-\frac{1}{2}}\varepsilon_2^{-\frac{1}{2}}...\varepsilon_{S-1}^{-\frac{1}{2}}\left(\varepsilon-\varepsilon_1...-\varepsilon_{S-1}\right)^{-\frac{1}{2}}\ d\varepsilon_1 d\varepsilon_2..d\varepsilon_{S-1}\right) \tag{9}$$

$$w(\varepsilon\geq\varepsilon_K)=\left(\frac{1}{\left(\frac{\mathrm{S}}{2}-1\right)!}\left(\frac{\varepsilon_K}{kT}\right)^{\frac{\mathrm{S}}{2}-1}+\frac{1}{\left(\frac{\mathrm{S}}{2}-2\right)!}\left(\frac{\varepsilon_K}{kT}\right)^{\frac{\mathrm{S}}{2}-2}...+\frac{1}{\left(\frac{\mathrm{S}}{2}-\frac{S}{2}\right)!}\left(\frac{\varepsilon_K}{kT}\right)^{\frac{\mathrm{S}}{2}-\frac{\mathrm{S}}{2}}\right)\times\exp\left(-\frac{\varepsilon_K}{kT}\right) \tag{10}$$

$$w(\varepsilon\geq\varepsilon_K)=\left(\frac{1}{\left(\frac{\mathrm{S}}{2}-1\right)!}\left(\frac{\varepsilon_K}{kT}\right)^{\frac{\mathrm{S}}{2}-1}\right)\exp\left(-\frac{\varepsilon_K}{kT}\right) \tag{11}$$