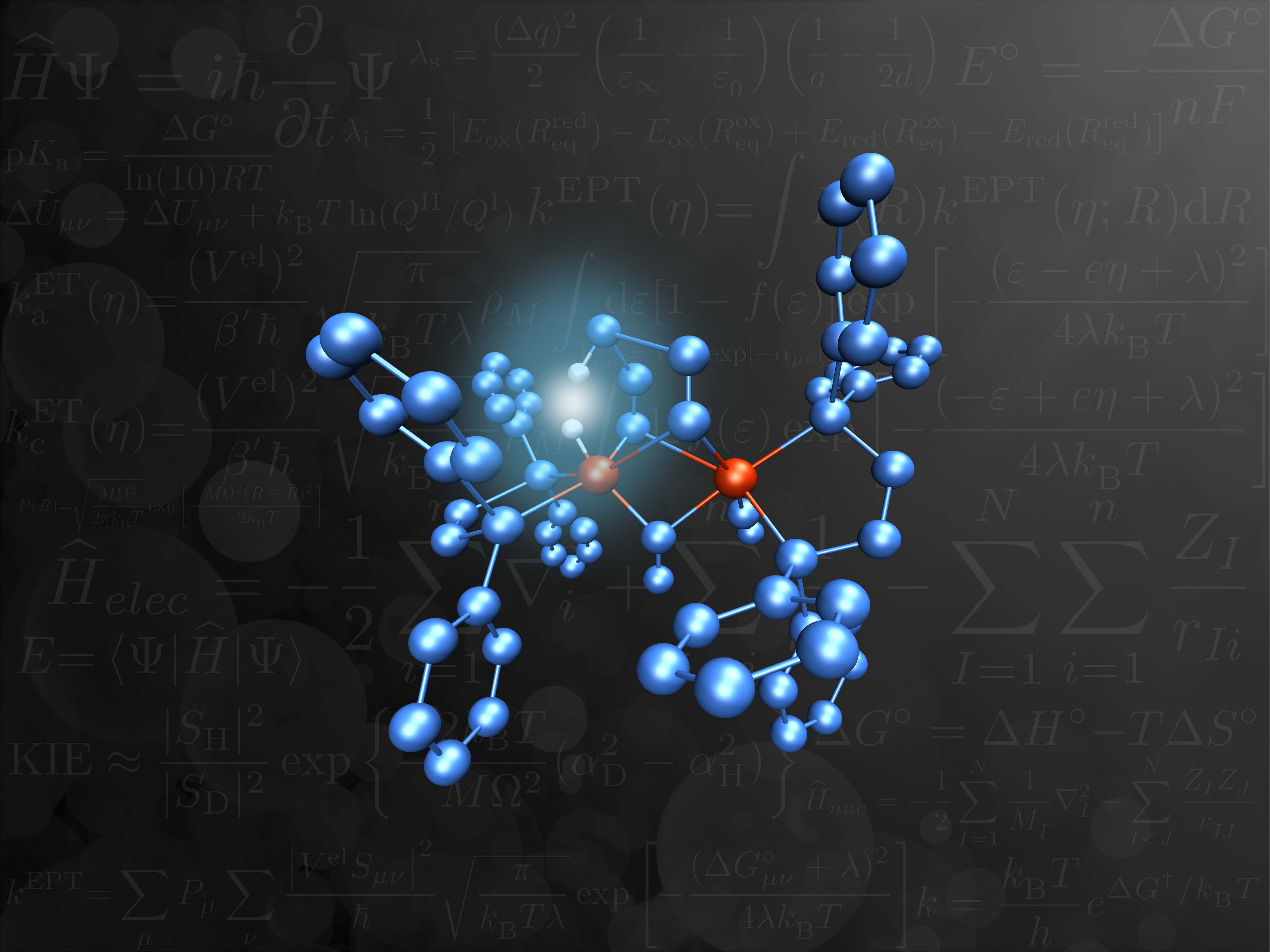

$\hat{H}\Psi = i\hbar\frac{\partial}{\partial t}\Psi$
$\lambda_s = \frac{(\Delta q)^2}{2}\left(\frac{1}{\varepsilon_\infty}-\frac{1}{\varepsilon_0}\right)\left(\frac{1}{a}-\frac{1}{2d}\right)$
$E^\circ = -\frac{\Delta G^\circ}{nF}$
$\lambda_i = \frac{1}{2}\left[E_{ox}(R_{eq}^{red}) - E_{ox}(R_{eq}^{ox}) + E_{red}(R_{eq}^{ox}) - E_{red}(R_{eq}^{red})\right]$
$pK_a = \frac{\Delta G^\circ}{\ln(10)RT}$
$\Delta\tilde{U}_{\mu\nu} = \Delta U_{\mu\nu} + k_BT\ln(Q^{II}/Q^{I})$
$k^{EPT}(\eta) = \int P(R)k^{EPT}(\eta;R)dR$
$k_a^{ET}(\eta) = \frac{(V^{el})^2}{\beta'\hbar}\sqrt{\frac{\pi}{k_BT\lambda}}\rho_M\int d\varepsilon[1-f(\varepsilon)]\exp\left[-\frac{(\varepsilon-e\eta+\lambda)^2}{4\lambda k_BT}\right]$
$k_c^{ET}(\eta) = \frac{(V^{el})^2}{\beta'\hbar}\sqrt{\frac{\pi}{k_BT\lambda}}\rho_M\int d\varepsilon f(\varepsilon)\exp\left[-\frac{(-\varepsilon+e\eta+\lambda)^2}{4\lambda k_BT}\right]$
$P(R) = \sqrt{\frac{M\Omega^2}{2\pi k_BT}}\exp\left[-\frac{M\Omega^2(R-\bar{R})^2}{2k_BT}\right]$
$\hat{H}_{elec} = -\frac{1}{2}\sum_{i=1}^{n}\nabla_i^2 - \sum_{I=1}^{N}\sum_{i=1}^{n}\frac{Z_I}{r_{Ii}}$
$E = \langle\Psi|\hat{H}|\Psi\rangle$
$\Delta G^\circ = \Delta H^\circ - T\Delta S^\circ$
$KIE \approx \frac{|S_H|^2}{|S_D|^2}\exp\left\{\frac{2k_BT}{M\Omega^2}(\alpha_D^2-\alpha_H^2)\right\}$
$\hat{H}_{nuc} = -\frac{1}{2}\sum_{I=1}^{N}\frac{1}{M_I}\nabla_I^2 + \sum_{I<J}^{N}\frac{Z_IZ_J}{r_{IJ}}$
$k^{EPT} = \sum_\mu P_\mu\sum_\nu\frac{|V^{el}S_{\mu\nu}|^2}{\hbar}\sqrt{\frac{\pi}{k_BT\lambda}}\exp\left[-\frac{(\Delta G^\circ_{\mu\nu}+\lambda)^2}{4\lambda k_BT}\right]$
$k = \frac{k_BT}{h}e^{-\Delta G^\ddagger/k_BT}$