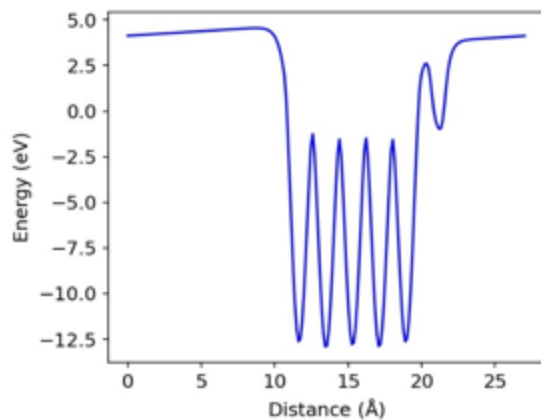


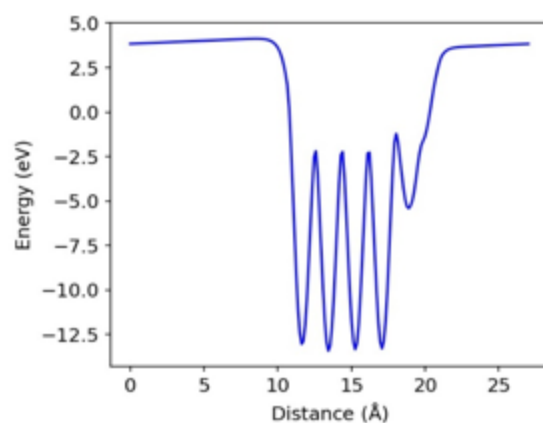
**(a) Perfect Cu (100) surface**



$$E_{\text{vac}} = 4.549 \text{ eV}$$

$$\Phi = 4.666 \text{ eV}$$

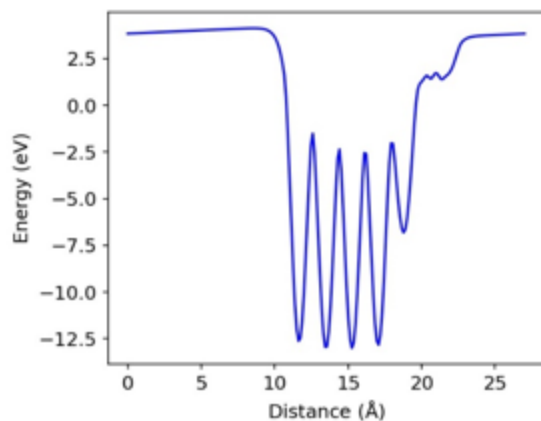
**(b) Stepped Cu (100) surface**



$$E_{\text{vac}} = 4.129 \text{ eV}$$

$$\Phi = 4.667 \text{ eV}$$

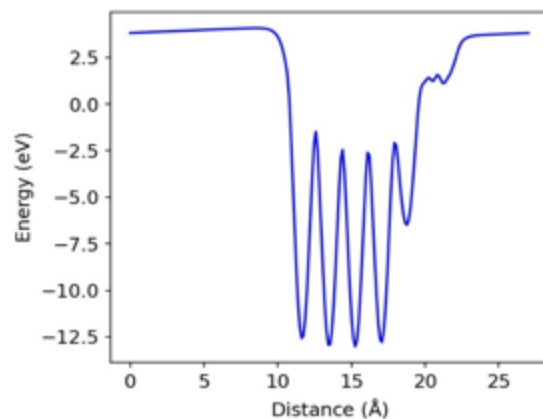
**(c) Stepped Pt-Cu (100) surface**



$$E_{\text{vac}} = 4.126 \text{ eV}$$

$$\Phi = 4.582 \text{ eV}$$

**(d) Stepped Rh-Cu (100) surface**



$$E_{\text{vac}} = 4.075 \text{ eV}$$

$$\Phi = 4.482 \text{ eV}$$