

# Термодинамические потенциалы

$$F(T, V, \mathbf{D}) = F_0(T, V) + \\ + \frac{1}{8\pi} \int dV \varepsilon_{ik}^{-1} D_i D_k,$$

$$\tilde{F}(T, V, \mathbf{E}) = F_0(T, V) - \\ - \frac{1}{8\pi} \int dV \varepsilon_{ik} E_i E_k,$$

$$\hat{F}(T, V, \mathbf{E}) = F_0(T, V) - \\ - \frac{1}{2} V \alpha_{ik} E_i E_k,$$