

Exercise 2.1-4

Derive the Formula for the Vacancy Equilibrium Concentration



Start from the formulas given, use the approximations described, and show that

$$c_v = \text{concentration of vacancies} = \frac{S_F}{k} \cdot \exp - \frac{H_F}{kT}$$



Would more advanced versions of Stirlings formula get better results?

Illustration



Link to the [Solution](#)