Illustration

Exercise 2.1-5

Do the Math for Mixed Point Defects

Solve the system of the three equations given below and show that the result given is correct

$$c_V(C) \cdot c_i(C) = \frac{N'}{N} \cdot \exp - \frac{H_{FP}}{kT}$$

$$c_V(A) \cdot c_V(C) = \frac{N'}{N} \cdot \exp - \frac{H_S}{kT}$$

$$c_V(C) = c_V(A) + c_i(C)$$

What are the conditions for the limiting cases of pure Frenkel or Schottky defects?

Link to the Solution