

Abstract: For the aim to investigate the role of chirality and helicity between D- and L-valine crystal lattices under Debye temperature 2K to 20K, the magnetic field dependence of zero-field and 1, 3 and 5 Tesla on the heat capacity were measured. The heat capacities of D- and L-valine crystals are plotted as C_p vs T , C_p vs $\ln T$, C_p/T^3 vs T in the measured temperature. The four C_p/T^3 vs T curves show a split between D- and L-valine from 2K to 12 K ($T \ll \Theta_D$) which is due to the strength of magnetic fields. It is absent from 12 K to 20K, which indicates the Schottky anomaly. The Bose-Einstein peak of the ($e-p$) condensation temperature is **11.20, 11.32, 11.44, 11.46 K** for **D-valine**, and **11.49, 11.59, 11.73, 11.70 K** for **L-valine**, respectively. This finding is leading to a zero-field splitting of a broad maximum associated with the Schottky anomaly below the temperature of 12K which is demonstrated ($e-p$) Bose-Einstein condensation through the **hydrogen of peptide bond in the alpha helix** at zero momentum space onto D- and L-valine optical lattices.