

Review of: "On the Vapour Pressure Over Three-Component Solutions"

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Potential competing interests: No potential competing interests to declare.

The proposed work appears to include the extension of binary solutions' thermodynamic connections to ternary (three-component) solutions. The partial vapor pressures of each component above the solution in a binary solution—one that has two components—depend on the solution's composition. Under specific conditions, the solubility of a gas in a liquid is measured by the Henry constant, also known as Henry's Law constant. One of the parameters in the virial equation of state that corrects the ideal gas law to take intermolecular forces into account is the second virial coefficient. It is useful in describing interactions between molecular pairs in solutions. A mathematical bridge has been created between binary and ternary solutions to help generalize the equations. The appendix contains a detailed description of the carefully developed equations. It's a worthwhile contribution, in my opinion, and ought to be approved.