

## **Small Volume Apparatus for Vapor Liquid Equilibrium Measurements**

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Vapor liquid equilibria data are cornerstone to the development of accurate equations of state for the prediction of thermophysical properties. Previously, the design of a small volume phase equilibria apparatus at NIST was reported which allowed for measurements on hazardous materials and small volume samples. A new apparatus has been developed incorporating improvements on the previous design to allow for better temperature control and improved uncertainty. The temperature range of the apparatus is 260 K to 380 K and pressures up to 10 MPa.